



EAM

ENVIRONMENTAL
CONSULTANTS

Contaminated Sites

Environmental Services



Do you own a potentially contaminated site?

If you own a site that is on the Hazardous Activities and Industries List (HAIL) kept by the Regional Council and you want to:

- demonstrate that your site is not contaminated,
- characterize the potential contaminants,
- clean up the site

Then EAM can assist you. Listed here is information that explains the scope of a typical contaminated site investigation.

A phased approach is adopted when assessing potentially contaminated sites. The end of each phase results in an assessment of risk. The risk is determined by the presence or absence of a series of "pollution linkages" known as the Hazard-Pathway-Receptor Model. The hazard is the chemical of concern, the pathway is the mobility of this chemical in the soil or water environment and the receptor is someone or something that can be harmed by the chemical. In order for a site to be assessed as contaminated all three aspects must be present.

Each phase is based on the findings of the previous phase and scaled to the requirements of the specific site.



Phase 1 - Initial Desk Based and Historical Use Assessment

includes preliminary site inspection visit and if required a sample collection and chemical analysis plan.

Phase 2 - Site Investigation

Includes the construction of trial pits or boreholes with collection and chemical analysis of a limited number of samples. From this follows a detailed report and risk assessment. If required recommendations may be made for further sampling.

Phase 3 - Site Characterization and Remedial Action Planning

If significant contamination is found and clean up is necessary then further sampling would usually be carried out to fully characterize the extent of the problem and a clean up plan would be developed. This may involve dig and dump or if conditions allow on-site isolation and monitoring or treatment.

Phase 4 - Validation of Remedial Works and Completion Reporting

Once soil removal or treatment has been carried out then further sampling is required to confirm that the contaminant risk has been removed.

Phase 5 - On-going Monitoring

In some instances there is a requirement for on-going monitoring, usually if water resources have been affected or natural attenuation (leaving the contamination to breakdown by itself over time) is the remedial option adopted.



Are you buying or selling a property?

Do you know the history of the site and whether it was ever used for activities that may have resulted in contamination? If you don't a Due Diligence assessment is vital. If you really want to know what you are buying, or you unknowingly buy a site that is later confirmed as contaminated then you may be responsible for the cost of further investigation or clean-up.

Whether you are buying or selling it is in your interest to have independent professional assessment or sampling work conducted. This removes fears or concerns regarding the site condition and if contaminants are present allows consideration of the scale of clean-up costs that may be involved for a potential purchaser.

Due diligence with regard to potential environmental issue associated with land transactions is now standard practice in countries such as the UK and should be considered by everyone in the same way as a pre-purchase structural survey.

Contaminated Sites

- Initial site appraisals
- Consenting and regulatory compliance
- Site investigations
- Contaminant fate and transport modeling
- Development and implementation of remedial solutions (*ex-situ* or *in-situ*).
- Site monitoring

If you would like further information on our services or wish to discuss any of the issues raised please do not hesitate to call us.

Info sheet

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