**Waste 2017 Abstract Submission**

**Phytocapping – Let’s cap it!!!**

*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:** Dr Kartik Venkatraman

**Presenter position:** Founder/Director

**Presenter organisation:** Acacia Waste Management Solutions Pty Ltd

**Presenter email address:** kartik@acaciawaste.com.au

**Presenter phone number:**

**Presenter mobile number:** 0437 919 262

**Biography**

Dr Kartik Venkatraman is a specialist in waste and environmental management; and holds a doctorate in Phytocapping.

Kartik has managed waste operations, developed and implemented strategies/plans/policies/procedures, written tenders, conducted audits/assessments/reviews/analysis and undertaken research whilst his tenure in Local Government. He has been pivotal in revolutionising and bringing innovation in waste management within the Local Government sector.

Kartik has been associated with the waste industry, engineers, scientists and academics for over a decade with significant contributions and achievements in this field. He is a member of Waste Management Association of Australia (WMAA) and has actively taken part in various working groups, workshops, seminars and conferences. He has also chaired the Local Government Network Group (QLD).

Kartik’s research in Phytocapping of landfills has been well recognised and acknowledged nationally and internationally. He has successfully implemented phytocaps during his tenure in Local Government thus specialises in providing futuristic capping solutions for landfills.

**Abstract Summary**

This presentation gives an overview of phytocapping and its benefits; and highlights the process involved in phytocapping with an emphasises on the factors to be considered in obtaining approval, designing and executing.

**Abstract**

Provision of a final landfill cap is a legislative requirement under Environment Protection Authority (EPA) Victoria’s Best Environmental Practice Management (BEPM) guidelines. This is no different in other States and Territories. Phytocapping is an alternative option to traditional clay capping methods for closed landfills towards effective leachate management.

Phytocapping is a capping technique that utilises native vegetation as a natural pumping system to reduce water being stored in the soil. Soil and trees in this system grossly reduce the amount of water reacting with the buried waste and being released as leachate.

This presentation gives an overview of Phytocapping and its benefits; and based on previous experience highlights the process involved in Phytocapping including pre-qualification tests, approvals, CQA plans, design, construction, QA, post closure management, vegetation management, post closure monitoring, reporting needs and indicative cost.