



Government of South Australia
Department of Health

DISCUSSION PAPER

Proposed Standards
for Connection to a
Reticulated Community
Wastewater System and
Amendments to the
Regulations

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DISCUSSION PAPER

Proposed Standards for Connection to a Reticulated
Community Wastewater System and Amendments to
the Regulations

Prepared by:

Wastewater Management Section
Applied Environmental Health
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PO Box 6, Rundle Mall, Adelaide,
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Foreword

This Code has been prepared to assist the relevant authorities in the administration of the relevant Regulations under the Public and Environmental Health Act with respect to the design, installation and operation of Wastewater Systems for a premise or building when connected to a community wastewater system in areas not administered by SA Water. These include such systems as private or council owned and or operated sewers, septic tank effluent disposal schemes (STEDS) or other types of reticulated community wastewater systems.

The Code also incorporates matters relating to trade waste flows into these systems. Reference is made to SA Water technical criteria for this purpose as it reflects the requirements for connecting to reticulated community wastewater systems and is already in place.

The current Regulations relevant to these issues, called the Public and Environmental Health (Waste Control) Regulations 1995, have been reviewed concurrent to this Code and another Code prepared for "Onsite Wastewater Systems Management." The new Regulations are called "The Public and Environmental Health (Wastewater Systems) Regulations 2007"

The Code will provide technical information and legislative requirements for consultants, the building and plumbing industry and owners and occupiers of premises in relation to the above schemes.

The draft was prepared in consultation with the Local Government Association, industry representatives, SA Water and individual officers of local government. Their comments have been addressed in the content of the draft Code.

Information included in the draft relates to:

- The legislative requirements for connection to a reticulated community wastewater system
- Relevant authorities and their requirements
- Connection requirements (technical specifications and procedures) including those relating to trade waste discharges.
- Connecting drains (technical specifications and information)
- Pumped connections to various community systems
- Septic tank and pre-treatment requirements where applicable
- Plumbing standards and incorporation of relevant Codes
- Inspection of systems
- Testing of systems
- Application and approval details
- Provision of diagrams and figures in support of the above points.

Comments

Questions and comments regarding the Code should be submitted **electronically** to:

Attention: Wastewater Management Section
public.health@health.sa.gov.au

PLEASE NOTE: The deadline for questions and comments is 5pm Friday 30 March 2007.

Where electronic submissions are not possible, please submit written comments to:

Wastewater Management Section
 Applied Environmental Health
 Department of Health
 PO Box 6, RUNDLE MALL
 ADELAIDE SA 5000

Persons wishing to discuss specific issues and/or seek clarification on matters addressed in the proposal can contact the Wastewater Management Section, telephone (08) 8226 7100.

Comments received will be submitted to the Public and Environmental Health Council, for consideration and recommendation to the South Australian Health Commission, the Minister for Health and Cabinet on the final form of the regulatory package.

On behalf of the Minister for Health, the South Australian Health Commission, the Public and Environmental Health Council, and the Department of Health I would like to thank you for taking the time to review the attached proposal and provide written comments.

A handwritten signature in blue ink that reads "Kevin Buckett". The signature is written in a cursive, flowing style.

Dr Kevin Buckett
Director
Public Health
Department of Health

January 2007

1. Introduction

The South Australian Department of Health is empowered to develop, foster or promote proper standards of public and environmental health in the State.

The introduction of sewer schemes in the nineteenth century was one of the critical advances in public health in history. As such, it is imperative that standards for operation and maintenance of wastewater collection and treatment systems are developed and updated on a regular basis.

This Code will provide the standards and technical information necessary when connecting a property to a reticulated wastewater collection system which transports sewage, treated trade waste or septic tank effluent to treatment and disposal/reuse facilities as well as operation and maintenance of these systems and is applicable to all community wastewater systems outside SA Water administered areas.

The Code, in association with the Public and Environmental Health (Wastewater Systems) Regulations 2007, will also provide for details regarding applications and fees to the relevant authorities which would generally be the local council.

Through such initiatives as Waterproofing Adelaide and the Strategic Plan for South Australia, there is also a need to protect and make better use of our existing resources. This Code forms part of the framework necessary to move forward in these areas.

South Australia presently has over 160 septic tank effluent disposal schemes (STEDS) as well as a small but increasing number of private or council sewers, vacuum sewer systems and pressure sewer and septic tank effluent pressure schemes. These systems serve 200,000 to 250,000 South Australians. Many are situated in water protection areas such as the River Murray and coastal areas where aquaculture is carried out. As such, they form a major barrier to pollution and disease and therefore form part of the front line in protection of public health and the environment.

