

WaPUG - BLACKPOOL

18-20 NOVEMBER 1992

WSA/FWR SEWERAGE WORKING GROUP

B E MALEM - TORBAY BOROUGH COUNCIL

1. INTRODUCTION

The Water Services Association (WSA)/Foundation for Water Research (FWR), Engineering & Operations Committee (EOC) carries out its functions through Working Groups.

The Sewerage Working Group (SWG) addresses issues relating to the planning and operations of sewer systems. Earlier in the year it absorbed the work of the former Pipeline Technology Group relating to the design and construction of sewer systems.

A major activity of the Group has recently been the monitoring of the development of European Standards relating to the planning and design of sewer systems and providing support and advice to the WSA representatives on these Committees.

It has produced manuals and model contract documents and these documents and other publications will be referred to later in this paper.

2. MEMBERSHIP OF THE SEWERAGE WORKING GROUP

Membership of the Working Group is drawn from Water Service Companies in England and Wales, the Scottish Regional Councils, District Councils and a Consulting Engineer.

The SWG is chaired by Mr W G Sheldon of North West Water Limited and the Technical Secretary is Mr N R Orman, Water Research Centre.

3. TERMS OF REFERENCE

To act for the EOC on the following sewerage topics:

- a. To resolve issues relating to the planning, design, construction and operation of sewer systems, and to prepare new or amended guidelines and model documentation when required.
- b. To review draft European Sewerage Standards and to ensure that the views of WSA are adequately represented in the relevant BSI and CEN committees.
- c. To identify, review, and report on, the requirements for research, development and evaluation of technology and procedures relating to the planning, design, construction and operation of sewer systems. Control and monitor current FWR sewerage research projects.
- d. To advise the EOC on the technical and operational implications of proposals from regulatory bodies.
- e. To liaise with other WSA groups on sewerage matters as required.
- f. To liaise with representative groups as required, including the Wallingford Procedure User Group (WaPUG), the Association of CCTV Surveyors, and the Association of Flow Survey Contractors, as required.

#### 4. WORK LOAD OF THE GROUP

Set out below is the work load of the Group.

##### i) European Standards

- a) Drainage systems outside buildings.
- b) Vacuum and pressure systems.

##### ii) Current Research Projects

- a) Storm Sewer Data.
- b) Reinstatement - Overseeing issues relating to the "New Roads and Street Works Act, 1991".
- c) Materials for Sewers Manual.
- d) Manual of Sewer Condition Classification.
- e) Sewer Renovation.
- f) Sewer Flooding Risk.
- g) Storm Sewer Detention Tanks.
- h) Sewer Flow Survey Contracts.
- i) Plastic Sewer Systems.
- j) Pipeline Technology Innovation.
- k) Commonality of bedding factors.

##### iii) Other Items

- a) Support for WaPUG mailshots.
- b) Model Consultative Agreement for the construction of pipelines in deep excavations - British Gas - new version due shortly.

##### iv) Future Research Projects

- a) Pumping Station reliability.
- b) Implementation aspects of Urban Pollution Management.

#### 5. PUBLICATIONS

The Group has a very successful history of producing and updating Guides, Manuals and Contract documents, for example:

- a) A guide to short term flow surveys of sewer systems.
- b) Manual of sewer condition classification.
- c) Model contract document for man entry sewer inspection.
- d) Model contract document for non-man entry sewer inspection.
- e) Manhole location surveys and the production of record maps.

Two recent publications have been issued.

##### a. A Guide to Sewerage Operational Practices\*1

This comprehensive guide will enable sewerage managers to find information on current best practice in all aspects of sewerage operations and maintenance.

The guide recommends a systematic approach to maintenance, directing resources to those parts of the system which require attention while recognising that other parts perform quite adequately with very little maintenance. It includes strategies which identify and target resources in a planned way to those parts of the system which have specific problems while other areas receive only reactive/crisis maintenance. The sewerage manager can use these to achieve an optimum balance between levels of service and cost.

There are four main sections:

i) Introduction

This sets out the objects of the guide with a glossary and notes on different legal conditions which apply to Scotland and Northern Ireland.

ii) Planning

Deals with the principles of developing a cost-effective operational strategy and explains the differences between reactive, planned and routine maintenance. It highlights the issues to consider in devising strategies for managing sewerage operations in the most cost effective manner.

iii) Working Practices

Having set out the general principles, the guide considers how they can be applied to specific types of sewer maintenance.

Major parts of the sewer system are considered including:-

Sewers, manholes, storm sewage overflows, detention tanks and pumping installations.

Other activities include:-

Incident reporting procedure, investigation procedures, methods of making connections, planning consultation and rodent control.

iv) Term Contract Documentation

A model form of term contract for general sewer maintenance work has been prepared and included in the guide.

b) An Inspectors Guide to Sewerage Law\*2

There are six main sections:-

i) Introduction

This guide is intended to assist operations staff in England and Wales (Scottish Law is different), to understand the complex subject of sewerage law and to help them in discussions with customers. It describes the law as it relates to the ownership and maintenance responsibility for drains and sewers and the duties and powers of Sewerage Undertakers.

It should also be of assistance to Customer Services staff when responding to enquiries relating to Sewerage Law.

Sewerage Law is complex and cannot be fully covered in a small pocket guide. Commonly understood definitions have therefore been used to help staff deal with customers. Simple diagrams have been included to illustrate common arrangements for drains and sewers.

ii) Definitions

The definitions used in the various Water and Public Health Acts are not easily understood by staff and customers. Commonly understood meanings have been used in describing the definitions which are not intended to be legal definitions.

Twenty five definitions are described, eg drain, sewer, public sewer, private sewer, etc.

### iii) Duties

These include the duties of the Sewerage Undertaker with appropriate reference to the relevant Acts in relation to:-

- a) A general duty to clean and maintain public sewers.
- b) To comply with regulations which lay down customer service standards for sewerage.
- c) A duty to keep public records.
- d) Connections to a public sewer.
- e) Removal of a public sewer from private land.

### iv) Powers

These include - inter alia, such items as:-

- a) Powers of entry on to land/premises.
- b) Sewer adoption agreements.
- c) Right to make connections to public sewers.
- d) Infrastructure charge.

### v) Ownership and Maintenance

Generally whoever owns a drain or sewer is responsible for its maintenance, which includes dealing with blockages and small repairs or its replacement. Broad definitions of ownership and maintenance are described in the guide.

### vi) Drawings

These are intended to illustrate typical ownership and maintenance responsibilities for sewers of various types of development.

- \* Available from the Foundation for Water Research at Allen House, The Listons, Liston Road, Marlow, Bucks SL7 1FD
1. Cost £20
  2. Cost £2.50

### 6. WaPUG

The SWG is looking to enhance its links with WaPUG and other representative organisations and is supportive of training initiatives being taken and the co-operative work in developing Codes of Practice. We also aim to achieve better publicity for our efforts and wider awareness in the Industry.

David Wright Consultant

Question

Are all the projects with WRc

Answer

Yes

Andy Eadon Severn Trent Water

Question

Are there any words of encouragement from SWG to WaPUG ?

Answer

Yes SWG is most impressed with what WaPUG are doing particularly the number of people that attend meetings and this conference.

David Wright

Comment

Stress the need to take back to SWG the enthusiasm and level of technical discussion that goes on within WaPUG.