TESTING PROTOCOL AND MANUAL OF GUIDANCE ON APPLICATION OF POINT-OF-USE TREATMENT FOR PRIVATE WATER SUPPLIES (DWQ 9028)

Progress Report to Department of the Environment January to June 1992

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ntroduction

This note describes work carried out in the period January to June 1992 under the Department of the Environment’s Research Contract “Testing Protocol and Manual of Guidance on Application of Point-of-Use Treatment for Private Water Supplies” (Reference PECD 7/7/379). There is a need for a practical guide on small-scale water treatment aimed at local government officials who need to provide advice on treatment to satisfy the requirements of the Private Water Supplies Regulations 1991. A large number of Point-of-Use Treatment devices (POUs) are commercially available but there is no generally nationally accepted procedure for the evaluation of these devices to determine their performance and acceptability for use in treating private water supplies.

Objectives

1. To produce a practical guide to the assessment and treatment of private water supplies.

2. To develop test protocols for POUs with guidance from a DoE Committee, set-up and serviced by WRc.

3. To validate the protocols by means of a limited number of tests.

Progress January – June 1992

A total of eight draft final reports were provided to the Department during March 1992. These were:

(a) Guidance Manual
DoE 3046 ‘TREATMENT OF PRIVATE WATER SUPPLIES’

(b) Test Protocols
DoE 3029 ‘PROTOCOL FOR TESTING THE PERFORMANCE OF ACTIVATED CARBON FILTER UNITS FOR TREATMENT OF PRIVATE WATER SUPPLIES’

DoE 3032 ‘PROTOCOL FOR TESTING THE PERFORMANCE OF EXCHANGEABLE OR DISPOSABLE ION-EXCHANGE BASED NITRATE REMOVAL UNITS FOR TREATMENT OF PRIVATE WATER SUPPLIES’

DoE 3033 ‘PROTOCOL FOR TESTING THE PERFORMANCE OF IN SITU REGENERATED ION-EXCHANGE BASED NITRATE REMOVAL UNITS FOR TREATMENT OF PRIVATE WATER SUPPLIES’

DoE 3034 ‘PROTOCOL FOR TESTING THE PERFORMANCE OF ULTRAVIOLET (UV) DISINFECTION UNITS FOR TREATMENT OF PRIVATE WATER SUPPLIES’
DoE 3035 'PROTOCOL FOR TESTING THE PERFORMANCE OF REVERSE OSMOSIS UNITS FOR TREATMENT OF PRIVATE WATER SUPPLIES'

DoE 3043 'PROTOCOL FOR TESTING THE PERFORMANCE OF CERAMIC AND CARTRIDGE FILTERS FOR TREATMENT OF PRIVATE WATER SUPPLIES'

(c) Evaluation Report

DoE 3054 'EVALUATION OF TEST PROTOCOLS FOR POINT OF USE DEVICES FOR TREATMENT OF PRIVATE WATER SUPPLIES'

Comments from the Department on the Guidance Manual have been received and a revised version has been produced (DoE 3046/1, issued 26/6/92).

Comments from the Department and BEWA on the test protocols have been incorporated in revised draft reports. Further amendments will be made to cover the recommendations made in the Evaluation Report (DoE 3054).

Future Work

A second revision of the Guidance Manual (DoE 3046/2) will be prepared following consultation of interested parties by the Department.

Modifications to the test protocols will be made in the light of experience gained during evaluation and in consultation with Chairmen of the Working Groups which were responsible for developing the protocols.