

Challenging the Cleanup Paradigm: Market Transformation Through Performance-Based Contracts

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Introduction

Victor Hugo once said, “There is nothing more powerful than an idea whose time has come” and the famous inventor Charles Kettering proclaimed, “The world hates change, yet it is the only thing that has brought progress.” These words of wisdom seem especially strident when one considers the recent introduction of fixed-price, performance-based contracting into the federal remediation marketplace. Performance-Based Contracting is certainly not a new concept in the federal procurement process; as a matter of fact, FAR Section 37.102, states, “Performance-based contracting is the preferred method for acquiring services.” On the GSA website¹ they say, “Performance-Based Contracting (PBC) is not a new concept but this Administration has made PBC a key initiative and has emphasized its importance by establishing a goal for all agencies to achieve in FY 02.” This general guidance appears to be clear, unambiguous and quite specific in the US Government’s intent to implement this procurement process. Yet, within the US Government’s environmental remediation marketplace there has been a reluctance to embrace this approach to remediation contracting. Concerns have been echoed in both the Government and contractor communities.

However, in typical “can do” fashion, the DoD has taken this directive and chosen to march forward with an implementation plan to introduce performance-based contracting initiatives into the environmental cleanup program. On October 22, 1999, Major General Van Antwerp issued a letter to the Army Major Commands stating that they should “(Get) out of the cleanup business and into the business of focusing resources on your core competencies of warfighting and sustainment.” His letter was titled “New Generation of Cleanup Initiatives” and it required that the Major Commands should develop a plan to evaluate the implementation of Guaranteed Fixed Price Remediation

¹ http://www.gsa.gov/Portal/content/pubs_content.jsp?contentOID=119969&contentType=1008&PMVP=1

(GFPR). Following the Army's lead, the Air Force also showed increasing interest in this approach and on April 1, 2002 a policy memo was issued from the Air Staff that established goals for the Air Force Major Commands to implement Performance-Based Cleanup Contracting (PBCC). The Air Staff guidance requires 10% of the FY03 remediation budget and 20% of the FY04 budget to be accomplished by PBCC.

Whether you call it Guaranteed Fixed Price Remediation or Performance-Based Cleanup Contracting, it still is the same basic approach – 1) identify the desired end state, 2) minimize the prescriptive guidance and then 3) back out of the way to allow the contractor to determine the process for achieving the results. With the rapid approach of the Defense Planning Guidance goals² and ever-tightening budgets, it became apparent that alternative approaches were urgently needed in the cleanup program to ensure that the DoD would meet their goals and improve overall program performance. On September 4, 2002 the Secretary of Defense's Business Initiative Council approved GFPR as an initiative that "requires the services to maximize the use of GFPR contracts where feasible."³

Clearly, it would appear that this initiative has support throughout the DoD structure and will be an important tool for implementing the federal cleanup program. On the surface, this new approach may not seem to diverge dramatically from business as usual. However, for those that are involved in the actual implementation of this program it is becoming obvious that this initiative will require a paradigm shift for all of the program and project participants and will likely transform the federal remediation marketplace.

GFPR – Why? How? What Is It? - An Interview

The following interview with Shawn Holsinger, environmental engineer with the Army's Office of the Director of Environmental Programs (ODEP), and Tom Scott, Federal Program Manager for ARCADIS, Inc., provides some insight from both the Government and contractor perspectives on this new way of doing business.

"Thanks for joining us today gentlemen. We keep hearing about this new initiative and we were hoping you could help shed some light. So tell us, why is this new approach to environmental contracting being introduced into the Government now?"

Holsinger: Several reasons. A key component is that as the Army transforms to meet its new mission requirements, it is imperative that we look at new business practices for ways to become more effective and efficient. This thought process has been implemented as part of the recent Transformation in Installation Management. On a less macro scale it is nearly impossible for our installation personnel and our project execution support offices to remain on the cutting edge of technological advances in cleanup. We do a very good job of program management. But why not turn the technical

² Management Guidance for the Defense Environmental Restoration Program (DERP), September 2001, Appendix 4, Defense Planning Guidance (DPG) Goals

³ <http://aec.army.mil/usaec/publicaffairs/update/fall02/fall0207.html>

details over to the experts? Let the firms that specialize in delineating and controlling/remediating contaminants determine the best approaches. The other key component of this concept is that it allows a more holistic look at the total installation to determine if sites are contributing to other sites, ways to optimize cleanup, and installation-wide strategies (such as risk assessment strategies). So we are not looking at issues on a case-by-case fashion, but looking at the entire set of issues and working to optimize our resources.