This paper provides background information and other material that was considered in preparing the draft Code to assist the various stakeholders in reviewing and providing comment on the proposed regulatory package.

2. Legislation Governing this Code

All wastewater systems outside of those schemes administered by SA Water are the domain of the Minister for Health/ Department of Health and local councils who are provided with delegated authority from the Minister for Health under the Wastewater Systems Regulations under The Public and Environmental Health Act 1987.

The number of South Australians served by this legislation amounts to more than 400,000 people. Approximately 150,000 to 200,000 of those are served by onsite wastewater systems and the remaining 200,000 to 250,000 are served by reticulated community schemes.

Note that private schemes will be subject to the requirements of the legislation as well as those administered and owned by local government.

The enabling legislation applicable to household wastewater systems connected to a community wastewater system are covered under the:

- Public and Environmental Health Act and more specifically the Public and Environmental Health (Wastewater Systems) Regulations 2007
- The Local Government Act 1934, Sections 528 and 530c and the Local Government Act 1999.

The Public and Environmental Health (Wastewater Systems) Regulations 2007

The Public and Environmental Health (Waste Control) Regulations 1995 under the Public and Environmental Health Act 1987 have been reviewed to incorporate the requirements of this Code *“Standard for Connection to a Reticulated Community Wastewater System”* and the *“Onsite Wastewater Systems”* Code replacing the *“South Australian Health Commission Code, Waste Control Systems, Standard for the Construction, Installation and Operation of Septic Tank Systems in South Australia as well as Supplement A Aerobic Sand Filters and Supplement B Aerobic Wastewater Treatment Systems.”*

The new regulations are called *“The Public and Environmental Health (Wastewater Systems) Regulations 2007”*. The schedule of fees listed in the draft Regulations will be determined at a later date.

It is also proposed that this draft standard is adopted under the Public and Environmental Health (Wastewater Systems) Regulations as a “Prescribed Code” and provide the necessary powers for the relevant authority to administer matters (via suitably authorised officers) relating to connection of a wastewater system for a house or building to a reticulated community scheme within their council area. Application fees apply for approval to connect to a reticulated community wastewater system.

Local Government Act 1934

Section 528 of the Local Government Act gives powers to local councils to declare an area to be a compulsory septic tank area. Section 530c of the said Act on the other hand details the procedural process a council is required to follow when proposing the installation of a STED (Community) scheme and provides for connection to the scheme at the request of the council. Council may require at the owners expense, the regular desludging of the treatment tanks, for example, a septic tank, a sullage (greywater) tank, or a pumping chamber as appropriate. The provisions also enable the council to carry certain work and recover costs and require all waste to be directed to an approved septic tank. These provisions are currently subject to change for transferring them to the Public and Environmental Health Act.

Local Government Act 1999

Section 177 of the Local Government Act 1999 provides the power for a council to apply a service rate and or an annual service charge for a prescribed service such as a community scheme.

Relevant Authority

For the purpose of this Code the relevant authority with regard to the connection of the individual property wastewater system to the community scheme:

- is the local council where a community system is installed in an area subject to local government control;
- is the Minister where the community system is installed in an area not subject to local government control.

3. Reticulated Community Systems in SA

Examples of all of the schemes below are presently found in SA and the Code in its draft form has been used for some time in assessing the technical requirements for connections to be made to the various schemes with no negative feedback. After receiving comments from SA Water with respect to trade waste discharges, matters pertaining to this subject are also addressed in the Code. The Code covers the following scheme types:

- **Septic Tank Effluent Drainage Schemes (STEDS).** The drains from the premises discharge to a septic tank, such as an all wastewater, greywater or blackwater septic tank of an approved type and capacity before connection to the community scheme.
- **Septic Tank Effluent Pumping System (STEPS).** In addition to discharging to a septic tank, requires the provision a pumping chamber and pump to discharge the septic tank effluent to the community scheme.
- **Sewerage System.** The property sewer drain can discharge directly to the community scheme connection point and the septic tanks as described above are not required. However, in some cases specific treatment tanks may be required for specific wastes, eg pre-treatment apparatus. Where the connection cannot be made by gravity then a pumping system is required.
- **Sewage Pumping System (SPS).** The drains from the premises discharge into a pumping chamber and the sewage is pumped to the community scheme connection point.
- **Vacuum System.** The drains either discharge to a septic tank with the resultant effluent flowing to the authority vacuum chamber, or where the vacuum system collects sewage without a septic tank, the property drain connects directly to the authority vacuum chamber.

