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Strategic Information for a Changing Industry

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REMEDIATION MARKETS ENTER A PERIOD OF REALIGNMENT

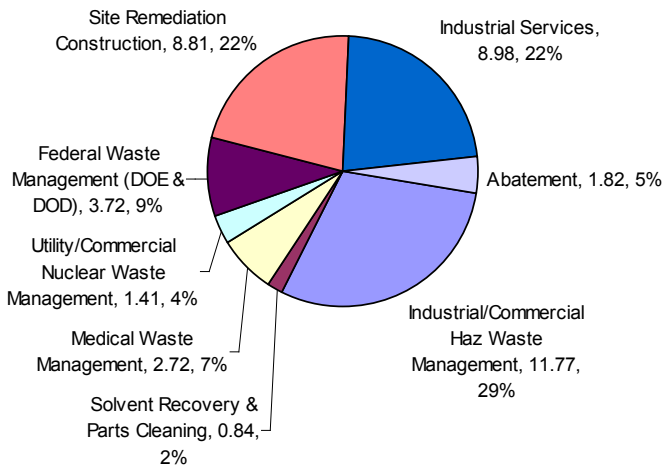
Analysis of Market Growth, Client Demand, PFAS, Contaminant Trends and Remediation Technologies

When EBJ last produced a detailed assessment of remediation and PFAS markets in late 2024, we declared that the long-running 'PFAS Waiting Game' was finally coming to an end. EPA had established drinking water standards and designated PFOA and PFOS as hazardous substances under CERCLA, setting the stage for what many expected would be an accelerating wave of investigation, treatment and remediation. Two years later, the waiting game has taken another turn.

The underlying contamination and potential liabilities have not disappeared, but the regulatory environment has shifted considerably. Federal policy has moved toward deregulation and extended compliance timelines, while many states continue to advance their own standards and enforcement programs. Meanwhile, multibillion-dollar settlements involving major chemical producers have begun to establish financial responsibility for PFAS contamination, although the conversion of these commitments into funded cleanup and treatment projects remains uneven.

The broader remediation industry is also undergoing a realignment. Following strong growth in 2022 and 2023, the market has slowed, and EBJ's latest survey reveals shifts in expectations for client demand. Federal agencies, which dominated growth rankings in previous surveys, have fallen sharply, while data centers, power utilities, manufacturing and infrastructure development are emerging as leading opportunities for 2027 and 2028. Increasingly, remediation is being driven as much

$40 Billion 2026 Haz Waste & Remediation Contracting Market



Source: EBI annual models of the hazardous waste and remediation/industrial services segments

Inside EBJ: Remediation & the Environmental Industry

Remediation Markets: Segment quantifications in remediation and environmental contracting, EBJ survey results reveal prospective client markets, contaminant and technology trends, and perspectives of industry leaders. A PFAS regulatory & liability outlook compares state and corporate approaches in absence of federal programs.

Columbia Technologies Adding AI & Data Analytics to Remediation Toolkit..... 22

TYLin Sees Membranes Move Deeper into PFAS and Contaminated Water 28

Weston Clients Value Integrated Delivery and Early Risk Reduction..... 30

CEC Remediation Shifts Toward Data, Faster Decisions and Productive Reuse..... 34

APTIM Sees Federal Remediation Moving From PFAS Investigation to Field Implementation..... 38

Dudek Finds PFAS, Vapor Intrusion and Redevelopment Reshaping Demand in the Remediation Industry..... 44

Peggy Derrick of EA: A Career Built on Waterways, Dredging and Stewardship.... 48

AEI Consultants Turns Environmental Risk into a Manageable Variable in Real Estate Transactions 51

Pennoni Integrates Remediation With Engineering, Redevelopment and Facility Risk Management 56

E&E Says Remediation Moves Toward Faster Closure, Earlier Contractor Input... 60

Clean Harbors Sees PFAS Market Moving From Early Response to Full-Scale Treatment and Disposal..... 62

CETCO Moves PFAS Treatment From Pilots to Multi-Media Implementation 64

Mabbett Sees Emerging Contaminants Expanding Federal Remediation Pipeline . 69

EBJ Webcast on Election 2026: Divided Government & the Environmental Industry's Need For Durable Policy..... 70

by private investment, property redevelopment, M&A and industrial expansion as by traditional regulatory enforcement.

The technology picture is evolving as well. Despite innovation in in-situ treatment, PFAS destruction and advanced characterization, established methods such as excavation, pump-and-treat, carbon adsorption and ion exchange remain central to remediation practice. Cost, speed, regulatory acceptance, implementation risk and long-term liability matter more to clients than technological innovation.

