

Remediation Cost-Saving Approaches



Areas of Expertise

- Facility closure services
- Integrated, innovative site closure
- Remediation system audit
- Guaranteed remediation programs
- Treating hazardous process wastes cost-effectively
- Environmental cost recovery

Overview

AECOM offers a wide range of environmental, health, and safety cost reduction strategies and end-point focused business solutions to industrial clients in all sectors. Our understanding of the business rationale for each project activity allows us to support our clients' core mission and eliminate or reduce disruption to their operations. We seek solutions that bring innovative approaches, focus on risk reduction, ensure compliance and result in cost savings.

"Beginning with the end in mind" defines our bottom-line approach to remediation, site closure, and restoration. Our clients want efficient, effective means to reduce their liabilities and AECOM's experienced remediation project managers and recognized technical experts work closely with client teams to achieve this.

Facility Closure Services

When a company decides to close a facility, it faces the challenges of meeting a variety of legal requirements, minimizing environmental liabilities, and complying with financial reporting requirements – all while pursuing options to maximize the value of the assets. This process is complex and must be managed carefully, accounting for potential adverse public image issues, third-party interventions, and the pressure on corporate teams to complete the work in a timely and cost-effective manner.

AECOM understands the need to simplify and optimize the decommissioning process and manage environmental liabilities to reposition assets – enabling sale or redevelopment. With our extensive facility closure experience, depth of resources and global footprint, AECOM supports facility decommissioning and asset managers worldwide as they work through the complexities of facility closure program management and timely project completion.

Integrated, Innovative Site Closure

When releases of industrial chemicals adversely impact soil and groundwater, activities must be undertaken to determine the extent of impacts, control migration and manage risks to known and actual receptors. Variables such as the chemistry of released substance, unique subsurface conditions, natural attenuation, receptors – can create unique situation requiring careful evaluation and planning.

AECOM helps clients achieve regulatory closure of contaminated properties through the integrated delivery of all aspects of property rehabilitation: site investigation, risk assessment, agency negotiation, engineering and design, remedial action implementation, and operation and maintenance of remediation systems. An integrated approach minimizes client costs because our solutions are site-specific, technically defensible, and based on a thorough understanding of applicable regulations and relevant technologies. AECOM's risk-based approaches to site closure aggressively challenge outmoded concepts of health and ecological risk, ensuring that both public health and your bottom line are protected.

If your ultimate goal is site reuse, AECOM has unique experience turning Brownfields into community and industrial assets - with award-winning results. We seek to bring an adaptive reuse approach to our projects – integrating site reuse with the need for cleanup – to

manage impacts and risks in a manner balanced with the end use of the site. This approach is focused on your desired end-point, avoiding extraneous work and meeting your business objectives.

Remediation System Audit

Many site remediation programs are overly restrictive and costly because they were developed to meet unrealistic cleanup goals based on conservative regulatory assumptions of the past. Updated exposure and risk assessments, use of innovative technologies, evaluation of natural attenuation and technical impracticability, and use of efficient remediation equipment and renewable energy - can all lead to simpler, lower cost solutions.

AECOM has the experience to conduct detailed remediation system audits that provide the information you need to understand, manage, and reduce your cleanup costs. An audit conducted by AECOM will identify specific money-saving actions and cleanup alternatives for your site. These action items will be accompanied by a cost-benefit analysis that presents your potential savings. With this financial data, you can make well-informed return-on-investment decisions about your current remediation systems versus potential enhancements or system alternatives.



Remediation Cost-Saving Approaches *(continued)*



Guaranteed Remediation Programs

The control of expenditures is important for all remediation projects. Setting fixed project costs can be advantageous to create predictable spending scenarios or in support of property sales or the disposition of assets. Project costs can be 'fixed' by using a variety of tools that evaluate life-cycle costs and probability-weighted scenarios.

AECOM has developed a flexible Guaranteed Remediation Program (GRP) with three options to provide more certainty on cleanup costs. All options embody the principle of "pay for performance" with a defined cost ceiling and no change orders. These GRP options include:

- **INSURANCE-BACKED FIXED PRICE GRP.** AECOM guarantees site closure at a fixed price. Closure is defined on specified performance criteria and the guarantee is backed with cost-cap insurance.
- **SHARED-RISK CLOSURE GRP.** AECOM agrees to a target cleanup cost to achieve specified performance criteria. Cost savings or overruns are shared with the client based on the level of risk, up to a specified cap amount.
- **FULL LIABILITY TRANSFER GRP.** The site and associated liabilities are transferred to a third-party limited liability corporation for a fixed fee.

Treating Hazardous Process Wastes Cost-Effectively

Facilities with hazardous waste cleanup and management issues need affordable means to effectively treat these wastes to avoid even more substantial cleanup costs and penalties. By defining the problem, characterizing the waste, identifying the treatment options and applying a decision tree approach, AECOM can help you evaluate alternative, cost-effective treatment systems for all forms of wastes.

Environmental Cost Recovery

AECOM offers companies methods to effectively reduce the cost of addressing necessary environmental cleanup issues, by closely examining a company's responsibility for environmental cleanup, applying for available reimbursement, checking insurance policies for coverage and exploring property development possibilities.

