

Submission

No 20

INQUIRY INTO MANAGEMENT OF DOMESTIC WASTEWATER

Organisation: Southern NSW Environmental Health Forum

Name: Mr Warren Matthews

Date Received: 16/12/2011

Submission to the Inquiry into the Management of Domestic Wastewater

The Southern NSW On-Site Sewage Management Special Interest Group (OSMSIG) comprises mainly Environmental Health Officers from Local Councils and NSW Health. The Group is a sub-committee of the Southern NSW Local Government Environmental Health Forum, and meets quarterly to share information, promote training and more consistent local policies and procedures.

The Group welcomes the Inquiry, and shares common concerns about the impact of on-site sewage management systems on health and the environment. Not only do these systems impact on oyster and seafood production in coastal waterways, but also drinking water supplies from surface water and groundwater sources. Recycled water from AWTs's being spray irrigated in domestic backyard play areas has been tested and found to be a risk to the health of the most vulnerable in the population.

We wish to raise the following issues and offer possible solutions:

1. Inconsistent application of existing legislation and Guidelines

There are 40 local councils in Southern NSW, and while some actively endeavour to apply the existing legislation under the Local Government Act & regulations, many lag behind. A requirement for all councils to develop and implement an OSM strategy was contained in Local Government (Approvals) Amendment (sewage management) Regulation 1998. While the legislation was repealed, it appears the requirements are still in force through Local Government Circulars.

Councils in Southern NSW were surveyed in December 2011 and of the 60% that responded to a survey:

- 12% did not maintain a register of OSMS in their area

- 28% had not developed an On-site sewage management strategy, and while 92% had a Risk rating system, only 56% conducted inspections of OSMS's. On an arbitrary scale from 1 (least important) to 10 (most important) OSM was generally rated about 6.

Councils that apply the legislation receive criticism from property owners, plumbers and builders who draw attention to adjoining local councils where the legislation, policies and guidelines may not be enforced.

This creates confusion for installation and maintenance companies who cross local government boundaries and are exposed to highly variable standards and levels of enforcement.

POSSIBLE SOLUTION

1. Introduce mandatory requirements for all councils to develop and implement an On-site Sewage Management Strategy.
2. Require compulsory reporting (to DLG) of council's management of the Strategy (including reporting of failed systems and actions taken to remedy the situation)

2. Delegation within Council

The approval and inspection role for on-site systems is often shared between several departments within council (eg. Plumbing Inspectors, Building Inspectors and Environmental Health Officers). This situation is often further complicated by the involvement of Private Certifiers, leading to poor communication, confusion and conflict.

SOLUTION

There needs to be clear delineation of responsibility within all Councils. The assessment, approval and ongoing monitoring of OSM's should be delegated to a single department within council with appropriate resources, skills and knowledge. Alternatively a cohesive communication strategy between the various sections of Council should apply.

3. Accreditation of AWTs Service Technicians

There is currently no formal state-wide accreditation for technicians who service Aerated Wastewater Systems (AWTS). AWTS's incorporate many treatment processes, involving moving parts and electrical components. While the systems are subject to extensive testing and evaluation before a state wide Certificate of Accreditation is issued by NSW Health, service technicians currently do not require any formal qualifications or experience to service these installations. While some technicians have voluntarily undertaken specifically designed private courses, many have minimal qualifications or training. Councils often receive complaints from home owners that some technicians merely replace chlorine tablets and leave the premises, while others conduct a comprehensive service that can take up to one hour, and involves provision of a comprehensive service report. Due to the highly competitive nature of the industry, service times are often kept to a minimum, resulting in poorly maintained systems. Complaints about service technicians often go unreported, as homeowners simply change technicians and do not refer the matter to Dept of Fair Trading.

Service reports also vary widely. Some report sheets have tick boxes, and do not require recording of test measurements or comments on system faults.

Some councils have attempted to apply arbitrary standards for service technicians, however they are generally unsuccessful, as technicians, (who often work in many local government areas), may claim discrimination or restriction of trade. Other states require minimum Plumbing trade qualifications or completion of specific training courses.

POSSIBLE SOLUTION

1. Develop a state-wide minimum criteria for service technicians, based on the NSW Health conditions of accreditation for AWTs.
2. Implement a Statewide accreditation (licencing) systems for AWTs Service Technicians.
3. The Provisions of Clause 45(4) Local Government (General) Regulation 2005) should be extended to include ALL conditions of approval contained in the NSW Health Department Certificates of Accreditation for OSM systems.

