Evaluation Report

CONTRACTING PRACTICES FOR THE INSTALLATION RESTORATION PROGRAM AT MASSACHUSETTS MILITARY RESERVATION

Report Number 98-152

June 15, 1998

Office of the Inspector General
Department of Defense

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MEMORANDUM FOR ASSISTANT SECRETARY OF THE AIR FORCE
(FINANCIAL MANAGEMENT AND COMPTROLLER)

SUBJECT: Evaluation on Contracting Practices for the Installation Restoration Program at Massachusetts Military Reservation (Report No. 98-152)

We are providing this report for information and use. We conducted the evaluation in response to a request from the Assistant Secretary of the Air Force (Manpower, Reserve Affairs, Installations and Environment). Management comments on a draft of this report were considered in preparing the final report.

Comments on the draft of this report conformed to the requirements of DoD Directive 7650.3. No further response is required; however, there will be separate followup inquiries from this office.

We appreciate the courtesies extended to the evaluation staff. Questions on the evaluation should be directed to Mr. William C. Gallagher, at (703) 604-9270 (DSN 664-9270) or Mr. Michael Perkins, at (703) 604-9273 DSN 664-9273. See Appendix F for the report distribution. The evaluation team members are listed inside the back cover.

Robert J. Lieberman
Assistant Inspector General
for Auditing
Executive Summary

Introduction. This evaluation was initiated in response to a request from the Assistant Secretary of the Air Force (Manpower, Reserve Affairs, Installations & Environment) to review the Installation Restoration Program at the Massachusetts Military Reservation.

Evaluation Objectives. The overall evaluation objective was to evaluate contractual, technical, and managerial processes associated with cleanup actions at the Massachusetts Military Reservation. This report discusses our evaluation of the contractual processes. The technical and managerial processes will be discussed in a subsequent report. We also reviewed the management control program as it applies to the award, administration, and oversight of environmental contracts.

Evaluation Results. The Air Force Center for Environmental Excellence did not effectively manage environmental contracts for the Massachusetts Military Reservation. Our review showed that the Air Force Center for Environmental Excellence:

- used undefinitized contract actions related to the Massachusetts Military Reservation routinely, rather than solely for urgent requirements,
- used unilateral ordering procedures on time and material contracts, though this did not comply with the Federal Acquisition Regulation,
- allowed the contractor to perform work outside the scope of the contract,
- did not promptly review eight invoices totaling $37.2 million to identify unallowable or questionable costs.

Additionally, neither The Air Force Center for Environmental Excellence nor the Environmental Contracting Division, Human Systems Center of the Air Force Materiel Command had not established an effective management control plan.

As a result, the Government faces greater risk of cost growth and ineffective contractor performance. See Part I for a discussion of the evaluation results and Appendix A for additional details on management controls.

Summary of Recommendations. We recommend that the Air Force Materiel Command periodically review support for the use of undefinitized contract actions at the Air Force Center for Environmental Excellence to ensure that undefinitized contract actions are used only for unforeseen urgent requirements, rather than to routinely
expedite obligations. Also, we recommend that the Air Force Materiel Command rescind the approval for the unilateral ordering procedures for time-and-materials contracts.

We recommend that the Air Force Center for Environmental Excellence discontinue routine use of undefinitized contract actions, discontinue the use of unilateral ordering procedures for time-and-materials contracts; cancel or request reapproval for the undefinitized $131 million letter contract; require the contracting officer to review contractor charges within 30 days of receipt; withhold payments for any questioned charges; and establish an assessable unit for the environmental contracting process.

We also recommend that the Human Systems Center establish a comprehensive management control plan for the environmental contracting process.

