

Minutes



Community Reference Group (CRG) for the Burwood Beach Wastewater Treatment Works (WWTW) Stage 3 Upgrade – Master Planning and Environmental Impact Assessment (EIA) Phase

MEETING DATE AND TIME: 5 August 2010, 4 pm

VENUE: Bimet Lodge

PRESENT:

John Flannery (JF)	Chairman
Bob Hawes (BH)	Property Council of Australia
Chris Tola (CT)	Surfrider Foundation Australia
Tim Ryan (TR)	Merewether National Surfing Reserve Committee
Ross Taggart (RT)	Merewether Surf Lifesaving Club
Brad Warren (BW)	OceanWatch
Scott Wiseman (SW)	Merewether Heights Public School P&C
Greg Bone (GB)	Manager, System Planning (Hunter Water)
Lauren Randall (LR)	Project Manager (Hunter Water)
Tara Pagnutti (TP)	Project Engineer (Hunter Water)
Lisa McDermott (LM)	Consultation and Communications (Hunter Water)

1. APOLOGIES

Apologies were received from Simon Fane, Michelle Peden and Peter Dennis.

2. MINUTES OF PREVIOUS MEETING

The minutes from the previous meeting were approved with no changes.

ACTION – At future CRG meetings, minutes from the previous meeting will be printed for circulation.

3. OVERVIEW OF HUNTER WATER'S CAPITAL WORKS PORTFOLIO

Capital Works Portfolio

GB gave a presentation on Hunter Water's capital works portfolio overview for the current price path (July 2009 to June 2013).

As a result of discussion, it was confirmed that:

- HWC is spending approximately \$62 million within the price path on the Kooragang Island Recycled Water Scheme and an additional \$12.5 million on dual reticulation schemes.

ACTION – A presentation on the current and planned upgrades to the Newcastle transportation system will be provided at a future CRG meeting (but not the next meeting due to other higher priorities on the agenda).

4. PROCESS DESCRIPTION AND “VIRTUAL TOUR” OF BURWOOD BEACH WWTW

Process Description

LR gave a presentation on the treatment process currently utilised at Burwood Beach WWTW. Samples of raw sewage, secondary treated effluent and biosolids were shown to CRG members to clarify their understanding of the plant. A process flow diagram was provided to CRG members, along with a summary of licence load limits and recent discharge loads and a summary of recent wet weather bypass flows.

As further clarification to discussions at the last meeting, it was noted that clarifiers are required to separate the sludge and effluent streams so that a portion of the activated sludge (known as Return Activated Sludge or RAS) can be returned to the ABF tower to assist in the biological process. The waste solids from the biological process (i.e. the biosolids) are discharged through two small pipes in the base of the effluent tunnel so that the velocity remains high enough to keep the solids in suspension. If the biosolids were discharged through the larger effluent outfall tunnel, the solids would settle out in the tunnel and eventually reduce the capacity of the outfall. A schematic diagram of the outfall arrangement was provided to CRG members.

“Virtual Tour” of Burwood Beach WWTW

A brief DVD was shown that included a tour of the Burwood Beach WWTW and footage of the ocean outfall. LR noted two minor changes that have occurred since the DVD was produced:

- The average dry weather flow received at the plant has increased to approximately 48 million litres per day (ML/d); and
- The Department of Environment and Climate Change is now known as the Department of Environment, Climate Change and Water.

ACTION – Copies of the “virtual tour” DVD will be forwarded to the CRG members.

As a result of discussion, it was confirmed that:

- The Environmental Monitoring Program for the Burwood Beach Ocean Outfall incorporates a range of components, including:
 - Visual monitoring
 - Beach water quality monitoring (bacteriological indicators)
 - Diving inspections (with photos/videos)

- Benthos surveys
- Water quality monitoring
- Oceanographic modelling
- Bioaccumulation studies
- Biosolids volume and quality monitoring
- Bioassay toxicity testing (Whole effluent toxicity, Toxicity identification evaluation)
- Sediment contaminant monitoring
- Consulting Environmental Engineers (CEE) have been engaged to develop the methodology for further studies/monitoring that may be required to enable decisions regarding the Stage 3 Upgrade. Dr. Ian Wallis of CEE is considered an expert on ocean outfalls and has significant knowledge of other outfalls around Australia and overseas.
- The effluent plume has been reported as visible by boat at the location of the ocean outfall. BW noted an intermittently visible clay coloured plume. LR confirmed that biosolids is discharged continuously from the outfall (not intermittently).

ACTION – Dr. Ian Wallis will be engaged to present an overview of the Environmental Monitoring Program and recommended future studies/monitoring at the next CRG meeting.

ACTION – Dr. Ian Wallis will be consulted as to the potential cause of the reported intermittent clay coloured plume near the ocean outfall.

5. ISSUES AND VALUES FOR STAGE 3 UPGRADE

LR provided an overview of the issues and values already identified from the upgrade. Two questionnaires were returned directly to LR. No questionnaires were received via CRG members. Further input regarding issues and values was invited from CRG members.

As a result of discussion, it was noted that:

- Vehicle access all the way down to Burwood Beach may be favourable to the community. BW noted potential safety issues related to inability to access the beach and parts of Glenrock Reserve by vehicle in the event of an accident.
- Public health is a key issue for surfing groups and other recreational beach users. TR suggested that stormwater discharges are likely to be of higher risk to beach users than the ocean outfall itself. The health risk due to stormwater has not been considered by Hunter Water in the recent health Risk Assessment.
- Hunter Water is able to present the outcomes of the recent Health Risk Assessment to specific community groups on request. Some information relating to other risks to beach users (eg. shark attack, injuries reported to lifeguards, etc.) has been collated by Hunter Water and can be provided with the Health Risk Assessment results for context.