4. Consultation

A broad range of key stakeholders from industry groups and government agencies have been consulted during development of the proposed framework, which also included:

- Public and Environmental Health Council
- Local Government Association
- SA Water

Ongoing consultation with a special interest group of local government Environmental Health Officers, predominantly through the Australian Institute of Environmental Health's Wastewater Treatment Systems Special Interest Group has occurred throughout the development of the proposal.

Additional consultation was undertaken with relevant Industry stakeholders, including the Plumbing Industry Association of South Australia, TAFE SA, SAI Global, Manufacturers of onsite wastewater systems and consultants in onsite wastewater system design.

5. Analysis of Expected Costs and Benefits

Costs

The costs involved in the introduction of this Code are not likely to impact on either government or the public any more than is presently the case.

The public are presently subjected to fees from local government for the connection of individual premises to a community scheme (this fee is, and is proposed to continue to be, gazetted each year under the Wastewater Systems Regulations) and therefore the introduction of this Code will not introduce any fees other than those currently charged.

The Department of Health currently processes a small number of applications for connection to reticulated community schemes. The enactment of this Code will result in local councils processing the majority of connections to reticulated community systems so any corresponding fees currently received by the Department will be received by local government.

Consequently, the Department of Health may continue to receive an even less amount of fees as with this Code the Department is going to process only the connections that are outside the areas administered by local government.

Additional costs may be incurred by persons wishing or required to connect, due to the possible need for installation of additional pipework prior to a connection to the community wastewater scheme. The fee for this service is set by each individual authority and is covered by Section 177 of the Local Government Act 1999 which is a fee for the connection service and different to the application fee under The Public and Environmental Health Act.

This Code will also address the connection of trade waste to a reticulated community wastewater system and a connection fee may be charged for this service by local government.

The cost of providing and training to update the knowledge of local government officers (many of whom presently use the draft Code) would be minimal and met from the general budget of the Department of Health.

Benefits

The benefits of the introduction of this Code would be to formalise the procedures presently taking place and provide further technical information on matters relating to connections including operation and maintenance. This in turn will provide suitable and consistent standards for connection works and further protect the public from disease and pollution.

Benefits to Local Government

These are as follows:

- Assistance to local government officers in the application process details and technical requirements for connections
- Since local government own and operate a vast majority of reticulated community systems, the Code will allow a standardised approach to connections to their schemes
- Provision of information on trade waste connections. The Code also provides advice on connection of existing systems to a scheme.
- The Code will be a "Prescribed Code" under the Wastewater Systems Regulations powers of enforcement are also delegated to authorised officers of the relevant authority (see Section 2 above).

Benefits to Industry

Industry stakeholders will benefit in the following ways:

- The Code provides for the technical requirements in making a connection and provides diagrammatic explanations to assist in the design/ installation of a system.
- Provides information on making an application to the relevant authority
- Provides information on connections of trade waste to the scheme.

Benefits to the Community

Homeowners and other members of the community will benefit as follows:

- Protection of public health by setting standards to be achieved for connections
- Enforcement of the requirements under the Public and Environmental Health (Wastewater Systems) Regulations 2007.
- Provides information on the approval, operation and maintenance of individual systems.

6. Trade Waste

SA Water Trade Waste technical criteria have been adopted and referred to in the Standards as they apply to sewers which form part of this Code. They will equally be suitable for the reticulated vacuum systems or systems containing septic tanks ie STEDS and STEPS.

7. Educational Program

Prior to the implementation of the regulatory package, the Department of Health will provide an educational program on the provisions of the new Code by means of information sessions and briefings to the council officers and the industry (plumbers, designers and installers).

8. Implementation Plan

The timeframe for the implementation is as follows:

- Regulations drafted: November 2006;
- Discussion paper released and comment invited: December 2006 – March 2007;
- Comments assessed and Code and draft Regulations updated: April 2007 – May 2007;
- Final Regulations and report to Cabinet for approval: June 2007;
- Written information distributed and presentations to industry and State and local council stakeholder groups: July - September 2007;
- Local councils to begin to implement the Code: September 2007;

9. Questions and Comments

The following questions are posed so as to target comments and facilitate improvements to the regulatory package. It would be appreciated if these questions are considered when preparing written submissions.

1. Is the assessment of costs and benefits considered appropriate for the scale and extent of impacts of the proposal to:

- Public health;
- Environment;
- Small business, regional business;
- Local councils; and
- Homeowners.

2. Is the proposal supported? If not please indicate which areas are not supported and make suggestions for improvement.

Authorities and individuals may also need to consider the following:

- Costing/revenue for the implementation of this Code should be carried out and address such issues as:
 - ❖ Connection fees
 - ❖ Trade waste charges where applicable

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