

Submission

No 32

INQUIRY INTO MANAGEMENT OF DOMESTIC WASTEWATER

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The Director

A proposal to conduct a survey on the number and operational performance of Domestic Onsite wastewater systems (septic tanks) in the Hawkesbury-Nepean Catchment.

A proposal to establish a Domestic On site wastewater system centralised policy position within the NSW Office of Water.

Does the NSW Government or Department or Organisation know the number of Domestic Onsite wastewater systems (septic tanks) installed and their operational performance in either NSW, catchment areas or local government areas?

I would like to know and Authorities should know?

NSW Best-Practice Management of Water Supply and sewage framework

The NSW Best-Practice management of water supply and sewage guidelines, 2007 (BPMG) requires-

1. A National Wastewater Source Management Framework;
2. BPMG elements of Integrated Water Cycle Management, Strategic Business Planning, Regulation and Pricing of Sewerage, Water Conservation, Performance Monitoring and Sewer Backlogs;
3. Outputs of annual TBL performance reports and Action Plannings;
4. Outcomes of sustainable water and sewage services implemented. Complying water and sewerage tariffs, full cost recovery, strong pricing signals to encourage efficient use of services and
5. BPMG are the practical means of implementing the goal of the NSW Governments Country Towns Water Supply and Sewage Program (CTWSS) .

The NSW framework is a preventative risk management approach to address the use of common pool resources.

The framework involves full cost recovery, sewer usage charges, monitoring of discharges, enforcement and penalty notices under the POEO Act 1997, all of which are applicable to the Domestic Onsite Wastewater sector.

Catchment Health Indicators

The approved catchment indicators of catchment health of a catchment area published in the NSW Government Gazette on 19 December 2008 relevant to the Onsite sewage sector are:

Theme	Approved Indicator
Land Use and Human Settlements	Land use, Sites of pollution and potential pollution, Community attitudes, aspirations and engagement.
Water Quality	Nutrient Load.

Development of Catchment Health Indicators for the drinking water catchments

The Development of Catchment Health Indicators for the drinking water catchments of Sydney, the Illawarra, Blue Mountains, Southern Highlands and Shoalhaven, December 2009 produced by the Sydney Catchment Authority lists catchment health indicators, outlines the process for indicator selection, summarises the recommended methodology for data collection and identifies the agencies responsible for collecting indicator data.

This document informs:

Sydney Catchment Authority confers, amongst other things certain functions with respect to the protection and management of the catchment areas, and for the protection of the environment.

Under Section 3 of the Sydney Water Catchment Act 1998 catchment health is defined as follows: “Catchment health, in relation to the catchment area, means the condition of the ecosystems and systems of management (such as sewerage and stormwater systems) in that catchment that protect water quality”. The OECD (2003) states that catchment health indicators are used to inform on key aspects of catchment health.

The Sydney Water Catchment Act 1998 (the Act) confers and imposes upon Sydney Catchment Authority that the catchment area is subject to periodic catchment audits and that catchment audits must assess the state of the catchment having regard to the approved 18 catchment health indicators published in the NSW Government Gazette on 19 December 2008.

The 5 approved catchment health indicators relevant to the Onsite sewage sector are: Land use, Sites of pollution and potential contamination, Population settlements and patterns, Community attitudes, aspirations and engagement and Nutrient Load.

Land Use

Understanding the use of land within a catchment and the changes in land use that are occurring over time is important to gain an understanding of the possible sources of pollution and the potential risks to catchment water quality arising from them.

Type and extent of land use of urban and rural development has been identified as a pressure indicator of catchment health. Land use data is a pivotal data set for all types of catchment and water quality analyses. The SCA maintains a data set that can be used to derive this information.

Sites of pollution and potential contamination

Sites of pollution can have a direct impact on catchment water quality through the export of a range of pollutants into surface and groundwaters.

The recommended measure for future audits is: Sites and areas of potential pollution impact. Due to the high variability of data sets used in past catchment audits, this indicator is confined to sites holding Environmental Protection Licences under the Protection of the Environment Operations Act 1997 and sites listed on Contaminated site registers in accordance with the Contaminated Land Management Act 1997.

It is acknowledged other possible or potential diffuse pollution sources such as Onsite sewage systems will need to be picked up in future audits.

Population settlements and patterns measures

The number of people living within the catchment and hence the number on Onsite sewage systems and their distribution patterns across the catchment can have potential implications on water quality, especially in sub catchments where population density is greatest.

Community attitudes, aspirations and engagement measures

Community attitudes, aspirations and engagement is a new indicator that aims to gauge the attitudes of the community living within catchments towards maintaining and improving catchment health, and the level of engagement within the community to bring this about.

In doing so, it should therefore provide some measure of the communities ability to provide input into the management of the catchment which should include the management of Onsite sewage systems.

Nutrient inputs

Nutrient inputs arise from both diffuse and point sources within the catchment.

Diffuse nutrient inputs originate from the broader area of the catchment and includes input by runoff from urban land.

Poor land use can lead to enhance nutrient loads from these areas. Failing or under performing onsite sewage systems can enhance nutrient loads in the catchment.

