COMMUNITY ODOUR SNIFFERS – WOODMAN POINT

WELCOME

Welcome to the Woodman Point wastewater treatment plant (WWTP). This is the largest wastewater treatment plant in Western Australia, currently serving a population of 600,000 persons.

The plant currently treats 120 million litres of wastewater each day (120 ML/d) and is to be expanded soon to a capacity of 160 ML/d. It will need to be expanded further to handle an estimated flow of 240 ML/d by the year 2045.

The Woodman Point WWTP receives wastewater from a large area of Perth (460 km^2) south of the Swan River. The catchment is bounded by Midland/Kalamunda in the east, Byford in the south and the coast to the west.

The main purposes of the treatment plant are to protect public health, provide a service to the community for wastewater handling, treatment and reuse and limit adverse effects on the environment from a multitude of small treatment units.

ODOUR UPGRADE

The Corporation is spending over $100 million on upgrading the plant to provide more effective treatment and reduce the emissions of odours from the plant.

The odour upgrade was released for public comment in September 2005 and approved by the EPA In 2006. Design work commenced in 2006 and construction has been proceeding throughout 2008 and is now entering the final stages.

ODOUR SNIFFERS

An extensive monitoring program is to be carried out in 2009/10 to check that the upgrade as constructed actually achieves all the desired outcomes – particularly in reducing the odour nuisance experienced by the community.

The monitoring program has several ways to check the outcomes from the perspective of the local community:

- Reports from the panel of odour sniffers;
- Odour complaints (reported by phone);
- Phone surveys of the local community;
- Computer modelling of the mixing and transport of odour emissions.

The reports from the panel of odour sniffers are particularly valuable as they distinguish the different types of odour that can be detected.

THE JOB OF ODOUR SNIFFERS

It is hoped to have 10 local residents on the odour sniffers panel. The members will:

1. Tour the plant and learn to distinguish the main types of odours;
2. Be given forms on which to record the times when they smell odours from the plant, and the types of odours they detect;
3. Email or post their forms each month, or provide them via phone;
4. Continue to report for 12 months from December 2008 to December 2009.

The reports from the odour sniffers will be used each month to check for improvements, problems, leaks or other unexpected emissions; and also will form a record of events that becomes part of the report submitted to EPA on the performance of the plant.

ODOUR COMPLAINTS

The role of being an odour sniffer should not change your behaviour in registering odour complaints to the Corporation (ph 13 13 75).

REPORTING AND REIMBURSEMNENT

Odour sniffers report only to Consulting Environmental Engineers (not to the Water Corporation). It is the job of CEE to check that the plant is meeting the desired targets for odour reduction, and the odour sniffers help the company do that.

Consulting Environmental Engineers will reimburse the expenses of the odour sniffers for emails and phone, to an amount of $60 in June 2009 and $60 in December 2009. So really you are doing the work to help the local community get a good outcome from this project.

Contacts are:

Ian Wallis phone 03 9429 4644 wallis@cee.com.au
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We would like you to report by the 15th of each month in 2009 – but the 19th in December 2008 (as a practice)

TYPES OF ODOUR

We suggest you concentrate on identifying five types of odour from the plant:

1. Inlet and primary area (hydrogen sulphide odour)
2. Bioselector (sharp fermenting odour);
3. Aeration (composting odour);
4. Digester area (strong sulphide and mercaptan odour);
5. Biosolids loading (powerful organic sludge odour).

HOW THE ODOURS SMELL TO ME

Type of Odour	How it smells to me
Inlet and primary area	
Bioselector	
Aeration	
Digester area	
Biosolids loading	

ODOUR STRENGTH

We suggest you record odour in five strengths:

1. Detectable, but not strong
2. Noticeable
3. Intrusive – moderately strong
4. Strong
5. Obnoxious and unbearable.

TYPICAL MONTHLY RECORD

Date	Day	Time	Odour type and strength	Wind conditions?