



# COMMERCIAL REAL ESTATE

ENVIRONMENTAL SITE RISKS



**PINCHIN**





SOIL  
CONTAMINATION



GROUNDWATER  
CONTAMINATION



HAZARDOUS  
MATERIALS WASTE



ASBESTOS WASTE



AIR  
EMISSIONS



WASTE WATER  
DISCAHRGES





EFFECTS ON PROPERTY  
VALUE



ENVIRONMENTAL RISK:  
EXAMPLES



LEAKING UNDERGROUND  
STORAGE TANKS





SUBSURFACE IMPACTS  
(HYDROCARBONS)





## LEAKING TANKS











REGULATIONS AND  
LAW SUITS



# ENVIRO “TOOLS” – PHASE I, II, DSI, ETC

- Phase I ESA – walk-through site assessment, historical and regulatory background searches, review of previous reports
- Phase II ESA/DSI – soil or groundwater sampling
- Remediation – clean up of impacted soil or groundwater. Several techniques can be used
- Risk Assessments – used as an alternative to remediation. Adjusts the regulatory standards to address contaminants given the conditions at a site



# ARE ALL ASSESSMENTS EQUAL?

Phase I ESAs should be comprehensive and review all available historical information

- It is important to note that not all consultants utilize all historical sources.
- ERIS charges for the material from their database and some firms will only use publically accessible information from local libraries to save money and to be more competitive.
- Beware – you get what you pay for!!
- Professional Designations as a minimum in signature (P.Eng, P. Geo, P.Ag., P., Chem, R.P.Bio). CSAP is highest designation in BC.



PHASE II ESA





REMEDIATION OPTION





WHAT IS RISK ASSESSMENT?



A person wearing a blue suit and a white shirt is holding a white rectangular card with both hands. The card has the word "QUESTIONS?" written on it in a bold, dark blue, sans-serif font. The person's hands are visible at the bottom of the card, and their blue suit jacket is visible in the background.

**QUESTIONS?**