ACTION – Hunter Water will discuss vehicle access with the National Parks and Wildlife Service (NPWS) at a Briefing on 12 August 2010.

6. UPGRADE OPTIONS FOR STAGE 3 UPGRADE

Stage 3 Upgrade Options

LR presented an overview of the long-list of upgrade options for the plant. Options have been discussed at a Process Options Workshop held on 19 July 2010.

As a result of discussion, it was confirmed that:

- Effluent disinfection will be implemented at Burwood Beach WWTW unless the preferred option selected for the Stage 3 Upgrade provides an equivalent (or better) reduction in the health risk. For example, if membrane treatment is adopted as part of the treatment process, this would provide the necessary pathogen removal and further disinfection would not be required. Also, if the ocean outfall were extended (made longer) then the additional dilution provided would reduce the health risk to beach users and disinfection may not be required.
- Nitrogen removal is one of the key issues relating to receiving water quality, as nitrogen is the limiting nutrient for eutrophication (algal growth) in the ocean environment and the discharge from the plant is currently approaching the current total nitrogen load limit on the licence. Other pollutants that may be present in the effluent and biosolids will also be considered as part of the upgrade investigations and receiving water quality assessment.
- Licence load limits have historically been set based on past plant performance with a small allowance for population growth. Any proposal to alter load limits in the future would require detailed environmental impact assessment and proof of growth in the catchment.
- There is currently no clear outcome for the Stage 3 Upgrade. All potential options are currently being investigated.
- Both onsite and offsite sludge treatment are being considered.
- Further details in relation to upgrade options (eg. truck movements, costs, emissions, etc.) would enable CRG members to provide more specific feedback on options. A broad range of options will be developed at a high level to provide preliminary details for discussion at the next meeting.
- A multi-criteria analysis (MCA) process will be used to screen options and narrow down to a short-list of options for detailed development and assessment. Feedback on the assessment criteria and weightings will be obtained from the CRG by a pair-wise comparison of criteria, to ensure the community's values are incorporated into the MCA process.
- An indication of the likely change to customers' bills will be meaningful in addition to the overall life cycle costs (including capital and operating costs) for the upgrade options.

ACTION – Hunter Water will clarify whether the truck numbers quoted based on preliminary calculations at the Process Options Workshop referred to truckloads of biosolids or actual truck movements (in and out of the plant).

ACTION – Hunter Water will distribute a matrix for pair-wise comparison of assessment criteria by CRG members.

ACTION – Hunter Water will translate estimated capital and operating costs into the

estimated change to each customer bill (i.e. \$ per customer per bill).

7. GENERAL BUSINESS

A revised date for the postponed site visit will be discussed at the next meeting.

8. NEXT MEETING

The next meeting will be held on 21 October 2010 and will feature a presentation from Ian Wallis on the Burwood Beach Ocean Outfall Environmental Monitoring Program. Hunter Water will also present preliminary details of a range of upgrade options to facilitate further feedback from the CRG and their networks.

MEETING CLOSED: The meeting was closed by JF at 6:30 pm

ACTIONS ARISING FROM PREVIOUS MEETING:

	Action	Responsibility	Status
1	A schematic diagram illustrating the outfall tunnel and diffusers to be provided with more information on why the effluent and biosolids are discharged separately.	LR	Complete
2	Further feedback on the approval pathway will be provided to the CRG after the Government Stakeholder Briefing.	LR	Due next meeting
3	The Member Contact Details sheet will be updated to include email addresses and distributed to members.	LR & JF	Complete
4	An electronic copy of the questionnaire will be distributed to members.	LR & JF	Complete
5	A link to the project webpage will be distributed to members.	LR & JF	Complete (refer to Member Contact Details sheet)
6	An overview of Hunter Water's capital works portfolio and information on other major projects relevant to the Burwood Beach project to be provided at future meetings.	LR & JF	Overview of Capital Program complete (further details of specific projects to be provided at future meetings)

Action		Responsibility	Status
7	Future CRG meetings will be held on the first Thursday of the month (every month until September and every two or three months thereafter).	LR & JF	Timing of next meeting changed to enable more details of options to be presented to CRG.

ACTIONS ARISING FROM CURRENT MEETING:

Action		Responsibility	Due Date
8	At future CRG meetings, minutes from the previous meeting will be printed for circulation.	LR	21/10/2010
9	A presentation on the current and planned upgrades to the Newcastle transportation system will be provided at a future CRG meeting (but not the next meeting).	GB	NA
10	Copies of the "virtual tour" DVD will be forwarded to the CRG members.	LR	21/10/2010
11	Dr. Ian Wallis will be engaged to present an overview of the Environmental Monitoring Program and recommended future studies/monitoring at the next CRG meeting.	LR	21/10/2010
12	Dr. Ian Wallis will be consulted as to the potential cause of the reported intermittent clay coloured plume near the ocean outfall.	LR	21/10/2010
13	Hunter Water will discuss vehicle access with the National Parks and Wildlife Service (NPWS) at a Briefing on 12 August 2010.	LR	21/10/2010
14	Hunter Water will clarify whether the truck numbers quoted based on preliminary calculations at the Process Options Workshop referred to truckloads of biosolids or actual truck movements (in and out of the plant).	LR	21/10/2010
15	Hunter Water will distribute a matrix for pair-wise comparison of assessment criteria by CRG members.	LR	21/10/2010
16	Hunter Water will translate estimated capital and operating costs into the estimated change to each customer bill (i.e. \$ per customer per bill).	LR	21/10/2010