Scott: Actually this approach isn't new to the commercial remediation market. It was originally developed almost a decade ago to facilitate the closure of real estate transactions and other commercial ventures where a fixed price was required to establish the cost liabilities associated with the proposed business deal. By providing the parties with a fixed price to achieve the performance standard – usually regulatory closure – the deal could be closed because the total environmental liability associated with known and unknown contaminants was quantified and guaranteed in a fixed price contract. In this approach, the parties could focus on their core competencies and transfer the responsibility and liability for achieving site cleanup to the remediation contractor. In addition to the value of realizing price certainty, businesses found that they were realizing significant cost savings and accelerated cleanup schedules. After almost ten years of success in the commercial sector, it was evident that this program could be just as successful in the federal remediation market. The general concepts of price certainty, accelerated cleanup schedules and transfer of liability were fundamentally the same. With the Government's interest in nailing down the final cost of the restoration program and in finding ways to meet their DPG goals, it seemed that the time was right for introducing this private sector concept.

“So why do you think this is a better way of doing business and what is wrong with how business is being done today?”

Holsinger: First and foremost, it sets the objective of our efforts at the shared goal of both the Army and the regulatory community: protection of human health and the environment via an active cleanup program. We streamline the processes by which we complete our investigations and this allows us to truly concentrate our efforts on the sites that pose the greatest risk. We streamline investigations by virtue of the fact that we don't prescribe the work effort (e.g. install 5 wells) only to discover that we missed the mark - sometimes by very little, but still creating delays and/or data gaps. The contractor is paid for completion of the investigation and regulatory acceptance as a milestone. So there is real incentive to get the job done right the first time. This gets us to the objective of determining if we need to perform a remedy, and what that remedy should look like much faster.

What's wrong with how we have done business? It's my personal opinion that it has been inherently inefficient. Through no one's fault, we have approached work in a very deliberative and process oriented fashion. As the former Restoration program manager for the U.S. Army Training and Doctrine Command, I could see that we did not reduce our total cost to complete all cleanup requirements on a dollar for dollar basis. In other words, a dollar spent did not reduce the bill by a dollar. Also, our projected phase completion (e.g. SI, RI/FS, etc) rates versus actual were less than 50% routinely. And we

didn't vary much from the rest of the Army. So, two leading indicators showed inefficient use of resources, coupled with less than expected results.

Scott: This program properly aligns the incentives for all parties. There is a common goal to achieve an end point – closure of the sites – despite the obstacles that may surface during execution. The Government receives price certainty and no longer is held accountable for determining the process to achieve the desired final result. The contractor is presented with a fixed price opportunity to achieve the performance standard where their skill at implementing technical and regulatory strategies will dictate their ultimate success. In the current system, the Government establishes the process for accomplishing the scope for each phase of the cleanup program. If the Government's approach doesn't work, then it is the responsibility of the Government to rectify those problems. On the other hand, the environmental remediation contractors have more than two decades of working within the existing regulatory environments and are intimately familiar with methods for implementing successful remedial strategies at commercial sites. The days of unspecified regulatory processes and technology-limited solutions are long behind us. With a clear end point established as the contractual goal, the contractor is incentivized to focus more on results and less on process. As the Government and industry discovered with other mature programs, eventually there is no reason that the Government cannot rely on the contracting community to accept the performance risk.

“What were the initial challenges that you faced in developing this program for the federal procurement system?”

Holsinger: We had several challenges that needed to be worked simultaneously. This was not business as usual for our installations. So there was initial reluctance to head down this path. This was not a procurement strategy or package that looked like anything before it. The issue of requiring the contractor to indemnify the government against cost overruns regardless (with very few exceptions) of the reason or site conditions was very unique. So, we had to work very closely with the procurement officials throughout this process. We also had to ensure we did not violate various legal requirements, to include incremental funding. So we had to have a package that provided for severability. Lastly, we had to figure out what and how to evaluate a proposal. Many times, the next logical step in the process on sites was reasonably straightforward. It was trying to anticipate and cost the follow-on steps that became hard. Then, how do you factor in the risk when a site may have large possible differences in required remedies?

