



dry cleaning *update* no 2

April 2006

We have had positive feedback from both the industry and local authorities about our first dry cleaning *Update* newsletter. Here is a second edition which deals with a number of issues that have arisen with the increase in local authority activity regarding dry cleaners. We hope things will start to settle down and future editions will not need to be so long.

 **DON'T FORGET** all applications for existing dry cleaners must be duly made by 31 October 2006

Issues

Several issues have been raised with Defra and the Welsh Assembly Government since the first *Update* in December 2005, as follows:

- Spillage trays, bunds, and errors in PG6/46

We will shortly be issuing an AQ note clarifying the guidance on when spillage trays and bunds should be used. It will also correct three errors in Appendix 4, for which we apologise. NB the SolvCalc spreadsheet in AQ16(05) incorporates the corrections and does not require amendment.

- Steam-Fed Machines

Conditions 17 and 18 in the outline permit in Appendix 3 of PG6/46 should be amended where there is a common steam feed (normally for more than one machine).

Condition 17 requires a thermostatic control device or equivalent with which to set a maximum temperature in accordance with the manufacturers' recommendations for the solvent used. ▶ In the case of externally-sourced steam supply, temperature control is automatically performed by the steam pressure rather than hard-wired thermocouples, local authorities are advised to accept this as the equivalent.

Condition 18 specifies that the heat source shall automatically switch off at the end of the distillation process. ▶ This should not be included for steam-fed machines, which are not generally fitted with steam shut-off valves. The steam demand is generated by the latent heat of evaporation in the presence of the organic solvent. When the solvent has evaporated, the steam pressure is maintained to keep the machines warm but steam flow is not initiated as the still is in a closed system. This has the benefit of avoiding stresses on welds etc due to thermal expansion/contraction and also allows for "bake-out" of the still residues. This has the effect of assisting better solvent recovery than the 15% allowance provided for rake-out.

Defra considers that either automatic switch-off or demand-fed heat should be accepted for steam-fed machines., The cost of fitting switches is around £300-£600 and has no solvent control benefit.

- Water separators

Item (20) in the list of outline permit conditions in PG6/46(04) states that all machines installed after 19 May 2005 shall have a secondary water separator to minimise potential solvent losses. Item (28) - which applies to new and substantially changed installations (ie **not** replacement/second-hand equipment at an existing installation) - states that all PER machines shall have a secondary water separator followed by an activated carbon adsorption bed to minimise potential solvent losses.

BAT decisions must ultimately (as ever) be for authorities to take on a case-by-case basis. Any new dry cleaning machine installed after 19 May 2005 ought to have an integral water separator, enabling this condition to be readily met. It is also expected that second-hand machines will only be supplied after this date either with integral water separators retro-fitted or to be fitted when being installed at the premises.

In all other cases, because of the cost of retrofitting a water separator, operators should be permitted to select their preferred approach based on their own assessment of business needs provided that all the other relevant parameters in PG6/46 can and will be reliably met. This includes cases where new machines were installed between 1 April 2001 and 19 May 2005. Alternative techniques which may be considered include equipment that is permanently plumbed-in or equipment involving a hose which is connected temporarily when required.

- Filters

Defra considers it acceptable for dry cleaners to use either filter cartridges or 'self-cleaning' filters. With self-cleaning filters, the filter material drops into the still residue and solvents within it can be recovered during bake-out thereby reducing solvent consumption. De-coloration must be carried out using extra distillation that can be built into the programme cycles. Filter cartridges have the benefit that de-coloration is carried out using intrinsic carbon black, but the solvents are not recovered on site and there may also be VOC evaporation during storage pending collection for recovery. (Note. Solvent recovery contractors are not currently able to treat them in the conventional way used for still residue, resulting in additional disposal costs.)

This issue is not normally significant enough to warrant an additional permit condition. Compliance with the solvent consumption - outline condition (1) - will suffice. However, self-cleaning filters are likely to have small advantages in terms of VOC losses, and dry cleaning businesses should be encouraged to compare the costs of the two options:

self-cleaning filters are likely to be more expensive initially, but costs could equalise when filter cartridge disposal costs are taken into account.

