

(A) New Approach to Rapid Closure for Inactive Sites

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In April 2020, the Federal Government announced that \$1.7B would be allocated to Alberta, Saskatchewan and British Columbia to address inactive and orphaned oil and gas wells and facilities. The Site Rehabilitation Program (Alberta), Accelerated Site Closure Program (Saskatchewan), and Dormant Sites Reclamation Program (British Columbia) were developed to accelerate site abandonment and reclamation efforts.

Matrix had previously developed a customized data management tool (Matrix Approach to Rapid Closure, or MARC) to support an expedited site closure process and the efficient management of large portfolios of sites. MARC was originally developed to manage our work with the Alberta Orphan Well Association, but has been expanded to include 24 other portfolios since the Federal funding was announced.

The tool and associated processes ensure that high-quality data is collected and managed in a central database, allowing for automated production of data-driven reports and mapping products used throughout the project lifecycle. Data management and risk-based work scopes are standardized and centered around the lifecycle of areas of potential environmental concern (APECs). MARC is connected to our in-house GIS portal (Prometheus), PowerBI reports, site visit and borehole logging apps, financial system, and environmental data management system (EQulS). Self-serve automated searches, figures, tables, photologs and reports can be generated using MARC. This automation allows our technical staff to focus on analyzing information and progressing sites toward closure instead of more administrative tasks like compiling and presenting data. The system improves the coordination of work across a large portfolio of sites and simplifies the management of hundreds of small budget projects. MARC has also improved the quality of our work by allowing us to easily assess data across projects to identify trends and anomalies, and ways to make our programs more efficient.

This presentation will provide an overview of the system and how it has helped with our inactive and orphaned site portfolios.

Tara Murfitt

Tara Murfitt has over 17 years of experience in the fields of hydrogeology, environmental assessment/remediation/risk management, and petroleum exploration. Her experience includes proposal, project and site management, as well as technical support for a range of sites including petrochemical plants, upstream and downstream oil and gas sites, farms, housing developments, gasworks sites, landfills, mines, quarries, sewage treatment plants, and various manufacturing facilities. Tara is a Senior Hydrogeologist with Matrix Solutions Inc. and her current responsibilities include portfolio management, client liaison, senior technical review, and assessment program design and management.

Sheila Luther

Sheila Luther is a Professional Agrologist with over 20 years of experience with environmental assessment and research projects with a focus on soil reclamation, contamination assessment and remediation. Her work experience includes contaminated soils assessment and remediation, pre-construction and post-reclamation assessments for oil and gas industry sites, environmental monitoring, literature reviews, technology transfer and research on soil water contaminant interactions. She is a Principal Soil Scientist with Matrix Solutions Inc. and her current responsibilities include senior technical review, client liaison and portfolio management, and assessment, remediation, and reclamation program design and management.