

Submission

No 15

INQUIRY INTO MANAGEMENT OF DOMESTIC WASTEWATER

Organisation: Penrith City Council

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Legislative Assembly
Committee on Environment and Regulation
Parliament House
Macquarie Street
SYDNEY NSW 2000

Attention: Chris Patterson MP

Dear Sir,

**Re: Committee on Environment and Regulation
Inquiry into the Management of Domestic Wastewater**

I refer to your invitation to make submissions to the Committee on Environment and Regulation regarding the inquiry into the management of domestic wastewater.

Penrith City Council currently regulates approximately 4700 on-site sewage management (OSSM) systems across the local government area. The main systems in use are aerated wastewater treatment systems (AWTS), septic tank with absorption trenches and pump-out systems.

Council's 'On-site Sewage Management Strategy' was introduced in 2002 to manage these systems after an amendment was made to the *Local Government Act 1993*. The Strategy was then reviewed in 2007, and Council's 'On-site Sewage Management and Greywater Reuse Policy' was adopted in response.

Council's OSSM Program has been running from the time that the original Strategy document was adopted in 2002. During this time, the Program has completed the initial round of inspections of all of the OSSM systems within the City. More recently, the current Policy and the OSSM Program have been under review to determine how the Program can be more effectively managed with Council's current resources.

We welcome the opportunity to make this submission, and, in turn, please find below our response to the specific terms of reference of the inquiry.

a) The adequacy of safeguards to ensure food safety, and to protect against the risk of localised contamination, in food production areas.

- There is a significant volume of information available both in Australia and internationally relating to the risk to food safety and the health of workers and neighbours through the use of wastewater to irrigate crops. There has also been a number of significant food borne illness outbreaks from the inappropriate use of wastewater on food crops. Currently there is no specific legislation that regulates the use or quality of wastewater in food production areas. It is recommended that

legislation be developed specifying the suitability of wastewater, the method of application and what quality the wastewater must be if it is to be used for agriculture, aquaculture and other food processing or preparation activities or for any other purpose that may result in contamination of food (including drinking water).

- The NSW Food Authority currently does not allow the use of wastewater in food premises unless prior approval has been obtained, and this approval is subject to a satisfactory risk assessment and management plan based on the Hazard Analysis and Critical Control Point (HACCP) principles. Operators should be required to seek approval or apply for a licence prior to using wastewater so that the appropriate regulatory authority regulating the use of wastewater for irrigation is satisfied that all hazards have been identified and that appropriate control measures are in place to prevent contamination and cross-contamination. The appropriate regulatory authority should maintain a list of approved premises that may be accessed similar to the how the NSW Environment Protection Authority maintains a list of “licensed premises”.
- Acceptable treatment methods should be based on clear scientific evidence. If an operator seeks to introduce a new technology, a process should be introduced to require an application to NSW Health for approval/accreditation to use this technology providing the necessary evidence that it works.
- It should not be assumed that all consumers wash fruit and vegetables before consumption. Multiple barriers should be in place to prevent the consumption of unsafe food. Consideration should be considered to labelling of products irrigated with wastewater.
- The legislation should specify buffer zones between OSSM systems and food crops. For existing properties where the system may be too close to the crop, consideration needs to be given as to whether new requirements apply or whether other control measures will be accepted. If one or the other must be relocated, there must be clear guidelines about how this decision will be made.
- Most Council’s in NSW are only responsible for the inspection of retail food premises within their local government area therefore either the NSW Food Authority or Department of Primary Industries should be responsible for the regulation of food production where wastewater has been used. Clear guidelines need to be in place on how to respond in the event that a food crop has been contaminated e.g. who to refer the matter to.
- There should be clear guidance as to whether animals or seafood that ingest wastewater or food contaminated with wastewater are safe to consume. Microbiological and chemical thresholds, including testing guidelines should be established and be enforceable. Legislative requirements should be equally applicable across all food producers.
- Information should be available to food producers and the community on guidelines relating to the use of recycled water for irrigation for food production. Information should be available for Culturally and Linguistically Diverse communities.

b) the appropriateness of current regulatory arrangements in relation to the management of domestic wastewater.