In this edition, EBJ updates remediation industry forecasts, examines the changing sources of client demand and revisits its long-running PFAS market model. The latest analysis takes a more selective view of which potentially contaminated sites will progress from testing and assessment to engineered remedies and construction. The result is a more conservative estimate of long-term market potential in PFAS, but one that may more realistically reflect the pace at which environmental liabilities become commercial opportunities.

Results of the 2026 Environmental Business Journal Remediation & PFAS Markets Survey indicate a notable shift in the drivers of the U.S. remediation industry. Company revenue growth has moderated considerably since the post-pandemic expansion of 2022 and 2023, and respondents expect only modest improvement in 2026. At the same time, the ranking of client markets has changed substantially, with data centers, utilities and manufacturing the leading growth opportunities for 2027–2028. PFAS remains the strongest contaminant-specific market driver for the fourth consecutive survey, but its commercial development is increasingly characterized by regulatory uncertainty, uneven client commitments and a continuing gap between investigation and implementation.

Remediation Company Revenue Growth: A Significant Slowdown

EBJ's 2026 Remediation Markets Survey; indicates that remediation company revenues have experienced a substantial deceleration since the relatively strong growth rates recorded in 2022 and 2023. Average respondent company growth reached 9.1% in 2022 and 8.9% in 2023 before moderating to 5.7% in 2024 and only 1.1% in 2025. Respondents estimate improvement to 2.9% in 2026, but this remains well below the growth rates that characterized the earlier part of the decade. Median company responses reinforce the slowdown. Median growth (respondents selected from ranges in two percentage-point increments) declined from 6–8% in both 2022 and 2023 to 2–4% in 2024 and 2025, and to only 0–2% in 2026. This indicates that modest growth expectations are not confined to a small number of companies with weak performance.

Annual Growth in Remediation Revenues: Respondent Companies

	2019	2020	2021	2022	2023	2024	2025	2026
Mean	3.6%	1.6%	5.1%	9.1%	8.9%	5.7%	1.1%	2.9%
Median	0-2%	0-2%	0-2%	6-8%	6-8%	2-4%	2-4%	0-2%

Source: 2026 EBJ Remediation Markets Survey; Question was: Please report/estimate the growth in your firm's Gross Remediation Revenues in each year; and Please estimate/forecast the Growth Rate for the entire USA REMEDIATION Industry in each year

The slowdown is consistent with comments describing reduced federal momentum, delayed client commitments and uncertainty surrounding PFAS regulatory requirements. Some respondents report clients postponing work in response to a less stringent regulatory environment, although others continue to see activity in drinking water treatment, site characterization and military facility investigations.

Outlook for 2027–2028: The industry appears positioned for selective rather than broad-based growth. Data center development, utility infrastructure and industrial projects may support expanding demand, while federal and regulatory-driven remediation work faces greater near-term uncertainty.

Private Infrastructure Replaces Federal Programs as Growth Driver

Data centers rank first among all 25 client categories in 2026, with approximately 82% of respondents rating growth prospects as strong or very strong for the coming two to three years (see tables with 2026 responses and client sector rankings from previous years). This is an addition to the traditional remediation client landscape. Large-scale data center development generates opportunities associated with site assessment, contaminated industrial property redevelopment, groundwater investigations, permitting and supporting power infrastructure. Nevertheless, the ranking should not imply that all data center spending translates into conven-

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CEC REMEDIATION SHIFTS TOWARD DATA, FASTER DECISIONS AND PRODUCTIVE REUSE

Civil & Environmental Consultants Inc. (CEC) is a nationwide employee-owned engineering and environmental consulting firm founded in 1989. CEC has more than 1,600 employees in approximately 30 offices nationwide and serves clients in the manufacturing, mining, oil and gas, power, public sector, real estate, and solid waste markets. The firm provides innovative design solutions and integrated expertise in air quality, civil engineering, cultural resources, ecological sciences, environmental engineering and sciences, manufacturing infrastructure services, survey/geospatial, waste management, and water resources. CEC is consistently ranked on Engineering News-Record's Top 500 Design Firms and Top 200 Environmental Firms lists.

Andy Kavanagh, Senior Project Manager. Mr. Kavanagh supports the planning and execution of complex environmental projects. He has designed, managed, and implemented more than 500 environmental remediation projects and is a strong advocate for remedy focused environmental investigations and responsible financial stewardship.

EBJ: Can you describe CEC's remediation practice today? What types of clients, sites and environmental liabilities account for the largest share of your work?