Scott: There were a variety of issues facing the contractor when comparing the federal contract to the typical approach in the private sector. Probably the most significant issue was the contract funding process. In the commercial contracts, it is typical for the entire contract amount to be placed in an interest-bearing escrow account and payments are made from this account as the milestones are achieved. Whereas, in the federal system the contractor must structure the schedule and cash flow to accommodate the expected funding. In some cases, it is necessary to structure the contract funding to mirror the original cleanup program funding profile for the installation. While this issue is certainly manageable, it does make the financial analysis a bit more challenging.

“Have you observed any resistance to implementing this program?”

Holsinger: It depends. Anytime you try to do business in a new way, there will be resistance. People become concerned about how it will affect their jobs. Also, it's not business as usual and sometimes people are reluctant to get out of their comfort zones. Over time, it probably will reduce oversight requirements. But that is inherent in this business anyway as we clean up sites and close out installation requirements. However, we are a ways from that yet. More near term, we are structured organizationally from a program management and project execution perspective to do business the way we always have. So it takes folks at all levels working in concert to get the structure where we need it to realize the efficiencies.

Scott: Absolutely! There are a lot of people that are perfectly satisfied with the current system and they would like to see things continue in the same old “cost-plus” and “Government accepts all the risk” mode. For the people that have been working in this system – and that includes contractors, Government personnel, and regulators – there seems to be a sense that things are working okay and there is no reason for significant change. For these people, it is usually a matter of educating them on the benefits of performance-based contracting and to explain that this will not degrade the responsibility for achieving protection of human health and the environment. This process merely transfers the responsibility and liability for meeting this performance standard onto the back of the contractor. In addition to the concerns expressed by the project stakeholders, there was also great skepticism within some of the DoD contracting and legal organizations regarding various aspects of this contracting mechanism. However, the obstacles have been knocked down as the DoD continues to find ways to try and make this work. Change is always difficult and I believe this one will be handled proactively just as similar changes have been implemented in the past.

“Are there systemic barriers to implementing GFPR?”

Holsinger: Nothing that cannot be overcome. Through the Army's initiatives, Congress provided relief in this year's Defense Authorization to some key areas that allow us to move out even more efficiently than before. One such area is to allow incremental funding of cleanup actions. This will streamline the contracting process by relieving us of the requirement to make each action a stand-alone action. The President's goals for performance-based contracting help to provide the impetus to make this happen.

Scott: I think if you look at the success in the commercial sector then you would have to say that there are no systemic barriers to implementing this initiative. The regulations are the same, so there should not be an obstacle from that perspective. The funding mechanisms are somewhat different but that is also manageable as long as there is a reasonable expectation that the contract will be fulfilled barring acts of God, war, or other extraordinary circumstances. So, the only real obstacles are likely to be a result of poor communications or resistance to change. The current environmental programs have been ongoing for many years so it is no surprise that there will be some reluctance to deviate from the current approaches. The biggest obstacle is usually to get the participants to switch the focus from a process orientation to a focus on end results.

“How do the regulators fit into this?”

Holsinger: The regulators are an integral component. We need to work closely with them so they understand the concept. This is not a tool to circumvent the regulatory process. In the case of Fort Gordon and Fort Leavenworth, we contracted for regulatory closure. It isn't done until the regulators agree it is done. Also, we need to work closely and collectively in the workplan process. It does us no good to inundate a regulatory agency with reports and paperwork they are not staffed to review. So, through some avenues, such as the Defense/State Memorandum of Agreement, we can help ensure adequate resources to meet the anticipated workload. Also, it is critical to understand, very early, their processes and what they want to see in the end. But as I previously stated, this mechanism focuses all of us on the end-state: environmental protection. And, by engaging the regulatory community early and often, we can provide them the data they want to see without a lot of extraneous information. This approach also reduces the likelihood of iterative investigations. In other words, there is incentive for the contractor to complete any remaining investigative work the first time.