Management Comments. The Office of the Assistant Secretary of the Air Force (Acquisition) provided the Air Force response to our draft report findings and recommendations. The Assistant Secretary partially concurred with our findings, taking exception with the audit assertion that undefinitized contract actions had been used excessively by the Air Force Center for Environmental Excellence. The Assistant Secretary agreed with all recommendations except one. The exception was the draft recommendation to terminate or request reapproval of the $131 million undefinitized contract issued to Jacobs Engineering Group. The Assistant Secretary stated that the contract has been revalidated and is being substantially used; therefore, it would be impractical to terminate it or request reapproval. The Assistant Secretary agreed to use undefinitized contract actions only for unforeseen urgent requirements and to discontinue use of the unilateral ordering procedure for time-and-materials contracts. Air Force will rescind the unilateral ordering procedure and investigate an alternative procedure that is responsive to mission needs and consistent with sound business procedures. He also asserted that procedures are already in place to require prompt review of contractor charges. The Assistant Secretary stated that the contracting officers also requested a Defense Contract Audit Agency audit of contractor charges on delivery order 25 and have questioned more than $600,000 of contractor charges based on findings from this ongoing audit. See Part I for a discussion of management comments and Part III for the complete text of management comments.

Evaluation Response. The Air Force comments were generally responsive. We agree that the finding on excessive use of undefinitized contracts pertained solely to contracts associated with the Massachusetts Military Reservation; however, we stand by our characterization of those undefinitized contracts. We will track the future use of undefinitized contract actions by the Air Force Center for Environmental Excellence through the audit followup process. We also agree that the Jacobs Engineering Group contract should proceed.
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Part I - Evaluation Results
Evaluation Background

The Commonwealth of Massachusetts established the Massachusetts Military Reservation (MMR) in 1935 as a National Guard training camp and federalized MMR in 1940. The MMR covers 34 square miles and is the home to Otis Air National Guard Base. The majority of military activity took place from 1940 through 1970. During that period, MMR generated large amounts of hazardous waste. The waste was commonly disposed of by disposing in landfills, dumping in storm drains or on the ground, or burning in fire training areas. In 1982, DoD initiated the Installation Restoration Program (IRP) at the Otis Air National Guard Base portion of MMR to investigate and clean up environmental problems. DoD expanded the program in 1986 to include Camp Edwards (Army National Guard) and the U.S. Coast Guard Air Station, Cape Cod. In 1989, the MMR was added to the U.S. Environmental Protection Agency (EPA) National Priorities List (superfund). Superfund is a designation signifying that the contamination at the reservation is a serious threat to the public and the environment, and its cleanup requires EPA oversight.

The MMR sits on the recharge area (an undeveloped area where rainwater flows through the soil) for the only groundwater aquifer from which all of upper Cape Cod draws its drinking water. Studies have identified 78 potential pollution source areas and 11 major groundwater pollution plumes. These plumes have contaminated both residential and public wells near the base. To date, the Government has spent more than $200 million for studies, investigations, and cleanup at MMR.

Air National Guard. Headquarters, Air National Guard, Andrews Air Force Base, Maryland, managed the IRP program from 1986 through 1989. In 1990, the Air National Guard opened a local office at Otis Air National Guard Base to manage the IRP. The Air National Guard obtained IRP services through an interagency agreement with the Department of Energy (DoE). To accomplish the required work, DoE established a contract with a management and operating contractor; Martin Marietta Energy Systems, Hazardous Waste Remedial Actions Program (HAZWRAP). HAZWRAP subcontracted the majority of the IRP work to various subcontractors. The main objective of this work was to fully characterize the site conditions at MMR and to complete cleanup. In May 1996, the Air National Guard transferred management responsibility for MMR to the Air Force Center for Environmental Excellence (AFCEE). Therefore, AFCEE administered MMR contracts awarded after May 15, 1996.

Air Force Center for Environmental Excellence. AFCEE provides a full range of technical services in areas related to environmental cleanup, and design and construction management. The Human Systems Center (HSC), Environmental Contracting Division of the Air Force Materiel Command, provides contracting services for AFCEE and establishes operating policy and procedures for environmental contracting. The Environmental Contracting Division at HSC also solicits, negotiates, awards and administers contracts.
supporting architectural design and worldwide environmental services for AFCEE. The IRP office at MMR performs on-site management for execution of the cleanup program at MMR.

