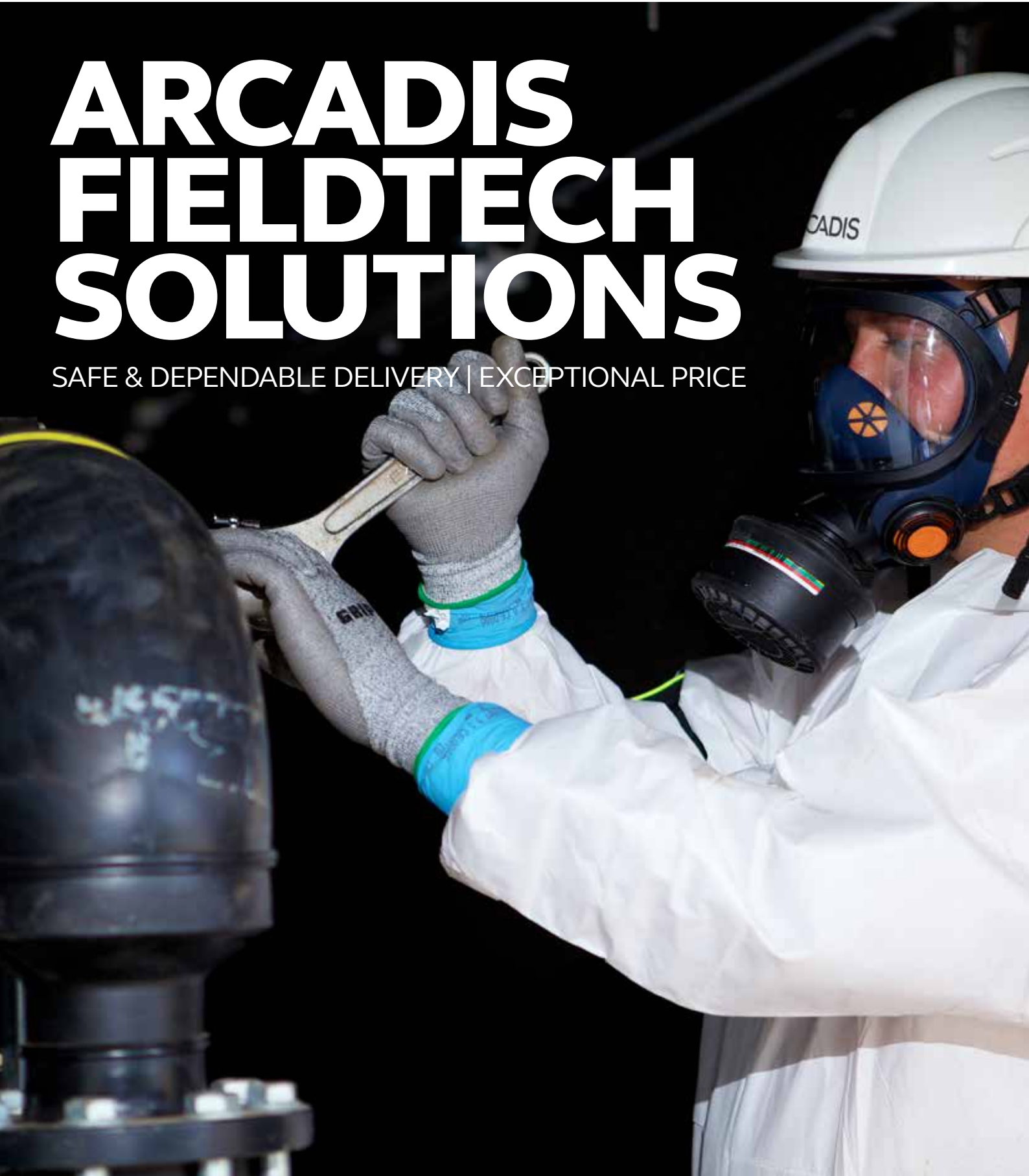


# ARCADIS FIELDTECH SOLUTIONS

SAFE & DEPENDABLE DELIVERY | EXCEPTIONAL PRICE



# A LOW-COST DELIVERY OPTION THAT CONTINUES TO MEET YOUR HIGH EXPECTATIONS

## Better pricing for routine, straightforward services

Nearly every industry in today's economy faces the challenges of staffing, budgetary and scheduling constraints. Managing a total environmental compliance program is complex and expensive. Yet there are routine, basic tasks associated with environmental compliance activities that lend themselves well to streamlined solutions.

FieldTech Solutions is a team of dedicated experts specializing in streamlined, low-cost services that provide competitive pricing for routine, non-complex remediation activities, while maintaining compliance and safety protocols you expect from Arcadis. Environmental Compliance activities where FieldTech Solutions can help lower costs include:

- Operation, Maintenance and Monitoring (OMM)
- Facility and Site Decommissioning
- General Field Services
- Multi-site Portfolios.

## Operation, Maintenance and Monitoring

OMM programs classically represent long-term, non-ending costs with little return for owners. For optimal management of environmental reserves and to control lifecycle costs, organizations need a dependable and knowledgeable partner to operate, maintain and monitor their systems and facilities.