Kavanagh: CEC's remediation practice is an integrated investigation-through-closure business. We differentiate ourselves from other firms by reducing uncertainty early and advancing efficiently towards technically sound remedy implementation. Our goal is to provide efficient and cost-effective solutions to complex problems.

Our teams support clients with due diligence, site characterization, hydrogeology and groundwater modeling, human health and ecological risk assessment, remedial alternatives analysis and design, regulatory negotiation, construction support, operation and maintenance, and brownfield redevelopment.

The majority of CEC's remediation work supports industrial and manufacturing properties, energy and utility assets, oil and gas operations, waste and recycling operations, commercial real estate portfolios, and public-sector redevelopment initiatives.

Typical liabilities include impacted soil, sediment, groundwater, and surface water; dissolved and non-aqueous phase liquid (NAPL) contamination; petroleum hydrocarbons, chlorinated-solvents, metals, and emerging contaminants such as PFAS; vapor intrusion; legacy disposal areas; and complex site conditions requiring risk assessment, remedy optimization, long-term stewardship, and regulatory closure under federal and state cleanup programs.

EBJ: How has CEC's remediation business performed over the past five years? Which parts of the practice have experienced the strongest growth, and what has driven that growth?

Kavanagh: Over the past five years, CEC has broadened its technical bench to support the needs of the public and private sector. Within remediation, the strongest momentum has come from brownfield redevelopment, industrial and energy sector corrective action, groundwater assessment and modeling, emerging contaminant work, and assignments that combine environmental cleanup with civil design, permitting, water, waste, and construction support.

EBJ: CEC works with commercial and industrial clients as well as community and economic development agencies. How different are the remediation objectives and decision-making processes among those client groups?

Kavanagh: The technical fundamentals are similar across client groups, but the definition of success differs. Commercial real estate clients are usually focused on transaction timing, certainty of cost, financing requirements, future land use, and liability protection; decisions are often milestone-driven and sensitive to schedule.

Industrial clients must balance risk reduction and compliance with operational continuity, capital planning, safety, and long-term asset strategy. Remedies are often implemented in an active facility setting, which requires special attention not just to the remedy's operational schedule, but also with the facility. The integration of remedy objectives and facility operations are critical to successful outcomes in these settings.

Community and economic development agencies place greater weight on public benefit, funding eligibility, procurement requirements, community engagement, equitable reuse, and alignment with a broader redevelopment plan. Their decisions typically involve more stakeholders and public transparency. CEC's role is to translate the same site data into the business, operational, legal, and community terms that matter to each group.

While the objectives and decision-making processes differ between commercial/industrial clients and economic development agencies, CEC navigates different frameworks to arrive at the same goal of cost-effective, expeditious remedies.

EBJ Q&A Summary

CEC sees remediation increasingly integrated with redevelopment, infrastructure and ongoing industrial operations. Growth is strongest in brownfields, industrial and energy corrective action, groundwater modeling and emerging contaminants. CEC argues that the largest near-term technology gains may come less from entirely new treatment technologies than from better characterization, modeling and analytics that reduce uncertainty and allow remedies to be targeted more precisely. PFAS regulation, redevelopment pressure and aging facilities are expected to sustain demand, while long-term stewardship remains an underappreciated component of successful site closure.

EBJ: Looking across the market, what are the three or four forces having the greatest impact on remediation demand today? Which do you expect to matter most over the next five years?

Kavanagh: First, evolving standards for PFAS and other emerging contaminants are expanding investigation and treatment needs. Second, redevelopment and infrastructure investment are accelerating work on brownfields, former industrial properties, transportation corridors, and utility assets. Third, aging facilities and portfolios are creating more compliance, closure, and asset retirement obligations. Fourth, clients and regulators increasingly expect timely, data-supported decisions and remedies that account for resilience, long-term stewardship, and beneficial reuse.

Over the next five years, emerging contaminant regulation is likely to be the most consequential because it affects drinking water, industrial sites, landfills, airports, military facilities, and municipal systems simultaneously. Closely behind will be redevelopment pressure and the need to convert environmental liabilities into productive assets.

EBJ: Which client sectors are generating the strongest remediation opportunities today? Are you seeing meaningful shifts in demand among manufacturing, energy, real estate, utilities, government, transportation or other sectors?

Kavanagh: The strongest opportunities are coming from industrial manufacturing, power and utilities, real estate and brownfield redevelopment, solid waste, and oil and gas markets in the private sector, and also from the public sector. Manufacturing demand reflects legacy releases, portfolio transactions, plant modernization, and emerging contaminant obligations. Utilities are addressing groundwater, coal combustion residuals, water management, and asset retirement issues.