**Federal Facility Agreement.** The Federal Facility Agreement, July 17, 1991, and amended April 24, 1997, is an agreement among the EPA, the Air Force, the National Guard Bureau, and the U.S. Coast Guard that defines responsibilities and requirements in accordance with the Comprehensive Environmental Response, Compensation and Liability Act. Specifically, the agreement:

- establishes requirements for site inspections, remedial investigations, feasibility studies, and remedial actions;

- ensures that remedial actions will accomplish the degree of cleanup mandated by the Comprehensive Environmental Response, Compensation and Liability Act and other applicable laws and directives;

- coordinates response actions with the mission support organizations at MMR;

- expedites the cleanup process to protect public health, welfare, and the environment;

- provides operation and maintenance of remedial actions selected and implemented; and

- identifies appropriate removal actions and provides timely notice of proposed actions to parties subject to this agreement.

**Strategic Plan.** AFCEE developed the strategic plan in July 1996 and updated it in September 1997 to implement the requirements of the Federal Facility Agreement. The strategic plan outlines the mission and roles of key DoD agencies that have an interest in the MMR IRP, and provides a comprehensive plume response plan that documents findings of technical evaluators, and includes the schedule for implementing those findings. The objectives of the strategic plan were to:

- remediate community groundwater resources;

- complete the MMR cleanup;

- protect human health and the environment from the hazards of past practice;

- maintain and strengthen community involvement through full and open disclosure, by obtaining community ideas for developing solutions;
to develop partnerships with regulatory agencies; and

- earn and restore public trust and confidence in the DoD commitment and capability to respond effectively to challenging contamination situations.

Evaluation Objectives

Our overall objective was to evaluate the validity of the contractual, technical, and managerial processes associated with the cleanup actions at MMR. This report discusses our evaluation of the contractual processes. The technical and managerial processes will be discussed in a subsequent report. The management control program as it applied to the award, administration, and oversight of environmental contracts was also evaluated.

See Appendix A for a discussion of the evaluation process and details of our review of the management control program. See Appendix B for a summary of prior coverage related to the evaluation objectives.
Environmental Contract Administration

AFCEE needs to improve management of environmental contracts for the MMR. AFCEE routinely used undefinitized contract actions (UCAs) and unilateral ordering procedures (UOPs) to expedite work. Also, AFCEE allowed the contractor to perform work outside the scope of the contract, and did not promptly review invoices to identify unallowable or questionable costs. This occurred because the Air Force entered into an unrealistically aggressive Federal Facilities Agreement and did not consider contract lead time when negotiating milestones. As a result, AFCEE used UCAs and UOPs to meet deadlines; and the Government, not the contractor, absorbed all the risk of cost growth related to the contracted work. Ineffective contract management also increased the risk of the Government paying for unallowable services, services in excess of contract requirements, and for goods and services not received.

Contract Administration Criteria

Federal Acquisition Regulation. The Federal Acquisition Regulation (FAR) provides contract administration guidance in areas such as selecting contract type, cost reimbursement contracts, undefinitized contracts, and contract oversight. The FAR guidance is intended to reduce the risk of cost growth, encourage efficient and effective contractor performance, and minimize the amount of Government oversight required to administer contracts.

Negotiating Contract Type. FAR 16.103, "Negotiating Contract Type," states that the objective of negotiating the contract type and price (or estimated cost and fee) is to select the type of contract that will result in reasonable contractor risk and will provide the contractor with the greatest incentive for efficient and economical performance. The FAR also states that a firm, fixed-price contract shall be used when the risk involved is minimal or can be predicted with an acceptable degree of certainty. The FAR further states that in the course of an acquisition program, a series of contracts, or a single long-term contract; changing circumstances may make a different contract type than that used at the outset more appropriate in later periods. In particular, the contracting officer should avoid the protracted use of cost-reimbursement or time-and-materials contracts after experience provides a basis for firmer pricing.

Factors in Selecting Contract Types. FAR 16.104, "Factors in Selecting Contract Types," states that the contracting officer should consider the extent and nature of proposed subcontracting when selecting and negotiating the contract type. If the contractor proposes extensive subcontracting, a contract type reflecting the actual risks to the prime contractor should be considered.
Environmental Contract Administration

Cost-Reimbursement Contracts. FAR 16.3, "Cost-Reimbursement Contracts," states that a cost reimbursement contract may be used only when appropriate Government surveillance during performance will provide reasonable assurance that efficient methods and cost control are used. The use of cost-reimbursement contracts for acquisition of commercial items is prohibited.