Scott: The regulators are the key player in this process. This program is designed for one simple incentive – achieve regulatory closure – so it is in everybody's interest to find ways to satisfy the regulatory requirements in the most efficient and effective manner possible. There is no incentive to cut corners, extend the duration or scope of any particular phase, to deviate from approved procedures, or any other action that might require rework or delays that will hinder regulatory closure. In this program, there is a unique alignment of incentives where the Government achieves a focused and accelerated closure of the site, the regulators achieve protection of human health and the environment as evidenced by the closure process, and the contractor gets the opportunity to find technological or other innovative solutions that will result in greater returns for the risk that they agree to incur.

“What, if any, lessons learned would you share with somebody that is considering doing GFPR?”

Holsinger: It is imperative to know what types of sites and installations lend themselves to GFPR. Just as importantly, you need to know where it won't work. The best conditions are where sites are reasonably well characterized. The better characterized, the less risk. But sites too far along in the process (such as a signed ROD) may not be a good choice either. If a different remedy were proposed, it may take too long to unravel the existing agreements. Or if this truly is the best remedy, then you can probably achieve the desired end-state without insuring against cost overruns.

Also, engage the regulatory community early. They need time to prepare, and we need to know what they can and cannot do from a staffing standpoint. They can also provide valuable information during the procurement process that will aid in determining closure requirements.

Know and understand the types and availability of insurance. A not insignificant part of this process is determining how much risk each party is going to be expected to take. It truly comes down to a shared risk between the government and the contractor. Neither should become overly burdened if this is to be successful.

Scott: First and foremost is to understand the project stakeholders. Next, is to quantify the risk. This program is a business solution that requires a thorough understanding of risk management. The risk that must be accounted for include 1) the regulatory process, 2) the characterization of site conditions, 3) contractual requirements that limit or hinder the contractor's flexibility, 4) potential for unknown, or variations in the quantity of, contaminants, and 5) public involvement or other factors that may impact the schedule or scope of the cleanup. None of these issues are necessarily insurmountable, but there is a cost associated with the risk. To ensure the project is awarded on a best value basis, it is important to establish the proper balance between the risk incurred and the cost for performance.

“Why is this approach in the best interest of the Government?”

Holsinger: Obviously, that is essential. If the approach is not in the best interests of the government, we shouldn't do it. I think it is in the government's best interests for the following reasons: 1. It allows us to utilize the best technologies and strategies for cleanup that the private sector has to offer. 2. It allows us to contract for, and only pay for, tangible products that meet the requirements of the regulatory community. 3. It fosters more of a team approach and breaks many of the government – contractor barriers. 4. It allows much more budget certainty for us. We have a fixed price for each aspect of the cleanup. We can also obligate funds for optional bid items (on multi-year contracts) as soon as funding is available. We should see a reduction in costs on a dollar for dollar basis. There will always be some unexpected events that can cause fluctuations, but not on the scale or magnitude presently experienced. 5. It provides a more holistic approach to environmental cleanup, to include the possible interaction of multiple sites.

Scott: This approach provides the Government with many advantages over the current contracting vehicles. The Government no longer will have to pay simply for “best efforts” but instead will only fund measurable results that will lead to project completion. In the commercial sector there have been significant cost savings realized by this program so if the Government can realize similar savings then there will truly be an opportunity to get at least a dollar of value for each dollar put into the cleanup program.

“Why is this a good deal for the environmental contractors?”

Holsinger: I think it allows the contractor to provide a workplan that is more effective and efficient. They can lay out the work as they see best. This will reduce mobilization requirements, and in some cases work similar sites simultaneously or at least consecutively. It also allows for innovative strategies and technologies to be used. They are also provided more latitude to propose and discuss courses of actions with the regulatory community directly. Understanding the government needs to agree with actions and need to participate in and facilitate the discussions. The government retains ultimate liability, so we need to remain actively engaged. But the contractor has much more direct access.

Scott: As with all performance-based contracts, this approach allows for innovation and efficiencies that give the contractors an opportunity to demonstrate their talents and earn

higher rates of returns based on their ability to perform. The contractors that do this well will succeed, and those that don't – won't.

“How do you define a “good site” for using the GFPR contracting approach?”

