Spill Response and Low Impact Remedial Measures-Wetland and Water Bodies

The course will outline the considerations that need to be taken into account when responding to pipeline failures and releases within sensitive ecosystems such as water bodies and wetlands. It will include a review of the identification of wetlands, response logistical considerations and methods of containment and recovery. We will also cover the preferred minimal impact response methods and remedial techniques to contain and recover released products including oil and produced water within these ecosystems. Actual response cases will be reviewed to show the positive outcomes and benefits of utilizing these methods.

**Topic 1-Identifying wetlands**
- Understanding what is a wetland

**Topic 2-Response Logistics and Considerations**
- Factors and Considerations
- Regulatory Expectations

**Topic 3-Containmment and Recovery**
- Review of principals and methods
- Utilizing natural topography and features
- Logistical considerations
- Access

**Topic 4-Impact Assessment and Site Monitoring**
- Methods
- SCAT
- Reporting

**Topic 5-Preferred Remedial Techniques**
- Review of preferred techniques and filed proven methods
- Review of actual incident responses
- Reporting

**Topic 6-Remediation and Action Plans**
- Expectations and content

**Topic 7-Wildlife Mitigation and Monitoring**
- Methods
- Expectations
Instructor
Mark Pickering
SWAT Consulting

Over 25 Years of experience in Environment Field, as a Technical Specialist, Emergency Response Officer and Environmental Protection Officer. Extensive experience in all phases of environmental site assessment and site management, including; ground and soil monitoring field investigation work, report review, remedial action plan development, site management and in situ remediation. In recent years he has gained the reputation of an industry expert as it relates to spills and releases into Sensitive Ecosystems, being wetlands and water bodies.

Recognizing the frequent destructive results of responses to these types of spills and releases, he has developed refined training that focuses on effective low impact response methods which minimize the overall impacts to the environment and associated costs to industry. Currently employed as a Spill Response Manager with SWAT Consulting Inc. A full service Environmental and Emergency Spill Response Company with a strong industry reputation for operational know-how, technical capacity and management expertise.

Previously employed with the Alberta Energy Regulator as a Technical Specialist, Environmental Operations and Incident Response. In this role he provided ongoing technical input and project management of spills and releases into sensitive ecosystems such as wetlands and water bodies.

Previous to that he was employed as an Environmental Protection Officer (EPO) and primary emergency response officer with Alberta Environment. He was involved in over 1500 environmental incidents within Northern Alberta. He was designate a technical expert during his time with Alberta Environment and in this role he provide technical input and recommendations to Industry and other EPO’s when they are dealing with environmental releases to water bodies and wetlands. He also provided expert opinion reviews and recommendation for Provincial legal matters related to pipeline failure and releases to the environment. Also, during his time with ESRD he held the position as an ASERT duty officer where he coordinated and managed emergency response for large scale incidents related to the oil and gas, transportation, rail, and aviation industry.

He has delivered training on Low Impact Spill Response for Alberta Environment and Sustainable Resources Development (ESRD), Alberta Energy Regulator (AER), Environmental Services Association of Alberta (ESAA) and Western Canadian Spill Services (WCSS) staff. This has included in-class and field training on Reporting expectations, Spill Response Logistics, Sensitive Ecosystems, Low Impact Response Methods, Preferred Remedial Techniques, Incident Command System, Wildlife Mitigation, Spill Containment and Recovery methods.