RP2008

# BENEFICIAL RE-USE OF BIOSOLIDS -COMMUNITY ENGAGEMENT

## Problem

Community engagement and acceptance is vital to broadening the processing and application of the biosolids product, even if its application is shown to be beneficial (Fig 1.).

However, the number and severity of complaints regarding malodour from Wastewater Treatment Plants, transport, and land application of biosolids is increasing despite attempts to produce a harmonious community environment.

Figure 1: the benefits of biosolids are considerable

## Solution

The aim of this project is to evaluate the social-environmental impact of sludge process and land application of biosolids, as well as determine local community perception and response. This in turn will promote an increased adoption of biosolids due to the greater acceptance of biosolids by communities.

In order to do this, multiple approaches must be implemented, including surveys, focus groups, and odour analysis (Figure 2).

Multi-faceted research creates better results when looking at communities

Complaint information is being obtained from Sydney Water, Hunter Water, and SA Water. This is in order to guide survey distribution as well as establish best practice for complaint management.

Surveys will measure qualities of community members pertaining to their wellbeing, attitudes and beliefs, as well as demographic identifiers.

Odour testing, through use of Gas Chromatography-Mass Spectrometry/Olfactometry (GC-MS/O) will assist in producing community odour testing that will illustrate the experiences of members of the community with regards to biosolids and other environmental factors.

Figure 2: odour testing is a key component of evaluating the impact of biosolids on communities.

## Benefits

The project will improve strategic decision-making and reduce social-environmental barriers regarding biosolids.

The tools implemented here will provide stakeholders with improved methods of communication with the community, as well as a framework by which to determine the most appropriate solutions for specific community concerns.

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