Time-and-Materials Contracts. FAR 16.601, "Time-and-Materials Contracts," states that time-and-materials contracts may be used only when it is not possible to accurately estimate the extent or duration of work, or to anticipate costs with any reasonable degree of accuracy.

Firm-Fixed-Price Contracts. FAR 16.202, "Firm-Fixed-Price Contracts," states that firm-fixed-price contracts place maximum risk and full responsibility for all costs and for resulting profit or loss on the contractor. Those contracts provide maximum incentive for the contractor to control costs and perform effectively. Firm-fixed-price contracts also place less administrative burden on the Government and the contractor.

Undefinitized Contract Actions

Initial Undefinitized Contract. AFCEE adequately supported and obtained the proper approval for issuing the initial UCA for work at MMR. However, AFCEE inappropriately issued five additional UCAs, instead of definitive delivery orders, on later contract actions. The UCAs were awarded to expedite award of delivery orders for environmental studies, sampling, and cleanup that were not urgent requirements. Defense Federal Acquisition Regulation Supplement 217.7403 states that UCAs shall be used only when:

- negotiation of a definitive contract action is not possible in sufficient time to meet the Government’s requirements and
- the Government’s interest demands that the contractor be given a binding commitment so that contract performance may begin immediately.

In April 1996, the parties to the Federal Facility Agreement (FFA) (the Army, the Air Force, the National Guard Bureau, the Coast Guard, and the EPA) agreed to transfer responsibilities of lead management agent for the installation restoration program at MMR to AFCEE. In May 1996, AFCEE issued the first delivery order (DO) for work at MMR to Jacobs Engineering Group, DO 0025 on contract F41624-94-D-8115. The purpose of DO 0025 was to provide full remedial action at MMR. The DO was awarded as a UCA to accomplish a limited amount of the required work. The estimated cost for the DO was $1.5 million; and a not-to-exceed price of $750,000 was established to compel the contractor to submit a proposal for a definitized contract before funds were expended.
The AFCEE request for authority to issue a UCA for DO 0025 stated that the UCA was required to meet milestones established by environmental regulators and set forth in the FFA. The request also stated that the Air Force made a commitment to the EPA and the community, that an operational well head treatment system for chemical spill site number 4 would be in place no later than July 4, 1996. The short suspense for the milestone justified issuing a UCA. However, AFCEE improperly used UCAs for subsequent modifications to DO 0025 and eventually increased the cost from the initially approved $1.5 million to $67.5 million.

**Delivery Order 0025.** Except for the initial contracting action, AFCEE did not have adequate justification for issuing UCAs on contract number F4162-94-D-8115, DO 0025. Also, AFCEE did not always disclose the total price of the requirement when requesting approval to issue UCAs.

For example, AFCEE issued the basic delivery order as a UCA on May 28, 1996, with a not-to-exceed price of $750,000. The justification and approval for DO 0025 estimated $1.5 million as the total amount “necessary for the effort as scoped.” In the legal review, AFCEE stated that only the well head treatment portion of the total requirement for Chemical Spill number 4 was urgent. However, on June 5, 1996, eight days after award of the basic delivery order, AFCEE issued modification 1 and increased the estimated cost to about $37.4 million and increased the not-to-exceed price to $41.5 million. Given the magnitude of the increase in estimated costs, $37.4 million, and the short period between the initial delivery order and modification 1, AFCEE should have known that the requirement on DO 0025 would exceed $1.5 million. Therefore, AFCEE should have requested approval for the full amount of the UCA, or awarded a definitive delivery order for the remaining $37.4 million.

On April 24, 1997, AFCEE issued modification 6 to DO 0025 as a UCA and increased the not-to-exceed amount to $67.5 million. The justification and approval for that modification stated that the UCA was required to continue critical plume response work at the MMR. The justification and approval stated that award of a definitive modification would require 75 days, and failure to issue a UCA would require work to be stopped and would cost the Government about $1 million. As work progressed, requirements should have become more defined, and AFCEE should have exercised more effective planning and reduced the need for UCAs.