- Typo in the Word “Outline Application Form”

In the PG note “outline application form” – it states erroneously that R41 is harmful to the unborn child. This should have said R61. Given that the word version of the outline application form was sent out to LAs especially so that they could alter and format it to their own preferences, we trust that LAs will make the necessary amendment themselves.

🕒 Textile Services Association

The Textile Services Association (TSA), the trade association for the dry cleaning industry, is supportive of bringing the sector into regulation and was consulted extensively by Defra on the content of PG6/46(04). Regular contact is maintained between TSA and the Department to ensure that industry's views are taken fully into account as issues arise during implementation. TSA is conducting a major communication exercise through meetings, seminars and conferences to ensure that cleaners are aware of their obligations and, in particular, not to delay in making application to the regulator for a permit. TSA worked with Defra and the LAU to develop a spreadsheet system, SolvCalc, to monitor weight of work processed and solvent emitted. These spreadsheets are available in AQ16(05). Additionally TSA provides for its members only a Solvcalc platinum pack giving detailed practical assistance on demonstrating compliance. More information at <http://www.tsa-uk.org/> .

🕒 Dry cleaning journals

Both Laundry and Cleaning News <http://www.laundryandcleaningnews.com/> and Laundry and Cleaning Today <http://www.laundryandcleaningtoday.com/> are carrying monthly articles/reminders by the Textile Services Association of what the industry refers to as "SED". There are also items in both papers from consultants, training organisations, and machine manufacturers.

🕒 Coin-Ops

AQ22(05) was issued on 30 November with further guidance on holding back asking operators of coin-op dry cleaning machines for an application. This remains the guidance; amending regulations to give effect to this are planned shortly. (See Q and A below)

🕒 PPC/health and safety join-up

HSE's variable warrants trial is still progressing. Defra has been in touch with Peterborough Borough Council who are hosting the on-going pilot for the transfer of health and safety responsibilities for dry cleaners and vehicle refinish establishments from HSE to LAs, with a view to the pilot examining the potential

for synergies from joining up PPC and health and safety at the same premises.

Training

The following training providers are known to be offering training on PPC and dry cleaning:

EHRC (Environmental Health Resource Centre Ltd) are providers of bespoke small group and one-to-one training sessions for regulators involved in permitting and regulating dry cleaners, including theory and practice at a dry cleaner of your choice (www.ehrc.org.uk or telephone Fay Rushby on 07802 349 581)

Martin Cranfield Associates are running a number of courses around the country on inspecting dry cleaning installations. The course has been designed in association with Parrisianne Ltd, who are approved trainers to the guild of Cleaners and Launderers. <http://www.cranfieldassociates.co.uk/>

SATRA, based in Kettering, runs a Solvent Emissions Directive practical 1 day course for regulators and cleaners. Their premises include working drycleaning equipment. (Tel 01536 410000 <http://www.satra.co.uk/>)

Parrisianne, based in Lower Kingswood, Surrey, offer a variety of training courses and packages for both cleaners and regulators. (Tel 0870 264 0002 <http://www.parrisianne.com/>)

The Guild of Cleaners and Launderers offer a competence-based certificate on "Handling Dry Cleaning Solvents Safely" following a 75-minute exam. Its aim is to qualify dry cleaners and regulators in the requirements of SED, but also includes understanding and optimisation of the dry cleaning operation. Next seminars + exams on 9 and 23 April (Tel 0161 483 4655 <http://www.gcl.org.uk/>)

Compliance Dates

It has been suggested that it would be helpful to provide a simplified list of equipment needed for installations and dry cleaning machines of different ages.

This summarises what the conditions in the outline permit in PG6/46 envisage for the key equipment requirements. (NB this *Update* newsletter gives extra advice on conditions 17, 18 and 20 [water separators and steam-fed machines] and there will shortly be an AQ note dealing with spillage trays.)