Real estate work remains active where cleanup can unlock scarce or strategically located property. Solid waste facilities are seeing increased attention to leachate and PFAS, while public agencies continue to advance brownfields, transportation, and community reuse projects.

"The technical fundamentals are similar across client groups, but the definition of success differs."

EBJ: What makes today's large, complex Superfund projects different from those undertaken 20 years ago? Have the technical challenges changed, or is the greater complexity coming from stakeholder, regulatory and liability issues?

Kavanagh: While the technical challenges at large Superfund sites remain significant, the nature of those challenges has evolved. Twenty years ago, projects were often focused on delineating contamination and implementing conventional remedies such as excavation, capping, pump-and-treat, or groundwater containment. Today, many of the remaining sites involve more difficult conditions, including fractured bedrock, NAPL source areas, matrix diffusion and back-diffusion, vapor intrusion, and emerging contaminants such as PFAS. As a result, investigations require much more sophisticated site characterization, conceptual site models, and long-term performance evaluations.

The greatest increase in complexity often comes from non-technical factors. Modern environmental projects as a whole must navigate extensive stakeholder engagement, environmental justice considerations, redevelopment pressures, evolving regulatory requirements, institutional controls, and complicated liability allocations involving multiple responsible parties, mergers, acquisitions, and bankruptcies. In many cases, identifying a technically viable engineering solution is only one component of a much broader challenge.

The greater challenge is developing a remedy that is technically defensible, regulatory compliant, financially acceptable, and supported by regulators, communities, property owners, and responsible parties over a stewardship period that may span decades.

EBJ: Where are you seeing the most meaningful innovation today?

Kavanagh: The most meaningful innovation is occurring at the intersection of characterization, modeling, and data analytics. High-resolution site characterization, passive and real-time sensors, improved geophysical means, geospatial tools, and more precise analytical methods can sharply reduce uncertainty about contaminant distribution and transport.

Cloud-based data environments and dashboards allow teams to integrate field, laboratory, hydrogeologic, and construction information in real time. Advances in groundwater and fate-and-transport modeling support scenario testing and more targeted remedies, while field automation improves consistency, safety, and speed. When contaminant distribution and transport are better understood, an optimized remedy generates better outcomes. More simply, the better we understand the problem, the more effectively we can develop, optimize, and implement the remedy.

Treatment innovation remains essential, especially for emerging contaminant destruction, in-situ delivery, and lower-energy remedies, but the largest near-term gains often come from using better information to place treatment precisely, verify performance sooner, and adapt the remedy before cost and schedule drift.

EBJ: Has the industry's ability to collect data advanced faster than its ability to interpret and use that information?

Kavanagh: In many cases, yes. Instruments, sensors, mobile field tools, remote sensing, and laboratory methods can now generate data faster and at far greater density than traditional project workflows were designed to absorb. The challenge is often not collecting data, but the ability to turn massive data sets into manageable resources. More data can even increase uncertainty if the decision the data are meant to support hasn't been defined. Experienced professional judgment remains essential: analytics should make the reasoning more transparent and repeatable, not substitute for understanding site conditions.

On the contrary, the ability to collect data faster has also enabled more agile project approaches where high-impact decisions can be made quickly and with

sound technical justification. Projects can pivot and stay on track with minimized financial impacts as a result. Ultimately, we are inundated with data not just in the environmental industry, but as a society. While it can feel overwhelming, when managed properly, it is a net positive.

EBJ: What important remediation problem is receiving too little investment or attention today?

Kavanagh: Long-term stewardship receives too little attention and investment. The industry is good at investigating sites and selecting remedies, but many projects will depend for decades on institutional controls, monitoring networks, treatment system operation, property use restrictions, and reliable transfer of knowledge as owners, regulators, and consultants change.

Weak stewardship can allow a technically sound remedy to lose effectiveness or create uncertainty for future transactions and redevelopment. More investment is needed in durable data systems, clear responsibility for inspection and maintenance, periodic optimization, climate resilience reviews, and concise records that explain why the remedy remains protective. Treating stewardship as an engineered program—not an administrative afterthought—would reduce life-cycle cost and risk.

EBJ: Is the talent mix changing?