**Delivery Order 0041.** AFCEE awarded DO 0041, Crescent Road Water hookups to Jacobs Engineering Group as a UCA on September 20, 1996, and definitized the DO on December 4, 1996 for $289,216. AFCEE approved a cost-plus-award-fee contract and a maximum fee of 10 percent, even though the prime contractor awarded a subcontract with the Mashpee, Massachusetts, Water District to accomplish the majority of the work. The final negotiation memorandum showed a subcontract price of $231,885, which included a firm-fixed-price agreement for administrative, engineering, and management costs of $63,706 and cost-plus-fixed-fee agreement for construction costs of $168,179. The majority of the risk on the delivery order is assumed by the subcontractor.
Environmental Contract Administration

Therefore, a cost-plus-award fee contract was not reasonable, and the 10-percent fee was excessive. AFCEE should have awarded a cost-plus-fixed-fee, or a firm-fixed-price contract to the Jacobs Engineering Group, reduced the award fee to an amount commensurate with the risk assumed by the contractor, or contracted directly with the subcontractor for a firm-fixed-price contract or cost-plus-fixed-fee contract.

**Delivery Order 0042.** AFCEE issued a UCA for DO 0042 to Jacobs Engineering Group, even though Jacobs issued a subcontract to the city of Falmouth, Massachusetts, to install the water lines. AFCEE awarded DO 0042, Falmouth Water Hookups on March 26, 1997, and definitized the DO June 13, 1997, for $2 million. The AFCEE justification for the UCA stated that it was issued because 30 days were required to award a negotiated contract. The justification stated that during the 30-day delay, the Government would be required to provide bottled water to residents of Falmouth, incurring a total cost of $3,000. The justification did not meet the criteria for an emergency. The preliminary price negotiation memorandum, dated May 9, 1997, showed that Jacobs Engineering Group planned to award a $1.5 million subcontract for engineering support, technical inspections, and plumbing services to the city of Falmouth. The nature and extent of work was well defined, and the majority of the risk for the work was assumed by the subcontractor. Therefore, AFCEE should have awarded a firm-fixed-price contract to Jacobs or directly to the city of Falmouth. Also, the risk of inadequate performance or cost growth on the UCA may exceed the benefits of the estimated $3,000 cost avoidance.

**Follow-on Undefinitized Letter Contract.** On May 9, 1997, AFCEE awarded contract F41624-97-D-8006, a $131 million undefinitized sole-source letter contract, to Jacobs Engineering Group for follow-on work at MMR. The contract did not meet the urgency requirement standards in the Defense Federal Acquisition Supplement. AFCEE obtained the appropriate approvals for the contract; however, 10 months after the request was initiated, no delivery orders had been awarded. The justification and approval states that the contract is necessary to continue to meet aggressive schedules required by environmental regulators and to avoid fines and stipulated penalties. AFCEE stated that the project was urgent because the estimated cost to complete work in FY 1997 and beyond was $244 million, and the contract was approaching its $150 million ceiling price. The justification and approval for the contract was issued in December 1996. The Principal Assistant Secretary of the Air Force (Acquisition) signed the approval of final acquisition in February 1997 and the contract was awarded in May 1997. As of September 1997, however, AFCEE had not awarded any work on the contract.

**Unilateral Ordering Procedures**

AFCEE implemented a contracting procedure referred to as a UOP, that increases the risk of cost growth and inadequate contractor performance. Also, the UOP contradicts guidance established by FAR 16.601, which states that:
A time-and-materials contract may be used only when it is not possible at the time of placing the contract to estimate accurately the extent or duration of work or anticipate the costs with any reasonable degree of confidence.

The UOP is a unilateral contracting method developed by AFCEE to expedite award of delivery orders on time-and-materials level-of-effort contracts. The AFCEE Team Chief’s Project Management Manual, May 1995, states that the UOP is used only on time-and-materials delivery orders that have a well-defined scope of work. The manual also states that this approach shortens the delivery order award time by eliminating the proposal preparation and evaluation, and negotiation. AFCEE issued UOPs on all five delivery orders issued on the four time-and-materials contracts included in our review.

The contracting officer stated that in accordance with UOP guidance approved by the Air Force Materiel Command, the UOP is used only when the Government has a well-defined scope of work and can estimate with a reasonable degree of accuracy, the amount of time, materials and other resources required to complete a specific task. The contracting officer stated that the risk of defective pricing is low because labor rates, overhead, profit and general and administrative rates are established in the basic contract, and that the materials used on the contracts were mostly commercial items that do not require cost and pricing data. The contracting officer further stated that the risk of substandard contractor performance is mitigated by implementing a field surveillance plan, which requires increased contractor oversight.

