CAN BITUMEN CONTAINING PRODUCTS BE APPROVED FOR USE WITH DRINKING WATER SUPPLIES?

1. INTRODUCTION.

From time to time the Drinking Water Inspectorate (DWI) receives requests about the approval of bitumen based (or containing) products, including coatings for direct application to structures, bitumen based sealants and bitumen based seal-coats for cement mortar lined ductile iron pipes.

In the past some of these products have been considered for approval, but problems encountered prevented their recommendation by the former Committee on Products and Processes due to –

- leaching of large numbers of unknown compounds by some bitumen products
- concern over the potential of these products to leach polycyclic aromatic hydrocarbons (PAHs)
- concern about the inherent variability of a product based upon a natural ingredient

DWI is aware of a number of serious water quality incidents which have arisen following the use of products based on bitumen both in water supply pipes and storage installations. DWI encourages Water suppliers\(^1\) to put pressure on manufacturers and suppliers to make immediate applications for approval of products based on bitumen so that an authoritative and independent assessment to be made of potential adverse effects on water quality and risks to the health of consumers.

2. THE NEW REGULATIONS

Although bitumen had been accepted as a traditional product under the former regulations, under the relevant current regulations\(^2\) bitumen containing products must be approved.

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\(^1\) Undertakers, inset appointees, and combined licensees - see The Water Act 2003 (Consequential and Supplementary Provisions) Regulations 2005, together with private drinking water suppliers

DWI has agreed that they can consider these products for use in contact with drinking water under the relevant regulations subject to –

- the receipt of a formal application, providing sufficient information about the chemical composition of the bitumen used and the quality checks undertaken on the bitumen to ensure a consistent product
- evidence to demonstrate full conformity of the product with the requirements of BS 6920, or equivalent European testing.
- appropriate testing of leachates from the product - this is likely to include, as a minimum, TOC, GC-MS, and polycyclic aromatic hydrocarbons (PAHs)

On the basis of the tests undertaken, the DWI will give further consideration to the approval of bitumen products. If DWI are then able to agree that a bitumen based product should be approved under the relevant regulations, they would advise the WRAS of this so that they could review their own policy on such products.

For further information concerning applications for approval of bituminous products see Advice Sheet 10.

Thus DWI confirms that it remains willing to consider such products for approval, subject to the normal formal application procedures.

If you have queries not covered by this information sheet, please contact DWI Regulation 31
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