- ① . an existing installation operating a dry cleaning machine installed in that installation before 19 May 2005 - no interlocks and no secondary separator.
- ② . an existing installation operating a dry cleaning machine installed in that installation on 19 May 2005 or thereafter – interlocks and secondary separator are specified.
- ③ . a new installation operating a dry cleaning machine installed in that installation before 19 May 2005 - secondary separator, activated carbon, and continuous PER monitor are specified, but not interlocks.
- ④ a new installation operating a dry cleaning machine installed in that installation on 19 May 2005 or thereafter – interlocks, secondary separator, activated carbon and continuous PER monitor are specified.

Where an installation has more than one machine, ② and ④. should only be applied to those machines installed on or after 19 March 2005.

Fees and charges reminder

The charges for dry cleaners have risen since 1 April 2006 to £134 for applications and £136 for annual subsistence.

Defra research

Phil Pope visited an obliging Local Authority in London and accompanied them on routine follow up visits to some dry cleaners following up on the first letter that was sent out to local dry cleaners advising them of the need to apply for a PPC permit. The feedback was that operators had a varying level of knowledge of the new requirements. Some operators were visibly worried or appeared to be unaware of what was required. Others expressed their surprise at the level of application and subsistence fees which they felt was excessive and which served only to squeeze already tight profit margins. Some seemed more comfortable with the requirements of the regulations. Very few dry cleaning had replied to the initial enquiry letter from the LA.

Defra and the Textile Services Association will continue to do what they can to sensitise dry cleaners to their obligations under the legislation. However, it is probably inevitable that the many small and micro-businesses involved will require individual approaches from LAs to ensure they take on board the requirements and apply by October this year.

If dry cleaners raise concerns about the application and subsistence fees, authorities may find the following helpful in explaining the background; although it is appreciated that those faced with these extra costs may still not feel any happier:

- all polluting processes under this legislation and its predecessor have been required to pay such fees since 1990; it is Government policy that those receiving a service, such as this regulatory service, pay the reasonable costs; the Government and the EU subscribe to the 'polluter pays' principle
- Defra and WAG set the level of fees and charges; they have devised simplified application and permitting arrangements to keep down costs; standard processes regulated under the same regime are charged at £1440 for applications, and between £671 and £1503 annually.

Q and A

Q I have recently been approached by the owner of a laundrette who has two old but serviceable coin-operated dry cleaning machines. He is aware of the guidance in AQ22(05) regarding the holding back of permit applications pending the outcome of DEFRA's discussions with the trade association. However he is keen to continue using the machines after the 31/10/07 deadline and is trying to establish whether it will be feasible/cost effective to modify the

machines to comply with PG6/46(04). He understands that the public will no longer be able to operate the machines and that all garments will need to be weighed.

The machines (Spencer Solitaire 6) appear to date from the early 1980's and whilst they are closed circuit they do not have PERC distillation stills and seem to rely on filters to clean the solvent. My feeling is that the machines will not be able to comply with the 20g/kg limit but I have insufficient technical knowledge to advise the owner further. I've suggested he contact the manufacturer and his trade association. Unfortunately the manufacturer is no longer represented in the UK and NALI have been unable to assist.

Are you able to help or point me in the right direction? Perhaps this is an issue that could be raised in the next edition of "dry cleaning update".

A Without a distillation unit, a considerable upgrade to the machine will be required to comply with PG6/46(04). The equipment required to be installed includes the complete distillation unit, condenser, as well as carbon adsorption*. Although I do not have cost information to hand, if the upgrade were technically feasible, the cost would be likely to be several £1000's rather than £100's (including installation and servicing). Of course design and space constraints could make a full upgrade impracticable. Furthermore there would be no guarantee that the equipment would then comply with the 20g/kg(clean clothes) limit value.

Without knowing the local circumstances, it is not possible to provide a more detailed response. My advice however, would be for the operator to establish the extent of the upgrade required to comply with PG6/46 and seek a quote for the full upgrade from instrument suppliers. The cost could then enable the operator to make a decision of whether to continue to use the machine after 31/10/07.

* since answering this query we have received a suggestion that carbon adsorption may not represent BAT. We will be investigating this and will provide further advice as soon as possible.

Next edition

Please email Phil Pope or Imalka Oyewole with any issues you would like covered in the next edition of the *Update*.

Any queries about dry cleaning and PPC/SED contact Defra or the Welsh Assembly Government. Also feedback is very welcome:-

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