Arcadis FieldTech Solutions tailors OMM services and strategies to reflect not only your needs, but also your organization's values. FieldTech Solutions focuses on cost control while maintaining comprehensive regulatory compliance and executing an industry-leading safety program. Average savings are between ten and twenty percent annually. By leveraging local resources with experienced project teams, FieldTech Solutions delivers immediate and long-term cost-savings.

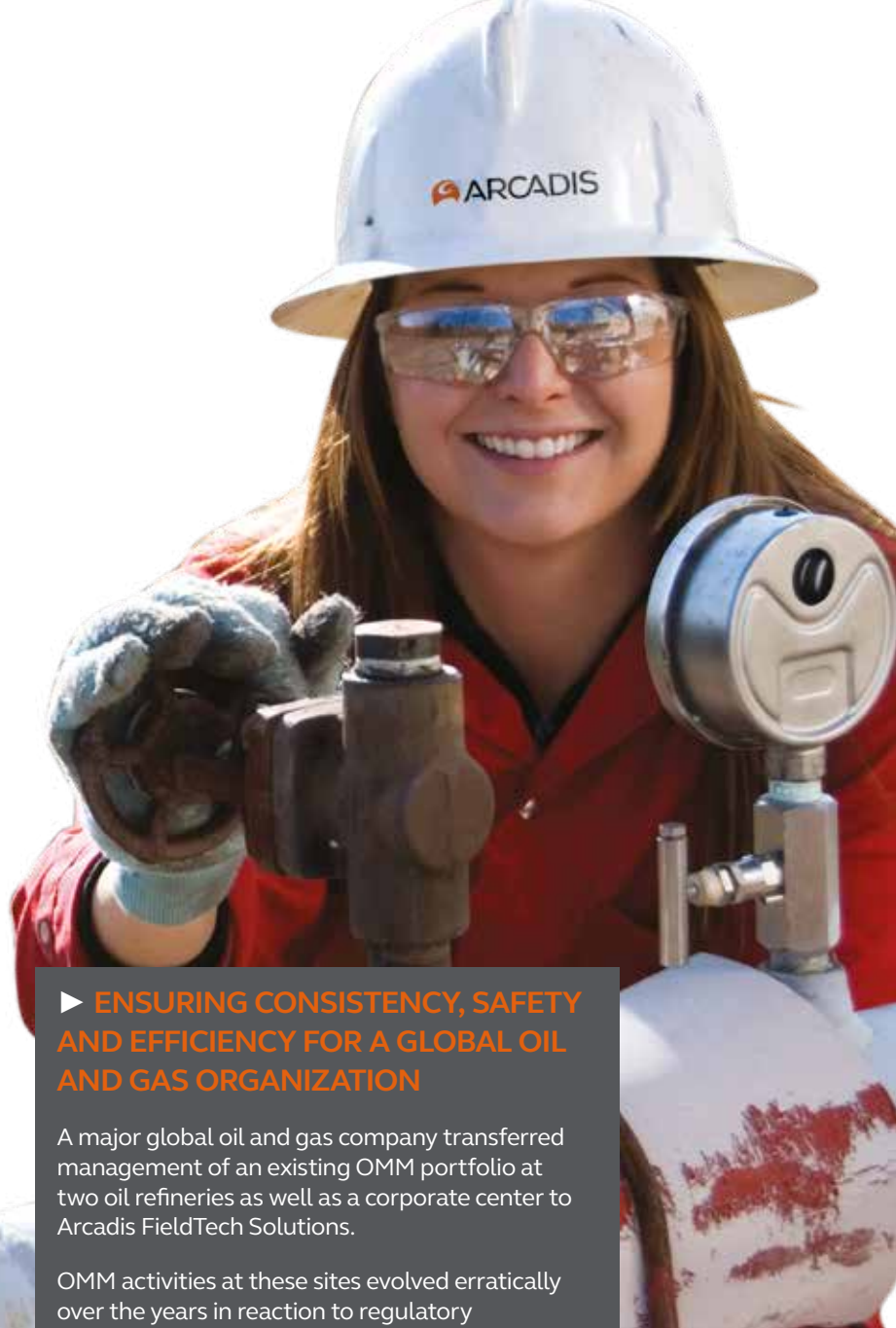
## ► ENSURING CONSISTENCY, SAFETY AND EFFICIENCY FOR A GLOBAL OIL AND GAS ORGANIZATION

A major global oil and gas company transferred management of an existing OMM portfolio at two oil refineries as well as a corporate center to Arcadis FieldTech Solutions.

OMM activities at these sites evolved erratically over the years in reaction to regulatory requirements and stakeholder agreements with current property owners, local trade unions and third parties. This evolution led to inefficient service delivery, failures with compliance, and a lack of program management and strategic direction. A shift in OMM approach was needed to reverse the trend.

Arcadis FieldTech Solutions was brought in to provide strategic direction and evaluate the current status and future direction of the program overall, and improve the OMM business model. Sites were bundled under one management structure to focus on safety, cost efficiency and compliance. The six-year, \$66 million program involved monitoring of thousands of groundwater wells, operation and management of more than 20 remedial systems, site-wide product removal from hundreds of wells and overall site facility management services.

