**Waste 2017 Abstract Submission**

**Lucas Heights Expansion - Creating Australia’s biggest Resource Recovery Park**

*My presentation is relevant to the following topic area(s).*

🞎 Circular economy 🞎 Overseas experiences

🞎 Collection (inc MUD’s, transient population areas) 🞎 Problem/Hazardous waste (inc asbestos, clinical &

🞎 Container Deposit Schemes medical, ocean plastics, paint, tyres etc)

🞎 Economics (inc business cases, data gathering, 🞎 Product Stewardship

monitoring performance) 🞎 Regional issues

🞎 Education (inc community engagement) 🞎 Recycling (inc CRC’s, collection)

🞎 E-Waste 🞎 Regulations and levies

🞎 Grants (outcomes and processes) 🞎 Social enterprise

🞎 Infrastructure (inc major waste grants, EfW, organics) 🞎 State based issues (eg. Fit for the Future NSW)

🞎 Innovative projects (case studies preferred) 🞎 Technology

🞎 Landfill (inc operations, regulations) 🞎 Tenders and contracts

🞎 Litter and/or illegal dumping (inc litter initiatives) 🞎 Other 🞎 Organics (inc collection, processing)

**Presenter information**

**Presenter name:** David Gamble

**Presenter position:** Technical Leader – Waste Infrastructure

**Presenter organisation:** GHD Pty Ltd

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**Biography**

David Gamble is GHD’s Technical Leader for Waste Infrastructure, based in the Sydney Office. After 15 years as GHD’s Service Line Leader for Waste Management, he has taken on a technical directorship role for waste infrastucture projects in Australia and the Middle East. David is a Principal Environmental Engineer who has been involved with at least 10 successful approvals for waste management facilities over the past 15 years, including the Lucas Heights Expansion, and has more than 20 years experience in waste management. David has also acted as an Expert Witness for various Commission of Inquiry and Land and Environment Court cases involving waste infrastructure approvals.

**Presenter name:** Phil Carbins

**Presenter position:** NSW Projects Director

**Presenter organisation:** Suez Recycling and Recovery

**Presenter email address:** phil.carbins@suez.com

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**Biography**

Phil has over 25 years engineering, operations, asset and business management experience within technical, environmental and regulated industries, including over seventeen years waste management and resource recovery experience specialising in landfill development, operations and rehabilitation. He has previously held senior management positions with Waste Assets Management Corporation, Transpacific Industries Group Ltd and Enviroguard Pty Ltd (a CSR/Brambles joint venture) with earlier experience in the concrete industry and consulting civil engineering. Phil’s roles and experience have given him a direct and comprehensive knowledge of the issues facing the waste industry, particularly in Sydney; a commitment to strategic waste infrastructure planning and development; and a thorough understanding of the risks and challenges facing the recycling and recovery industry. Phil is the Chairman of the Australian Landfill Owners Association (ALOA) and has had significant involvement in the clean energy legislation, carbon farming initiative and broader state and federal government policy and regulation.

**Abstract Summary**

In January 2017, the NSW Government approved the Lucas Heights Expansion EIS, which sought approval to re-profile the landfill's current surface to enable better rainwater runoff and improve odour management. The resultant increase in capacity at the New Illawarra Road Landfill of 8.3 million cubic metres extends the operation of the site by 12 years to 2037.

As part of the project, the capacity of the garden organics operation will be increased to a maximum of 80,000 tonnes per year and activities moved to the western side of the site near Heathcote Road, further away from residential areas. New and improved infrastructure will be provided for garden organics operations, using concrete bunkers with aeration and covering with a breathable membrane during the active phases of the composting process for better odour management.

A $90 million Advanced Resource Recovery Technology facility has also been approved, which has the potential to divert up to 70% of waste from landfill. The proposed facility would be fully enclosed and process up to 200,000 tonnes per year of municipal waste into compost for use on degraded soils.

The facility would also process mixed plastics, timbers, textiles and other dry combustible materials into fuels which can replace gas and coal in existing power stations, cement kilns or industrial furnaces.

The Lucas Heights Resource Recovery Park will ultimately be returned to the community as parklands for everyone to enjoy in a similar way to the Ridge Golf Course and Sports Complex at Menai which were developed on the site of the old Lucas Heights landfill.

GHD and Suez worked collaboratively with stakeholders including the local community, Sutherland Council and ANSTO to prepare a staged master plan, comprehensive environmental impact assessment and detailed environmental management plans to enable this significant project to proceed with minimal impacts on the environmental and the local community. The presentation discusses the approval process, the benefits of a collaborative and integrated approach to major project approvals, and some of the lessons learnt along the way.

**Abstract**

<Insert abstract here>>