Holsinger: As previously stated, you need to have proceeded far enough into the investigation to have a good idea of the site conditions, both vertically and laterally. This does not mean it has to be completely delineated. Generally having a good Remedial Investigation (for CERCLA) or RCRA Facility Investigation (for RCRA) is necessary. A known future land use is also important. Obviously this may directly impact the proposed, and ultimately accepted, cleanup standards. A site, or sites in aggregate, with a total anticipated cleanup requirement of \$1 Million or more are generally required to be able to obtain insurance.

Scott: Shawn has hit the nail right on the head for defining a “good” site. There really are only a few limiting factors for sites that cannot currently be included in a Cost Cap insurance policy – for example, UXO, radioactive mixed waste, and chemical weapons contamination. However, there is work underway with the insurance companies to also address these issues as well. In general, the best sites for this approach are sites with groundwater or soils contamination. There are very few contaminants or contaminate levels that would not be amenable for inclusion in a performance-based contract. It is always a good idea to discuss the site conditions with prospective bidders in advance to determine the relative risk that is perceived to be present at the site. Also, there are differing views on sites where there is a contentious or difficult relationship between the current project stakeholders – in many cases, by passing the liability to the contractor for closure there is greater incentive for finding a solution and the contractor may bring a fresh new perspective to the cleanup.

“How much risk is reasonable for each party to assume in this type of contract?”

Holsinger: This could be a topic of debate, but I truly see this as a shared risk. It does not benefit the government to try to overburden the private sector with financial liabilities. First, we pay for that risk. Risk translates directly to bid prices. The more risk, even with insurance, the higher the cost. The insurers are very savvy and have their own experts to review sites and proposals. They know what they are getting into. Second, it would not be in anyone's best interests to have some high dollar failures. This hurts industry, may damage our credibility, and ultimately will be detrimental to the program. I believe a key early component of this process is to look at the risk factors and determine the reasonableness. It may be that some alternatives should be excluded from the contract. In the case of the two I was involved with, we specifically excluded landfill removal and reinterment. The costs were orders of magnitude beyond any other reasonable alternative. And in general, I think is just a bad idea. So we eliminated that alternative to help keep costs down. Ultimately, it does require some site-by-site decisions.

Scott: This is an excellent question. Since this program is basically a risk management business proposition, the key to establishing the true value for the specific offering is

centered on answering this question for each project. Insurance vehicles are available for mitigating the risk to each contractual party. Since the contractor is responsible for meeting the performance requirements at a fixed price, it is common to utilize Cost Cap Insurance, also known as Remediation Stop Loss Insurance, to cover this risk. These policies also provide coverage for the Government if the contractor becomes insolvent or cannot complete the contractual requirements. While the Government cannot transfer ALL liability for the site, there is no doubt that the liability for achieving regulatory closure can be completely transferred to the contractor. This liability can include all known and unknown contamination based on a full disclosure of all site information, as well as changes in regulatory standards or future regulatory re-openers. Each site should be analyzed to evaluate the appropriate risk and liability that can be assumed at a reasonable and acceptable cost. Due to the many misconceptions and rumors regarding these issues, it is highly recommended that an open dialogue with knowledgeable sources within the insurance and risk management communities be initiated prior to making any assumptions about “acceptable” or “unacceptable” risks.

“In what way are you ‘Challenging the Cleanup Paradigm’ with GFPR?”

Holsinger: What we are doing is a results oriented approach. We contract for a desired end-state, so all efforts by both parties are geared towards achievement of that end-state. Currently we utilize a very process oriented approach. This is not always bad, and in some cases, is the right approach. However, a strict process approach can be inefficient, and in some cases, can take on a life of its own. If the end-state is not kept in mind during the process, it can lead you down a path to a point that nobody wanted to end up at. The process can be followed exactly and correctly, but without regard to the desired outcome. Worse, no one will understand how you ended up there, or how to get back on track. This leads to bad decision-making, slows efforts to protect human health and the environment, and increases the costs. These costs are ultimately borne by the taxpayers.

