

917 Princes Highway Springvale, Victoria

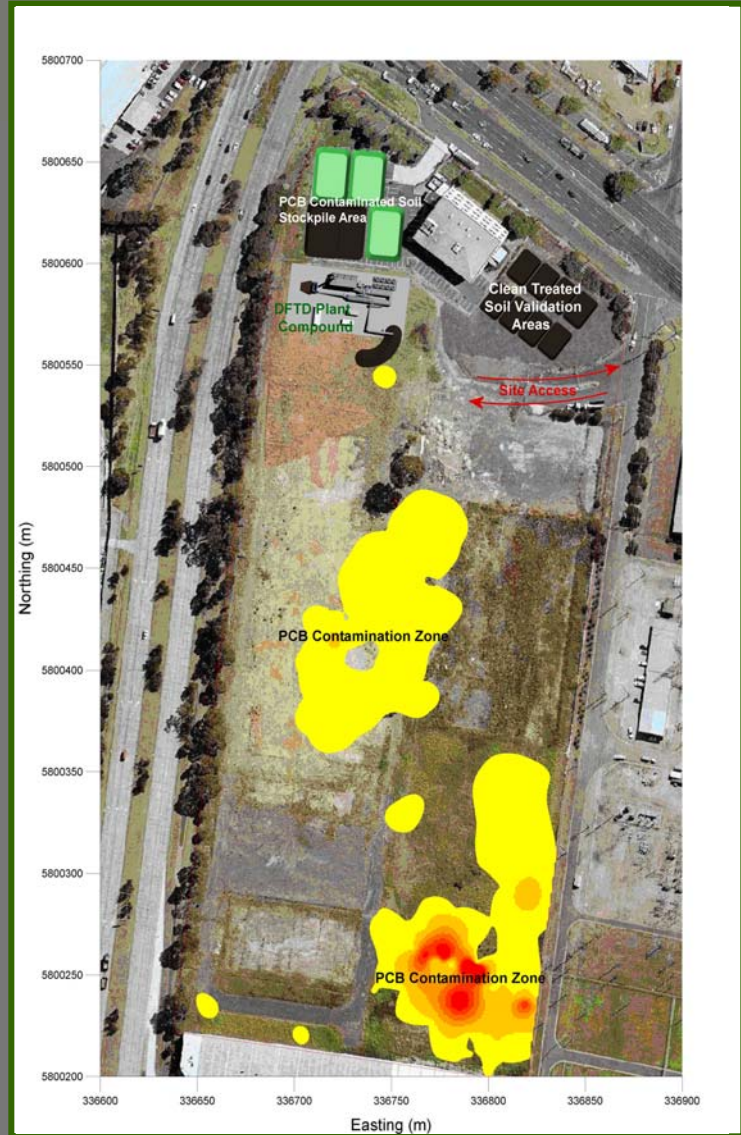
Introduction

INNOVA SOIL TECHNOLOGY has been appointed by Harvey Norman as the head contractor for remediation of a site at Springvale, Victoria. This remediation work presents a first for thermal desorption and PCB remediation in Victoria.

Site History

The remediation site is located at 917 Princes Highway, Springvale, Victoria. The site was formerly a car assembly plant owned by Volkswagen and later the Nissan Motor Company. After operations had ceased in 1968, the Commonwealth Government and later Telecom (Telstra), took over ownership of the premises. The site is now set to be developed into a retail outlet by the new owner, Harvey Norman.

Harvey Norman, in a \$300M joint development with IKEA, is constructing a retail premises onto which the largest homemaker centre in the southern hemisphere will be built. During the planning stages of this development, a small section of the 8ha parcel of land was found to be contaminated with hydrocarbons known as Polychlorinated Biphenyls, or PCBs. Although Harvey Norman was not responsible for the contamination, they have chosen to remediate the contaminated soil to permanently fix the problem on-site, rather than transporting the contaminated soil to landfill.



Approvals

On 14 August 2007 the EPA granted approval for the remediation work to proceed. In granting the approval, Mr Bruce Dawson (EPA executive director regional services) said "This technology presents a solution for PCB contaminated soil at this site and in addition, on-site treatment means sending less contaminated soil to landfill. Whilst new to Victoria this is well proven zone technology used in the USA and Europe".

8. Harvey Norman Remediation Pre-Project (2008) - PCB

In the past, cheaper methods have been used such as ‘cap and contain’ or ‘dig and dump’ where the problem of soil contamination is either rendered immobile or relocated, rather than solved once and for all. Due to the scale of the redevelopment at Springvale and Harvey Norman’s commitment to cleaning the site without passing contamination on to landfill for future generations, remediation utilising best practise technology such as **DFTD** was chosen.

Persistent Organic Pollutant (POP)

Treating PCB impacted soil for the first time in Springvale represents a milestone for the **INNOVA DFTD** process in that PCBs themselves are quite stable chemicals, and therefore treatment is more difficult. Due to this stability, once PCBs have been released into the environment, they fail to break down naturally and are hence known as persistent organic pollutants (POPs). The **INNOVA DFTD** process however utilises a high residence time of four seconds in the gas conversion stage and will provide ample capability for destruction of the PCB contaminant.

Average Soil Properties of the Harvey Norman Springvale Site

Substance	Concentration
Total Petroleum Hydrocarbons (TPH)	620 mg/kg
Total Polychlorinated Biphenyls (PCB)	2 - 8,400 mg/kg (Avg 89 mg/kg)
Total Benzene, Toluene, Ethylbenzene, Xylene (BTEX)	<0.2 mg/kg
Total Polynuclear Aromatic Hydrocarbons (PAH)	<0.5 mg/kg
Total Benzo(a)pyrene (BaP)	<0.5 mg/kg

Project Timeline

The key dates for the 2008 Springvale Remediation Project are as follows:

Date	Description
February	Earthworks begin
April	Earthworks completed Plant set up and commissioning
June	EPA Proof of Performance (POP) test
July	Remediation work begins
October	Plant shut down and transported off site