4. AWTs Accreditation

While the NSW Health Department's AWTs Accreditation Guidelines of May 2005 require manufacturers to submit a percentage of systems installed annually for field evaluation, this requirement has not been enforced. There is concern that systems may perform well under controlled test conditions, but may not consistently meet specifications in the field.

The Guidelines also required NSW Health to convene a Wastewater Management Advisory Committee to vet and process applications in an open and transparent manner. This Committee has not been convened.

SOLUTION

NSW Health should implement the requirements of the NSW Health "Sewage Management Facility- Sewage Treatment Accreditation Guideline" May 2005, **and in particular Clauses 3.3.2 and 10.1**

5. Irrigation Areas

The irrigation area is a vital component of the sewage management facility, and poorly designed, installed or operated systems can lead to human exposure to wastewater or contamination of the environment.

Design and installation of irrigation systems is seen as site dependent, and S 68 Local Government Act 1993 gives council the power to approve human waste treatment devices “or a drain connected to any such device”. However the Local Government (General) Regulation 2005 does not make specific reference to AS/NZ 1547 - 2000 *On-site Domestic Wastewater Management*, which provides guidance on soil classification and design of land application areas.

Homeowners are often responsible for the installation of the irrigation system and, in many instances, the dwelling will be occupied long before the irrigation system is completed.

SOLUTION

1. Council should be given stronger powers to require the irrigation systems to be designed and installed in accordance with AS/NZ 1547 - 2000.
2. Occupation Certificates must not be issued until the irrigation system has been installed in accordance with the approved plans and specifications.

6. Training

Local Council Officers often lack the technical skills and knowledge necessary to understand OSMS and the assessment and approval process.

SOLUTION

Basic training in the field of wastewater treatment and soil science are core skills for rural council officers, and should be incorporated in the curriculum for the Degree in Environmental Health Science (not left for post Graduate study)

7. Environment and Health Protection Guidelines 1998

The Guideline dealing with On-site Sewage Management for Single Households was first released in 1998 and a review has been long over-due.

SOLUTION

Issue a revised Environmental and Health Protection Guideline

8. Protection of Drinking Water Supplies

The impact of OSMs on ground water supplies in rural NSW is poorly understood and not well coordinated. While the Office of Water issues Bore Licences for stock and domestic water use, the location of the proposed bores in relation to any existing OSMs (and the potential impact on the water quality) is not considered.

Equally when a local council issues an approval to install an OSMS, it is often issued without knowledge of the location of bores in the area, and the potential impact on the quality of the bore water (particularly for domestic or drinking purposes).

SOLUTION

1. Investigate the potential impact of OSMS on Groundwater supplies used for human consumption.
2. Provide a coordinated approach to the approval, installation and monitoring of both bores (including wells and spearpoints) and OSMS.

9. Gap between Domestic and Large Commercial systems

The management of OSMS for single domestic dwellings serving a maximum of ten persons is the responsibility of Local Government. However Sewage management systems for a minimum of 2000ep (equivalent persons) is currently the responsibility of the EPA (Office of Environment & Heritage).

While the management of systems serving between 10 and 2000 ep has been passed to Local Government, there are no State-wide policies, Guidelines or processes of accreditation for such Sewage Management Facilities. Most councils lack the expertise to evaluate such systems, and may attempt to apply the accreditation guidelines for domestic systems, which are inappropriate.

SOLUTION

1. Return the management of commercial system serving 10 to 2000 ep to the EPA or;
2. Provide Local Government with the resources and legislative powers to adequately control such facilities.

10. Subdivision Policies

Some council subdivision policies are inconsistent with their OSM Strategy. This can result in un-sewered subdivisions being approved with lots < 2ha, on town water, where the cumulative impacts of OSMS on groundwater and surface waters are not adequately addressed. The long term impact on recreation waters and drinking water can lead to a potential public health risks.

The performance of OSMS can also be compromised when town water is reticulated to small, existing un-sewered lots that previously relied on tank water.

SOLUTION

Introduce uniform planning legislation dealing with minimum lot sizes for un-sewered subdivisions

11. Greywater

The ready availability of greywater diversion devices through hardware store can lead to uncontrolled discharge of untreated wastewater above ground (potentially coming in contact with humans and animals). Diverting a large proportion of the greywater from an existing septic tank can also lead to blockages and premature failure of septic tanks.

SOLUTION

1. Greater education of landowners
2. Stronger powers for Local Council Officers