Arcadis FieldTech Solutions improved the project team's schedule of activities and revised additional activities to meet compliance requirements, resulting in a cost savings of more than \$3 million.





## Decommissioning

Derelict and out-of-service manufacturing and industrial facilities pose multiple challenges for their owners, presenting exposure to risks associated with regulatory compliance, fire, vandalism, and potentially negative public and shareholder perception.

As business needs change, decommissioning is a necessary step to conclude operations at facilities impacted by hazardous materials. Decommissioning services include facility assessments to identify hazards, risks and environmental impacts; equipment/ industrial cleaning and disposition; and the inspection and abatement of hazardous materials such as mold, asbestos, PCBs, metals, energetics, radiological materials and lead paint.



### ► ELIMINATING HAZARDS AND UNNECESSARY COSTS

When OSRAM, one of the leading light manufacturers in the world, decided to close one of its major manufacturing facilities, Arcadis FieldTech Solutions was chosen to decommission the property in preparation for sale. Decommissioning the site involved the decontamination and demolition of all process-related equipment and infrastructure, and the decontamination of building materials. FieldTech Solutions provided review of records associated with the historical closure and decommissioning of the radiological licensed manufacturing process, and prepared summary documents to assist with the real estate transaction involving cost models for full removal of closed-in-place radioactive waste.

FieldTech Solutions' tailored in-house resources to cost-effectively implement decontamination and demolition that streamlined work schedules and adapted to the scope changes encountered during the ongoing implementation. This strategy avoided the generation of costly mercury and radioactive wastes, which would have increased decommissioning costs.

## General Field Services

Whether performing a geophysical survey to conduct environmental sampling or sediment coring and geotechnical drilling, to providing a host of other services, the extensive field resources and well-established vendor/supplier relationships of FieldTech Solutions meets your general field service needs. With a dedicated team of experts and an inventory of field equipment and supplies strategically located, FieldTech Solutions is available where and when you need them.



### ► ENSURING SAFETY AND QUALITY OF LIFE FOR A MAJOR RIVER DREDGING PROJECT

Remediation in an aquatic environment presents a complex set of challenges. Arcadis FieldTech Solutions collected and processed post-dredge sediment cores samples from a 40-mile stretch of the river, characterized processed sediment for waste disposition, and monitored and sampled the water discharged from processing facilities 24 hours a day, seven days a week.

For six construction seasons, our team also worked with construction managers, dredge and processing contractors, as well as regulatory agencies to conduct high-volume air sampling, and monitor noise, light and odors to minimize hazards and inconvenience for area residents.

Throughout the project, health and safety oversight remained focused on the well-being of workers on the site and the communities along the river.



## Multi-site Portfolios

### Economies of scale – tailored approach

Arcadis FieldTech Solutions organizes portfolios of sites with common characteristics to provide the best cost savings. The portfolio approach provides efficiencies, centralized management control, reliable and consistent implementation of portfolio-specific strategies and shortens time to regulatory closure. The cleanup of sites has evolved from a predominantly regulatory-driven approach to a more even balance of regulatory- and economy-driven closure. There is an industry-wide trend for companies to close their sites and work with real estate developers to improve and sell their properties.

### A single “cost-to-closure” program

The economies of scale that our clients can realize by bundling multiple sites for closure are typically greater than for single-site closures. The Arcadis FieldTech Solutions team manages portfolios of sites as a single “cost-to-closure” program providing improved performance, while reducing costs and resource demands. FieldTech Solutions goes beyond the typical procurement process to deliver the benefits of “single line of sight” accountability. Successful approaches range from bundling impaired properties to reduce remediation costs, to enrolling sites in voluntary cleanup programs to expedite closure.

### ▶ ACHIEVING SUCCESSFUL CLOSURE MANAGEMENT FOR 330 PETROLEUM SITES

A major oil company partnered with Arcadis FieldTech Solutions to manage a pay-for-performance based portfolio of 330 retail petroleum facilities in 27 states in North America, valued at over \$39 million. The FieldTech Solutions team exceeded the client’s annual requirements for milestones achieved, site closures and reimbursements from state funds. The effective management of this portfolio enabled the client to spend less time on project management and more time focusing its resources on higher-risk projects. FieldTech Solutions successfully closed the sites in scope ahead of schedule.

## An exemplary safety record

Arcadis is committed to providing a healthy and safe work environment for everybody. That is precisely why our global health and safety vision and policy reflects a proactive risk and behavior-based approach that integrates health and safety into our culture, values and the way we do business.

Our global health and safety management system is standardized across the company while allowing for nuances of local culture, client expectations and regulation. Our system focuses on proactive hazard recognition, risk assessment and control to prevent accidents. Lessons learned and best practices are regularly shared globally through our formal Safety Share process and informal networking of staff. It gives our people the tools to implement healthy and safe work practices at all times.

**For more information on Arcadis FieldTech Solutions, email us at:** [Arcadis.FieldTechSol@arcadis.com](mailto:Arcadis.FieldTechSol@arcadis.com)

**Arcadis.**  
**Improving the quality of life.**