The current measure to inform this nutrient load indicator is: The level of compliance of sites of point source nutrient input within Environment Protection Licences and/or Pollution Reduction Programs during the audit period.

It is considered that a future measure include the level of compliance of diffuse source nutrient input with Onsite sewage systems during the audit period.

Role Players for Onsite sewage management in NSW

The roles and responsibilities for Onsite sewage management appear disparate and disjointed.

At a recent Waster Working Group meeting it was reported Councils want a central agency- no one seems to know where to go or who is responsible for what, there should be a one stop shop-not countless bodies, where does responsibilities start and finish. Appropriate training for Council staff may assist in reducing confusion.

NSW Office of Water

The NSW Office of Water leads the NSW Governments policy agenda on water-ensuring all of NSW has sustainable water while populations grow and conditions change.

The Office also manages the policy and regulatory frameworks for the State's surface and ground water resources to provide a sustainable water supply for all users and supports other water utilities in the provision of water and sewerage services throughout NSW.

Catchment Management Authority

Confers and imposes functions with respect to the protection and management of catchment areas and for the protection of the environment. Section 42A of the Sydney Water Catchment Act 1998 specifies the catchment area is subject to periodic catchment audits by an auditor appointed by the Minister.

Sydney Catchment Authority publications Upper Nepean and Blue Mountain brochures May 2005 acknowledges "people living and working in the catchment areas play a special role in keeping our catchments healthy. Some of the ways people in the catchments help include managing Onsite sewage systems effectively."

Department of Local Government

The 'Easy Septic Guide' developed by Social Change Media for the NSW Department of Local Government 2000. This document can be downloaded by googling septic tanks and clicking on septic tank regulation.

This Guide informs in 1999 leaking septic systems were identified as a possible contributing factor in several cases of hepatitis and a major food safety crises in the oyster industry. Leaking septic systems can also have more insidious effects, seeping into and contaminating groundwater supplies, and mixing with the water in our favourite swimming holes without us even being aware of it. There is a growing crisis facing areas where septic systems predominate. Many of these septic systems (70%)

are leaking, posing health risks to families and communities and to those further downstream. Badly maintained septic systems can cause environmental problems up to 50km downstream.

This Guide may need to be reviewed to reflect greywater reuse, recycling systems and current trends.

NSW Health

Under the provisions of Clauses 40 and 41 of the Local Government (General) Regulations, a local council must not approve of the installation of certain sewage management facilities unless they have been accredited by the NSW Department of Health. This is the only statutory role of NSW Health in Onsite domestic wastewater management.

Landowners

Monitoring and maintaining their systems.

Councils

The development of Sewage Management Strategies identifying key element areas.

The issue of approvals to operate a system of sewage management (licence).

Approvals to operate a system of sewage management requires the landowner to take all reasonable steps to minimize transmission of disease, pollution of water and degradation of land.

Overseeing the operation and maintenance of Onsite wastewater systems.

Inventory (database) of all licensed or registered Onsite systems identifying the type of system.

The issue of notices identifying maintenance works that need to be carried out on sewage management facilities.

Plumbers, drainers and service agents

The installation, maintenance and compliance reporting of Onsite sewage management facilities.

My Observations

It would appear that Councils have a number of concerns regarding the management of Onsite sewage systems.

These are but are not limited to:

Compliance with Councils Sewage Management Strategies;

Dual Occupancy?;

WICA licensing;

“Pump Out systems”;

Greywater/Reuse systems;

Terms of Approvals;

Renewal of Approvals periods

Risk categorization;

Inspection fees and frequencies;

Performance of systems;

No accreditation of service agents;

Lack of consistency of service agents forms and reports and

Inconsistencies across Councils.

NSW Councils unlike Victorian Councils are not required to forward annual reports to a Central Agency (EPA VICTORIA) advising on the number of Onsite sewage management facilities operating, newly installed or decommissioned within every Council where Onsite systems are operating over a financial year.

Onsite Wastewater Working Groups

There are currently two wastewater network groups established in NSW-Hawkesbury Working group and the Hunter Working group.

Conclusion

The sustainable management of Domestic wastewater systems and its goals fits comfortably within the State policy frameworks for the management of water and protection of the environment.

Proposals

A survey being undertaken in the Hawkesbury-Nepean catchment basin on:

The number of Domestic Onsite wastewater systems installed in the catchment;

The types of systems;

The age of systems;

The performance of systems;

The management of systems;

Improvements for the management of systems.

To be funded by the Sydney Catchment Authority.

The creation and appointment of a centralised policy position within NSW Office of Water to:

Co-ordinate Domestic Onsite wastewater policy on a Statewide basis;

Determine which On-site wastewater publications need review;

Determine how Councils are complying with their Onsite sewage management strategies;

Assist Councils to implement the reviewed AS/NZ Standard 1547 (Onsite Wastewater Management), when adopted by Standards Australia;

To Co-ordinate the above mentioned survey;

Define responsibilities;

Identify training needs;

Identify and make recommendations on any improvements needed.

It is suggested that a centralized Domestic Onsite wastewater position be created and appointed within the NSW Office of Water.

To be funded by the NSW Office of Water.

Yours sincerely,

Patrick Garry

Environmental Health Officer.

Dated 15 May 2012