The UOP increases risk to the Government because time-and-materials level-of-effort contracts require the highest level of Government oversight. The cost of this additional administrative and field oversight may exceed any savings expected from awarding UOPs. Also, even if the orders exceed $500,000, the UOP does not require cost and pricing data. Even though the Government estimate may include a significant amount of commercial items, the UOP, other than the not-to-exceed price, does not place cost constraints on the contractor. The risk to the Government is increased because the contractor may use the funds for costs other than materials or other commercial items.

Contract F41624-94-D-8046, DO 0031, awarded to Jacobs Engineering Group is an example of inappropriate use of UOPs on time-and-materials contracts. Delivery order 0031 was awarded to Jacobs Engineering on April 22, 1996, with a ceiling price of $74,388. The DO included requirements for the Plume Containment Management Plan for Otis Air National Guard Base, a feasibility study, installation of monitoring wells, and water sampling. As of June 1997, AFCEE had issued seven UOPs on modifications to DO 0031, and had increased the initial ceiling price from $74,388 to $3.9 million. Modification 6 to DO 0031, dated March 6, 1997, accounted for $2.1 million of the $3.9 million ceiling. A chart showing a summary of modifications on DO 0031 is in Appendix E.

The $2.1 million ceiling price for modification 6 was established from information in the Independent Government Estimate. This estimate included $766,057 for labor and $1.36 million for support costs, which included an
estimated $1.1 million for drilling subcontracts. The AFCEE stated that the UOP did not increase the Government risk because the drilling costs and labor requirements could be estimated with a reliable degree of accuracy.

If costs and requirements can be estimated with a reliable degree of accuracy, AFCEE should negotiate firm-fixed-price contracts or other cost-type contracts. The Government must expend additional resources to monitor the contractor’s performance and costs for contracts awarded as UOPs on time-and-materials contracts. The cost of the additional resources may exceed any cost savings expected from issuing UOPs.

Work Outside The Contract Scope

The AFCEE did not effectively monitor and approve contractor performance on contract F41624-94-D-8115, DO 0025. Some of the additional work was directed by the AFCEE program manager at the request of representatives from the local community. The request resulted in the contractor performing work that was outside the contract scope, which increased Government costs for work that was not supported by contract modifications. For example:

- On January 3, 1997, the contractor notified the Government that costs had been incurred for work that was not planned for DO 0025. The work included additional sampling, drilling, and preparing of ecological and environmental studies.

- In a January 11, 1997, memorandum, the contracting officer stated that the contractor was probably invoicing for new work (FY 1997 requirements) on DO 0025, leaving no funds for FY 1996 requirements. The contracting officer stated that work on fuel spill site number 12 was not funded and would require either a UCA to fund the requirement, or notification to the contractor that they were at risk.

- Jacobs Engineering Group stated in a January 20, 1997 letter that costs for the additional 33 test wells and 130 additional samples was $930,000 more than the negotiated baseline estimate. In a January 27, 1997 memorandum, the contracting officer stated that the contractor’s cost performance report showed a potential $16.1 million cost overrun. That trend was noted during a 3-month monitoring process as cost variances increased from $5 million to $8 million to $16.1 million. The contracting officer provided three options:
  - stop work on the entire program under DO 0025,
  - issue a partial stop work order and fund only a portion of the projects until additional funding became available, or
  - obtain funds from the Air Force to fund all requirements that had been validated.
In a January 24, 1997 point paper, the AFCEE MMR program coordinator stated that Jacobs Engineering Group initiated so much new work on DO 0025 that the contracted tasks could no longer be completed for the existing $39 million. For example, the FY 1996 project included a requirement for three test wells at a cost of $800,000. The point paper stated that the requirement had been increased to 64 wells, of which 39 had already been drilled.

The AFCEE should monitor the contractor's work and should ensure that the contractor does not perform services outside the scope of work without Government approval of funding as well as an approved contract modification. In addition, AFCEE should not pay the contractor for any work in excess of the amount contracted for by the Government.

