Risk Assessment and Site Re-Development – Changing the Paradigm

Ian Mitchel and Cory Kartz, Millennium EMS Solutions Ltd

The development of a strategy for a risk-based site divestment benefits greatly from full endorsement and application of risk-based approaches. Paramount to the strategy development is clarity on desired outcome, and an acknowledgement that an iterative process to reach the outcome may be required. Specifically, traditional risk assessment process would consider a site as a single entity, and focus effort on areas of the Site that have present risk to a re-development scenario. Often the approach In the meantime,areas of a Site that do not have identified risk remain in a non-beneficial use until the areas that have present risk are dealt with. This traditional approach is neither beneficial to a buyer nor a seller, and in our experience a classical risk assessment approach can actually be detrimental to site divestiture and redevelopment, particularly when considering generic land use assumptions.

An alternative approach to the above is applying progressive closure, based on Site size and buyer/seller business goals. Applying unique strategies to a subdivided Site – not all parts of a Site may require a risk based intervention – allows swifter movement of Brownfields sites into beneficial re-use to the advantage of both a buyer and seller. Additionally, the risk assessment can be tailored to the specific redevelopment plans.

Two case studies will be presented where this approach was applied to progressively advance large sites, accelerating divestiture and redevelopment of valuable land while allowing additional time to address parts of the site where more mitigation is required before redevelopment.

Ian Mitchell

Ian Mitchell, M.A.Sc., P.Biol., P.Eng. has degrees in ecology, environmental engineering and toxicology, and nearly 30 years of experience in risk assessment, guideline development and complex contaminated sites management. He contributed to the development of the Alberta Tier 1 and Tier 2 guidelines, as well as several other provincial and federal risk assessment andrisk-based guideline documents. As VP of Technology and Business Services at MillenniumEMS Solutions Ltd., he is responsible for integration of new technologies into consulting,

advancing scientific practice, and overseeing applied research and development. Ian has also taught numerous courses for consultants, industry and post-secondary institutions.

Cory Kartz

Cory Kartz, M.Sc., P.Biol. serves as the Director of the Brownfi eld Assessment and Development Group atMEMS. Mr. Kartz brings 14 years' experience in conducting contaminated sites investigations at dozens of industry sites throughout Western Canada including upstream,midstream, downstream and urban residential/ commercial/industrial categories. He has conducted or supervised the development of conceptual site models at hundreds of contaminated sites to support site investigation, site management strategy and site-specific guideline development. Mr. Kartz is specialized in Alberta Tier 2 guideline development,human and ecological risk assessment and risk management along with quantitative hydrogeological analysis including groundwater modelling. Mr. Kartz has also taken both lead and supporting roles in the development of policies/guidelines for regulatory bodies and industry partners. Mr. Kartz is a professional biologist registered in Alberta.