

guardians of drinking water quality

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DWI Information Letter 12/2003

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# To: Board Level and Day to Day Contacts of Water and Sewerage Companies in England and Wales

Dear Sir or Madam,

### PROCEDURES FOR THE DELIVERY OF WATER TREATMENT CHEMICALS

### **Purpose**

1. The purpose of this letter is to remind companies of the need for vigilance when water treatment chemicals are delivered to a site and of the need to ensure that there is no potential for contamination of a chemical either at source or during the supply chain.

## **Background**

- 2. Companies have a responsibility to ensure that only approved chemicals are used in treatment of public water supplies.
- 3. The Inspectorate has audited procedures and documentation to ensure that companies are meeting the requirements of regulation 25 in respect of the chemicals used in water treatment. The last detailed audit of this topic was during 2001and procedures were generally found to be satisfactory. It was noted that a number of companies placed considerable reliance on their suppliers having ISO 9000 accreditation and that some companies required their suppliers to use dedicated tankers for large volume deliveries. However very few companies carried out their own quality control assays on chemical deliveries and very few companies took routine samples for subsequent analysis in the event of a problem developing.
- 4. The Inspectorate has also audited systems and procedures for chemical deliveries, including the labelling and security of chemical delivery points, and checks continue to be made during inspections of water treatment works. Overall systems have generally been satisfactory, although in some cases recommendations have been made for improvements

- 5. In recent months the Inspectorate has been made aware of a number of potential problems. Two cases related to chemicals not meeting the required specification, with actual or potential impacts on the efficacy of the treatment process. Issues have also arisen over the cleanliness of carboys used to transport small volumes of chemicals, the use of chemical tankers with multi compartments, and tankers carrying adapters for their delivery hoses.
- 6. Concerns have been further heightened by a report of a near miss that could have resulted in a very serious incident, but for the vigilance of the technician supervising the delivery. A tanker made a 20 tonne delivery of sodium silicate into two storage tanks. The delivery paperwork was all in order but, on completion of the delivery, the technician noticed a smell of paint thinner emanating from the tanker. He immediately isolated the storage tanks and stopped the silicate dosing. The supplier was contacted to determine the tanker's previous load. This was confirmed as white spirit, although the supplier maintained that the correct cleaning procedures had been followed and appropriately certificated.

### General approach

- 7. Companies should ensure that there are appropriate procedures in place for the acceptance of chemical deliveries, such that only the correct chemicals of the correct specification are received. They should also ensure that delivery points are dedicated to specific chemicals, are clearly labelled with the name of the chemical, and are securely locked unless a delivery is being made. All deliveries should be supervised throughout by company personnel, who are familiar with the delivery process and the types of chemicals being delivered.
- 8. Companies should satisfy themselves that the chemical supplier has appropriate quality control procedures in place for the production and delivery of their products. The supplier should also notify the company in advance of any changes in product specification.
- 9. If the contract specifies the use of dedicated tankers, then this should be reflected and auditable in the delivery paperwork. If the contract does not specify the use of dedicated tankers, then the company should satisfy itself with the supplier's arrangements for cleaning the tank between deliveries.
- 10. Companies should also review the need for carrying out their own quality control assays on chemical deliveries and the need to sample of each delivery for analysis in the event of a problem developing.
- 11. Companies are reminded that they could be liable for prosecution under section 70 of the Water Industry Act 1991in the event of an contamination incident resulting in the supply of water unfit for human consumption.

#### **Enquiries**

12. Copies of this letter are being sent to Pamela Taylor, Chief Executive, Water UK; Rodney Anderson, Water Supply and Regulation Division, Department

- for Environment, Food and Rural Affairs; Bob Macey, Environment Division, The National Assembly for Wales; Tim Hooton, Drinking Water Quality Regulator for Scotland; Randal Scott, Drinking Water Inspectorate for Northern Ireland; and Rowena Tye, Office of Water Services.
- 13. This letter is being sent electronically to Board Level contacts. Please acknowledge receipt by email to <a href="mailto:dwi.enquiries@defra.gsi.gov.uk">dwi.enquiries@defra.gsi.gov.uk</a>. Hard copies are not being sent but the letter may be freely copied.
- 14. Any enquiries about the letter should be addressed to Claire Jackson (tel 020 7944 5977; 020 7082 8010 after 29 September)

Yours sincerely

Professor J Colbourne

Chief Inspector