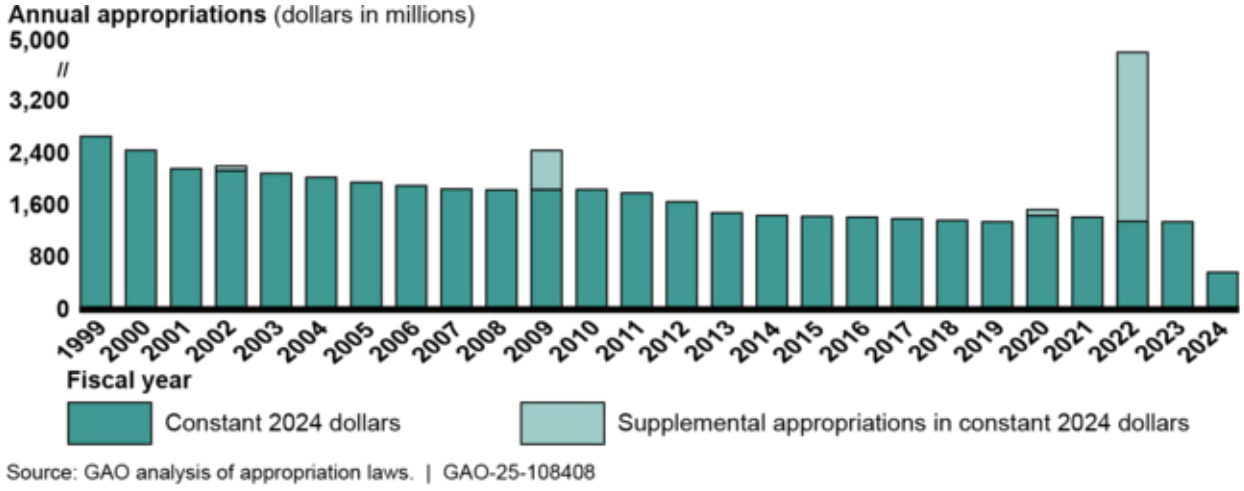
Kavanagh: Data management, visualization, and systems integration are becoming more critical roles within environmental firms. As discussed previously, the industry's ability to collect data has advanced exponentially faster, resulting in larger and more complex data sets that require effective organization, visualization, and interpretation of data.

At the same time, remediation professionals are increasingly expected to work across disciplines. Today's projects require practitioners who can integrate environmental science and engineering with regulatory strategy, risk assessment, economics, redevelopment planning, stakeholder engagement, and business decision-making. Clients are looking not only for technical answers, but also for an understanding of project costs, schedules, liability management, operational impacts, and long-term asset value.

Technology helps teams process and understand environmental data faster than ever before. Tools such as data analytics, cloud-based platforms, real-time monitoring, and modeling software make it easier to evaluate site conditions and support decisions. However, these tools do not replace experienced professionals. Their value comes from helping teams make better-informed decisions more quickly. As technology continues to evolve, firms will need professionals who can leverage strong technical skills with practical problem-solving. □

"CEC's remediation practice is an integrated investigation-through-closure business...The better we understand the problem, the more effectively we can develop, optimize, and implement the remedy."

Superfund Funding Declines as Complex Cleanup Challenges Persist



Source: GAO analysis of appropriation laws. | GAO-25-108408

Federal appropriations for EPA's Superfund program have declined over the past 25 years, falling from $2.6 billion in fiscal year 1999 to $537 million in FY2024, according to the U.S. Government Accountability Office (GAO). Supplemental funding has provided temporary increases, including $600 million under the American Recovery and Reinvestment Act in 2009 and $3.5 billion under the Infrastructure Investment and Jobs Act in 2022. Superfund taxes, reinstated beginning in 2021, have also reemerged as a funding source. As of March 2025, the National Priorities List included 1,340 active Superfund sites, approximately 90% of which were nonfederal. GAO identifies several factors affecting cleanup timelines, including increasingly complex contamination, newly discovered contaminants, insufficient responsible-party funding, and limited agency resources. EPA officials have previously linked declining site deletions to both reduced annual appropriations and the greater complexity of remaining sites.

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COMPANY INDEX

AEI Consultants 51
APTIM 38
CETCO 64
Civil & Environmental Consultants Inc. 34
Clean Harbors Inc. 62
Columbia Technologies PBC 22
Dudek 44
EA Engineering Science and Technology 48
Engineering & Environmental Construction 60
Greeley & Hansen 28
Kilborn Consulting Limited 29
Mabbett & Associates 69
Minerals Technologies Inc. 64
Pennoni Associates 56
Perkins&Will 28
Sidara 28
SWCA 70
Transearch 70
TYLin 28
U.S. Naval Research Laboratory 33
Vista Clara 23
Western Dredging Association 48
Weston Solutions Inc. 30



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