- The “Environment and Health Protection Guidelines: On-site Sewage Management for Single Households” (the Silver Book) was published in 1998 and has not been reviewed since this time. Considering the importance of proper installation and management of these systems, and the potential environment and health risks associated with their use, this is not appropriate. This is the key guideline document for wastewater management, and does not consider recent developments in technologies. The document should be reviewed in consultation with relevant authorities such as the Department of Primary Industries, and the NSW Food Authority and Local Government.
- Current regulation does not provide options for the enforcement of food production irrigated by wastewater.
- Where food production is irrigated by wastewater, enforcement options should be available to ensure:
 - That where irrigation of food production is unsafe, action can be taken to prevent the sale/consumption of the food. The powers should be similar to Section 60 of the Food Act 2003 relating to the issue of a prohibition Order.
 - Ability to seize any unsafe food similar to Section 38 of the Food Act 2003.
 - Issue penalties, adequate to act as a deterrent on the producer, operator, owner and/or the installer.
 - Prosecution against a producer, operator, owner or installer for offences.
- To ensure penalties notices act as a deterrent. The value of the penalty notice should be of a significant value and above the cost of an application to install/modify an OSSM system.
- The installation and servicing of AWTSS is an unregulated industry for which there is very little accountability on service agents. Under the Local Government Act the responsibility is on the property owner to ensure that the system is installed and operated satisfactorily. Standards should be introduced to ensure consistency of accreditation and mobility of the trade across all local government areas. The accountability and training of AWTSS installers and service agents is essential to achieve environmental and public health objectives.
- There are no inducements for the industry to consider installing or utilising better technologies in on-site sewage management that then can achieve better environmental and health outcomes.
- Guidelines should be developed regarding the best practice method to calculate appropriate disposal area size, for the varying disposal technologies and site characteristics.

c) The adequacy of inspection procedures and requirements to report incidents.

- Council is committed to minimising the financial impact of monitoring OSSM systems and an inspection regime on the landowners. There is a significant challenge to provide a cost effective service to owners of OSSM systems based on cost recovery from the owners of the systems.

- Under the current legislation, the owner of the property is responsible for the installation and operation of the system. The service agent is not accountable. There is no recourse available under the Local Government Act where service agents do not properly maintain the system or do not submit the service report to Council after completing the service.
- Under the Local Government Act, there is no formal requirement for property owners or users of an OSSM system to notify Council of an 'incident'. For example, if an absorption trench system is failing, Council may only be made aware of this issue when a complaint is received from a neighbouring property, or when it is queried whether approval is required to modify/alter the system. There should be a duty to notify where significant pollution events occur for example, contamination of a watercourse.
- Whilst the installation approval and operational approval for AWTs systems requires that certain performance criteria are met, Council is only made aware of any variations from this when a complaint is received or when the service sheet is completed and submitted. Service agents may not notify Council of significant operating issues at the risk of losing clientele.
- There should be a regulatory requirement for a standardised service maintenance report, with allowances for electronic submission.

d) Any other related matter

- The use of recycled water in cooling towers in place of potable water is increasing. Wastewater is also used for cooling towers. The risk associated with the use of wastewater in cooling towers needs to be adequately assessed and treatment requirements specified and legislated. Operators wishing to use wastewater should be required to apply for approval or a licence with NSW Health being the appropriate regulatory authority. Alternatively, amendments could be made to the Public Health Regulation to require notification of the use of wastewater to council. There is also a potential for wastewater to be used in other equipment where legionella has been isolated e.g. car washes, fountains and spray misters.
- When considering the level of treatment required, the presence of odour should also be considered.
- There is a potential for wastewater to contaminate private and public drinking water supplies such as through direct connection, equipment failure, run-off or spray irrigation. Any risk assessment should identify nearby drinking water supplies that may be impacted and appropriate measures put in place to prevent contamination. Appropriate buffer zones should be considered and nearby water supplies should be protected from spray drift.
- The risk to animals and native fauna from consuming wastewater should be considered.
- The use of wastewater may result in increased incidence and growth of cyanobacteria and algae in waterways and drinking water supplies. Toxins caused by these can have serious health effects. Similar to the closure of oyster-harvesting areas when waterways are contaminated or the closure of a water supply, if higher than normal levels of cyanobacteria and algae are identified, the appropriate regulatory authority

should have the power to restrict the use of wastewater at nearby properties until a cause can be identified and measures taken to improve the quality of the wastewater. The appropriate regulatory authority should also have the power to recover costs from any clean up or remediation from the responsible party.

- The potential for contamination of soils, particularly from pathogens and chemicals in wastewater needs to be considered. There should be clear guidelines for businesses and government agencies to be able to assess whether a certain activity should be permitted based on the condition of the soil resulting from previous wastewater use.
- Clear information about the requirements needs to be available to all relevant parties e.g. business operators, workers, neighbours, the general public and the relevant government agencies.
- The health impact on workers from exposure to pathogens and chemicals and exposure limits should be considered.

Please do not hesitate to contact Kristin Blain on (02) 4732 7724 should you wish to discuss this submission further.

Yours faithfully



Graham Liehr
Environmental Health Manager