Scott: I think an example or two might be the best way to demonstrate the paradigm shift that is underway through the implementation of this program. At one of the installations we evaluated for DoD we were reviewing documents and found a Work Plan for a site that appeared to have duplicate copies. However, after closer examination we discovered that the dates on the documents were changed. The first document was dated January 2001 and the second document was June 2002. Further review found that the documents were quite similar with no substantive changes. Apparently, the only thing that had changed for this Work Plan was the passage of 18 months time. In another incident, and one that we find quite often, we found a site where the contractor was required to do multiple phases of investigation and then there were at least two supplemental investigations for the same site with no clear remedial path established and no certainty that the site had even completed the investigation phase. Even more distressing was the fact that adjacent sites still had not been characterized despite the fact that they shared a common groundwater aquifer. While both of these examples are quite common in the current system and there are certainly explanations for why these things happen, under a fixed-price, performance-based contract it is far less likely that the contractor will have any incentive to accomplish multiple phases of investigation or to delay progress on the site while awaiting regulatory guidance. Instead, the contractor is incentivized to ensure

that communication channels are established with the regulators and that work proceeds at risk if necessary. As long as there is a clear understanding of the regulatory process and high confidence in the remedial approach, then there is no reason that the contractor cannot proceed towards achieving the designated end-state. Also, the contractor must take a more holistic view of the site and approach the cleanup from an overall site closure perspective. In this program everything is focused on closure and as a result the approaches and even the way you think about each activity changes. You tend to ask yourself everyday, “Is what I’m doing today leading to closure of this site?”

“So where do we go from here?”

Holsinger: Forward. As we learned from the Navy’s early efforts and worked through a variety of issues on both BRAC and active installations within the Army, we need to learn from those experiences to move to the next generation. I believe we need to work to achieve even more streamlined procurement processes and become more performance-oriented. The Air Force is doing some interesting things in a very progressive manner and we can learn from their efforts.

As we look at some current initiatives to contract out more operations that are not inherently government in nature, the natural conclusion for me is that the remaining government workforce must have more generalists and fewer specialists. The required span of control for that workforce means we cannot try to oversee and manage spec-based contracts or process-oriented operations. The physical ability to oversee those types of operations will not exist. So we need to keep in mind not only what it means today, but what it means for the future.

Scott: I agree with Shawn – “Full steam ahead!” It has become quite evident that this program is probably DoD’s best chance for achieving the DPG goals and is certainly the best path forward for ensuring price certainty in the cleanup program. If the DoD and other Government agencies can establish a reasonably well-defined cost to closure for the environmental cleanup program, then they will have the ability to plan and divert funding to activities that satisfy their core competencies and mission. So far, the federal environmental program continues to balloon as each year passes and there does not appear to be a change in that trend. There has always been optimism that future regulatory changes, technological advances or some other opportunities would eventually present themselves and the program would realize the savings of the previous investment. However, these huge opportunities have not materialized, so perhaps the focus should be shifted instead toward establishing a new paradigm for the cleanup program and moving away from the process-oriented approach and move more towards a results orientation.

“Any concluding remarks that you would like to make?”

Holsinger: The Department of Army, along with the other services, faces significant challenges in meeting our obligations in environmental stewardship. By the very nature of much of the operations in the past that have lead to the current cleanup requirements, many of the sites and installations present significant challenges. There are several emerging issues and potential future requirements that create a need to address current

issues as efficiently and effectively as possible to avoid a potential “bow wave” of requirements that spread available resources too thin to affect meaningful results. GFPR is one of a number of ongoing and proposed performance-based contracting initiatives. As with any significant deviation from “business as usual”, along with the successes come some failures. However, this should not be used as a reason to revert to what is familiar. Instead, the lessons learned need to be incorporated to work towards an optimized set of solutions that ultimately will benefit both the government, and the firms that support those efforts. Private industry brings a wealth of knowledge and experience in dealing with the very issues facing the DoD.

Scott: I would simply echo Shawn’s remarks and close with a quote by Arthur Schopenhauer, “All truth passes through three stages. First it is ridiculed. Second it is violently opposed. Third it is accepted as being self-evident.” I believe that in the end it will be self-evident that transferring the performance risk to the contractor is the best approach for the Government’s environmental cleanup program. The Government will achieve price certainty, the contractors will be rewarded for innovation and superior performance, and the public will realize expedited site closures.