



Environmental Checklist

KPMG SGA has a team of environmental consultants specialising in environmental / hazardous materials assessment, remediation and management.

Supported by a multidisciplinary skill set, and own in-house environmental drilling capabilities, KPMG SGA aims to provide clients with a high level of environmental / hazardous materials expertise and service.

Acquisition / Disposal-Due Diligence

| Service | Includes |
|--|--|
| Limited Hazardous Material and Environmental Assessments | Initial site investigation Desktop research of hazardous material and environmental risks with site inspection |
| Targeted Site Investigations | Targeted intrusive soil / groundwater investigations |
| Hazardous Materials Audits | Asbestos, PCB's, CFC's, lead paint, SMF audit providing a summary of health risks plus indicative removal / management recommendations |

Existing Properties / Development sites

| Service | Includes |
|--|--|
| Preliminary Site Investigations (PSI) (ex Phase 1) | Site investigation Desktop research of environmental risks with site inspection |
| Detailed Site Investigations (DSI) (ex Phase 2) | Intrusive soil / groundwater investigations Laboratory analysis of samples |
| Remediation works – soil and groundwater | Scope of works Project administration of specialist contractors Monitoring / validation of works |
| Underground Storage Tank (UST) removal | Planning of project Project Management of specialist contractors Validation of works |
| Environmental Management Plans (EMP) | Management plans and monitoring of contaminated land which is not to be remediated |
| Remedial Action Plans (RAP) | Scope of environmental remediation works Method and control of works |
| Hazardous Material Audits | Asbestos, PCB's, CFC's, lead paint, SMF audit Summary health risks plus indicative removal / management recommendations |
| Hazardous Material Registers and Management Plans | Records the location of hazardous materials and how to manage them (as required by legislation) |
| Hazardous material remediation | Scope of works Project administration of specialist contractors Monitoring / validation of works |

Leasing

| Service | Includes |
|--|--|
| Environmental Management Plans (EMP) | Production, review, approval or monitoring for tenant or landlord EMP |
| Environmental Schedules of Condition | Environmental condition survey of soil / groundwater at start of lease |
| Environmental Schedules of Dilapidations | Environmental condition survey of soil / groundwater at end of lease to attribute responsibility for potential remediation |

Definitions

| | |
|---------------------|--|
| Asbestos | Natural crystal with heat and abrasion resistance qualities. Banned in Australia 2003. Three common asbestos types: Crocidolite / Blue Asbestos, Chrysotile / White Asbestos, Amosite / Brown / Grey Asbestos. Asbestos either bonded into materials or friable. Asbestos register required for all places of work potentially containing asbestos. |
| ANZECC 2000 | Australian New Zealand Environmental Conservation Council-Guidelines for fresh and marine water quality. |
| ASS | Acid Sulphate Soils / marine mud's containing Pyrite (FeS ₂) when exposed to oxygen creates Sulphuric Acid. |
| BTEX | Benzene, Toluene, Ethyl Benzene, Xylene – mono aromatic hydrocarbons. |
| CFC's | Production and use of Chloro-fluorocarbons (CFCs) was banned under the Montreal Protocol (1987) which aimed to phase them out due to their ozone depleting potential. Prior to implementation of the Montreal Protocol CFCs were commonly used as refrigerants (Freon, R11 etc) in air conditioning units. Hydrochlorofluorocarbons (HCFCs) including R22 refrigerant gas due for phase out by 2016. |
| EPA | Environment Protection Authority. |
| Heavy Metals | Common Heavy Metals: Arsenic (As), Chromium (Cr), Copper (Cu), Cadmium (Cd), Lead (Pb), Nickel (Ni), Mercury (Hg), Zinc (Zn). Can accumulate in soils to toxic levels. |
| NEPM | National Environmental Protection Council – National Environment Protection (Assessment of Site Contamination) Measure. |
| PAH / BaP | Polycyclic Aromatic Hydrocarbons are a mixture of organic compounds created during the incomplete combustion of organic material. The USA EPA has identified 16 priority PAHs such as Benzo(a)Pyrene (BaP), based on concerns that they do or might cause cancer in animals and humans. |
| PCB | Polychlorinated Biphenyl a persistent organic pollutant and banned in Australia in 1975. |
| SMF | Synthetic Mineral Fibre, a man-made fibre used as an alternative to asbestos in insulation, fire-rating products and as reinforcement in cement, plaster and plastic materials. Is considered an irritant to the respiratory tract. |
| TPH / TRH | Total Petroleum / Recoverable Hydrocarbons – laboratory processes that assess concentrations of petroleum hydrocarbons. |
| UPSS | Underground Petroleum Storage System comprising a UST and underground equipment (e.g. fuel pipework). |
| UST | Underground Storage Tank commonly used to store petroleum products which can leak and contaminate soil and groundwater. |

Contact us

Sydney

Peter Graham

+61 2 9295 3807

pgraham2@kpmg.com.au

Melbourne

Peter Rodgers

+61 3 9288 5812

prodders1@kpmg.com.au

Brisbane

David Gouge

+61 7 3233 3101

dgouge@kpmg.com.au

Perth

Dahmon Sorongan

+61 8 9263 4805

dsorongan@kpmg.com.au

Canberra

Gerry Filgate

+61 2 6248 1004

gfilgate@kpmg.com.au

Adelaide

Dahmon Sorongan

+61 8 9263 4805

dsorongan@kpmg.com.au

Darwin

Dahmon Sorongan

+61 8 9263 4805

dsorongan@kpmg.com.au

Hobart

Peter Rodgers

+61 3 9288 5812

prodders1@kpmg.com.au

Auckland

Scott Marshall

+64 21 0827 1194

smarshall2@kpmg.com.au

Singapore

Wayne Plant

+65 9005 6503

wplant@kpmg.com.au

www.sgaproperty.com

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