Operational Excellence for Environmental Remediation Programs

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Introduction

Organizations responsible for managing environmental liabilities such as contaminated land remediation and asset decommissioning find themselves under more pressure to improve business performance. As a cost center challenged with managing a highly complex set of services that are predominantly outsourced, a razor sharp focus on the fundamentals of project execution is a must have. We observe that leading companies are seeking out new ways to execute with greater efficiency and effectiveness. Most of these companies view technology as a primary lever to help them achieve and sustain operational excellence.

Operational excellence is critical to the success of environmental liability management programs because:

- It is a complex service environment with many core business processes supported by highly specialized professionals and cross-functional teams

- It is predominantly outsourced so there are many handoffs during project execution that if not managed properly will result in inefficiencies

- Change management is crucial because of the extreme levels of uncertainty associated with subsurface contamination, corrective actions, and the end state of the site or project

- Massive data streams are present throughout the lifecycle of each project and this information serves as the basis for critical decision-making

- This work is highly regulated (environmental and financial reporting / disclosure requirements) and non-compliance is not tolerated

Technology's Role

In the age of high-impact technology, enterprise software systems and big data analytics are the enablers of operational excellence for a complex service environment. In addition to the complexity of environmental liability management, it has another distinction of being an extremely data-rich business function. Studies have shown that as much as 60 percent of environmental costs can be attributed to information management. Regardless of the cost percentage, environmental work is data-intensive and information management should be viewed as a top strategic priority by executives and leaders. Data is being used in a broad range of categories including site and location management, supplier management, technical and environmental data management, and financial management. If not executed in the most efficient manner, it is highly likely that the organization will be underperforming.

Enterprise software is based on a suite of integrated software functions or modules and a common central database. The software functions are built around predefined business processes that reflect best practices. Examples of these for remediation and decommissioning activities include:

- Portfolio management of a large number of sites and projects

- Environmental supplier and commercial rate management

- Environmental reserve and asset retirement obligation management

- Remediation lifecycle management

- Vendor proposal and requisition management (work scope, schedule, cost, deliverables)

- Purchase to pay

- Cost recovery and receivables management

- Financial controls management

- Financial performance management

- Sampling, monitoring, and O&M program management

- Field and analytical data management

- Asset management

- Auditing and inspections management

- Permit management

- Document management

The central database is used to collect data and to feed data to the numerous software functions that can support nearly all of an organization's internal business activities in a single platform. When new information is entered by one process, the information is made available immediately to other business processes. As an example, when a vendor expenditure has been approved, the remediation reserve balance is automatically adjusted in real-time to reflect the drawdown. Enterprise systems support organizational policies or procedures by enforcing uniform data standards, business processes, and financial controls throughout the company or business unit in a single unified technology platform.

Business Value

The organizational-wide data generated by enterprise systems helps managers plan, execute, control, and evaluate organizational performance. A properly implemented enterprise system will:

- Increase operational efficiency and productivity of staff and suppliers

- Enable rapid responses which leads to cost avoidance

- Provide organizational wide information to improve decision making and knowledge management

- Enable performance management at all levels in the organization (from the project to the organization in its entirety)

These in turn generate the overall business value to the organization such as cost reductions (direct, management and overhead, and transaction costs), future cost avoidance, and a permanent lowering of the cost structure to manage and execute remediation and decommissioning work.

About ENFOS

Our customers and their environmental suppliers are doing some of the most challenging and rewarding work the world has to offer. The teams that do this work are responsible for assessing, managing and controlling risks, cleaning up, and restoring environmentally damaged assets so that these assets may contribute to the economy or society to the fullest extent possible. ENFOS is proud to be a contributor to the solution of the world's $15T environmental liability problem.

Our role is clear. ENFOS provides the most advanced enterprise technology solutions to our customers and their suppliers so that they may plan, perform, and measure their environmental liability management work in the most effective and efficient way possible.