



# Creating a cleaner, safer world

Presentation on CRC CARE Pty  
Ltd



# Introducing CRC CARE

CRC CARE is a partnership of scientific, industry and government organisations.

We devise new ways to overcome and prevent contamination of soil, water & air.



## CRC CARE Pty Ltd is

- the CRC for Contamination Assessment and Remediation of the Environment Pty Ltd.
- a Co-operative Research Centre (CRC) set up under the Australian Government's CRC Program
- a proprietary company structured to carry out research and development.



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## Our goals

- Cleaner, safer food, water and living conditions
- A reduced toll of disease due to contamination
- Benefits of \$540m-1.8 bn/yr from remediation
- A cleaner natural environment for Australia
- A new export industry
- New skills and jobs in solving and preventing contamination.



## Many partners

Agilent Technologies; Alcoa Australia; Australian Institute of Petroleum; Capital Technic Group Ltd; Chemistry Centre; CHM2mHill; Coffey Geoscience Pty Ltd; Curtin University; Commonwealth Department of Defence; Department of Primary Industries, Victoria; Environment Protection Authority of SA; Environment Protection Authority of Victoria; HLM Asia Capital Ltd; IT Environmental (Aust.) PL; Rio Tinto Ltd; Southern Cross University; The University of Queensland; The University of South Australia; The University of Technology Sydney, URLC Victoria; WA Department of the Environment; Worsley Alumina.



# Our challenge

- Contamination is now seen as a threat to our health, environment and economy.
- Australia has over 100,000 contaminated sites; Asia has 5 million.
- The cost of clean-up is huge - over \$A5 billion.
- Long-term, affordable solutions are urgently needed.





## Our Challenge (2)

- Much remains to be understood about contaminants in soils, water, air and people.
- A risk-based approach offers safe, cost-effective solutions
- Australia needs more skills in environmental risk assessment and remediation.



# Our Research

- Risk Assessment
- Remediation Technologies
- Prevention Technologies
- Social, Legal & Economic Issues
- National Contaminated Sites Program



# 1. Risk Assessment

- Develops reliable and acceptable techniques and technologies to quantify the risk associated with contamination in soil, ground water, surface water and air
- Targets groups of contaminants that pose major soil, air and groundwater problems in Australia, or may pose a threat from terrorism activities.

*- Leader: Assoc. Prof. Jack Ng*



## 2. Remediation Technologies

- Develops technologies for the low-cost, in-situ remediation of contamination that provide results acceptable to regulatory agencies and environmental auditors.
  - *Leader: A. Prof. Megharaj Mallavarapu*



## 3. Prevention Technologies

- Determines how some contaminated soils, treated soils, municipal and industrial wastes may be safely reused on land to return maximum value without creating further contamination issues.

*- Leader: A.Prof. Neil Menzies*



## 4. Social, Legal & Economic

- Aims to understand the social, legal and economic drivers associated with environmental contamination and remediation, so our solutions will be rapidly adoptable.
- Evaluates legal and policy frameworks governing assessment and remediation of contaminated sites.

- *Leader: Prof. Rob Fowler*



# National Contaminated Sites



Demonstrates multi-disciplinary approaches to solving complex land, groundwater and air problems at representative sites across Australia. These are proving grounds for new technologies.



## Education & training

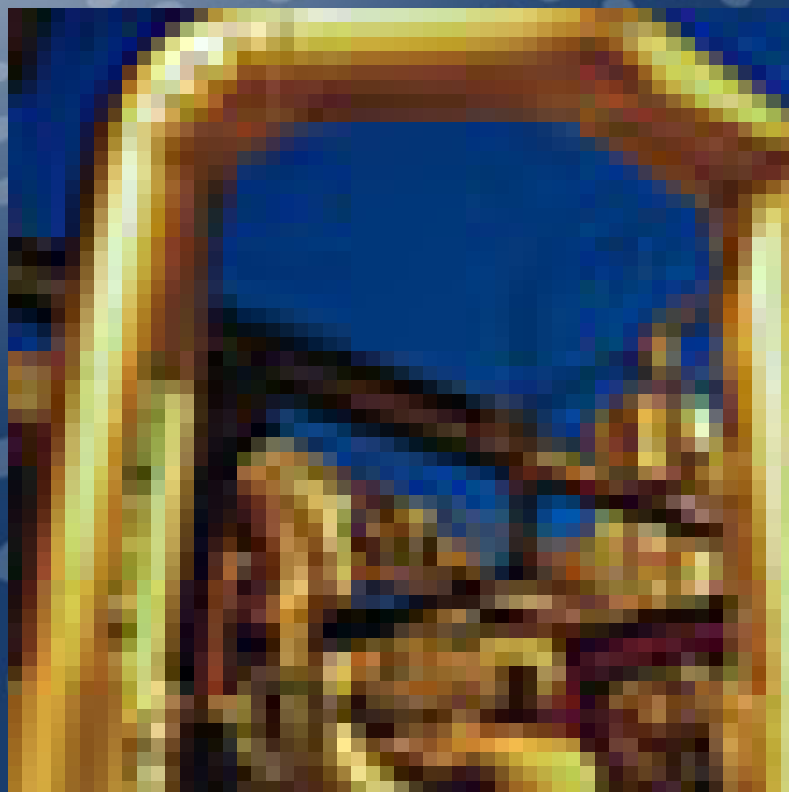
- Addresses an acute shortage of skills
- 75 PhDs with industry supervisors
- Industry-ready graduates
- Skills training for industry and govt. regulators



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# Commercialisation

- Commercialisation begins at the start of the R&D
- Business case planning with partners
- World market access
- Critical mass and industry clusters
- Targeted service / technology / product configurations
- National demonstration sites
- Venture capital access.





## Where to find us

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# CRC CARE

A cleaner, safer future for all