

Site Contamination Investigations:

Issue:

Where property is being used, or has historically been used, for an activity with potential to pollute the site, it is essential that potential land and groundwater contamination liabilities are quantified.

Expertise:

Site contamination assessments generally comprise three (3) stages:

- PSI (preliminary site investigation) – history and site review;
- PSI sampling to confirm, or otherwise, presence & type of contamination;
- DSI: quantify the extent and/or significance of contamination.

PSI 1 investigations are designed to determine whether or not the potential for contamination exists on a site. Site contamination could arise due to industrial processes, introduced soil or fill, hazardous chemical or substance use, fuel storage, inappropriate waste disposal, excavation or mining activities or migration from neighbouring activities

Signs of potential contamination should be identified:

- Signs of stressed vegetation;
- Property conditions or activities which could potentially cause soil or groundwater contamination;
- Presence of surface and subsurface storage tanks, drums and other containers, in use and abandoned;
- Onsite waste water systems in use or abandoned;
- Electrical equipment that may contain PCBs; and
- Building and waste materials that may contain asbestos.

If it is determined that potential for contamination does exist, then sampling & analysis becomes necessary to complete a Conceptual Site Plan (CSP).

Site investigations involve intrusive sampling and analysis in order to confirm or otherwise the presence of contamination at potential 'hot-spot' locations. If contamination is not present at hot-spot localities it is unlikely to represent a significant risk and generally warrants no further investigation.

If contamination is identified, progression to a Detailed Site Investigation is often required.

DSI's are designed to quantify the extent and/or significance of contamination and the need for remediation and/or management strategies. These usually involve extended sampling and analysis, preferentially performed on a basis that will permit statistical interpretation of results, thereby permitting a risk evaluation of the site.

DSI's develop, prioritise and provide a cost estimate for one or more remedial alternatives which address contamination of a property.

Solution:

EnviroRisk Management is skilled in conducting preliminary & detailed investigations to identify persistent pollutants and document liability issues. Our experience includes chlorinated organics, pesticides, heavy metals and arsenic, ammonia, formaldehyde, excessive nutrients as well as fuels, hydrocarbons, PAHs or solvents.



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As usual, the service and advice has been very professional and extremely helpful,
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- J. Pearce
Risk Management
Ridley Corp.