Review of Contractor Invoices

AFCEE did not promptly review contractor charges for work performed on contract F4162-94-D-8115, DO 0025. As of September 1997, the contracting officer representative (COR) had not reviewed contractor charges totaling $37.3 million for work performed from November 30, 1996, through August 1, 1997, to determine that cost reimbursements were accurate, reasonable and allowable. DO 0025 was awarded as a UCA on a cost-plus-award-fee contract and was modified three times with UCAs. The risk of cost growth on cost-type contracts is generally greater than on firm-fixed-price contracts. This risk is increased with the use of UCAs. Prompt review of contractor invoices is essential to reduce the risk of contractor cost growth on UCAs, and to ensure that the Government does not pay for unreasonable or unallowable costs.

Contracting Officer Representative Responsibilities. Prior to awarding a project, the contracting officer may delegate authority to an on-location contracting officer and appoint a COR to oversee the contractor's performance of the delivery order. The COR is usually the team chief and/or the field engineer. The AFCEE team chief's project management manual states that project cost reviews are critical to project execution and that the COR is responsible for:

- determining that work claimed during the period was actually performed,
- determining that the number of hours claimed is valid for the tasks billed,
- reviewing and approving invoices and payment vouchers to ensure the contractor appropriately bills travel and other direct costs,
Environmental Contract Administration

- documenting any invoice discrepancies in a memo and coordinating with the HSC contracting office, and

- monitoring a contractor’s deliverable quality and technical approach by comparing the work performed with the requirements in the statement of work.

The COR assigned to oversee work performed under DO 0025 at MMR did not review contractor invoices in accordance with the Environmental Restoration Contracting Procedures Manual.

**Invoice Processing.** The prime contractor submits billing invoices monthly. The contractor provides the COR with substantial documentation to support costs incurred for each billing period of an invoice including labor summaries, subcontract costs, other direct costs, and vendor invoices for expenses greater than $1,000. As of September 18, 1997, the COR had not reviewed eight invoices totaling $37.3 million for work performed at MMR between November 30, 1996, and August 1, 1997. The most recent invoice reviewed by the COR was for work performed from November 1 through 29, 1996. The COR questioned numerous cost items in a letter to the contracting officer on April 7, 1997. As of September 25, 1997, the contracting officer had not resolved the questioned costs, and the COR had not certified the invoice. The COR stated that other priorities prevented him from reviewing invoices and stated that a Systems Engineering and Technical Assistance (SETA) contractor review of invoices would validate contractor billings.

**Systems Engineering and Technical Assistance Contractor.** The AFCEE contracted with a SETA contractor to assist the AFCEE team chief monitor project execution. One responsibility of the SETA contractor is to review the IRP contractor’s invoice submissions to ensure that charges are consistent with the statement of work. The SETA contractor did not verify that the work billed was actually performed by the IRP contractor. Therefore, a timely review of invoices by the COR was necessary to ensure the accuracy of contractor billings. The SETA contractor had reviewed all invoices submitted by the IRP contractor. The reviews resulted in questioned charges including travel, labor hours, and property costs. However, the contracting officer had not taken action to resolve the questioned charges noted in the five reports submitted by the SETA contractor. The contracting officer stated that as a result of travel and labor costs questioned by the COR, AFCEE requested the Defense Contract Audit Agency to perform a cost-incurred audit. As of September 30, 1997, the Defense Contract Audit Agency had started, but not completed the audit of travel and overtime charges at MMR.

**Evaluation Summary**

AFCEE inappropriately used UCAs and UOPs to expedite award of delivery orders. Therefore, the risk of cost growth and ineffective contractor performance was increased. UCAs and UOPs did not provide a positive incentive for the contractor to control costs or perform services in a highly
efficiency manner. Also, AFCEE did not review contractor invoices totaling $37.3 million in a timely manner, to ensure that costs were reasonable and allowable. Neither AFCEE nor the HSC had established effective management controls for environmental contracting. That increases the risk that deficiencies may occur and may not be detected and corrected promptly. AFCEE should designate environmental contract administration as an assessable unit and perform periodic tests of controls. HSC should prepare a management control plan that includes tests of controls and milestones for completion of reviews of environmental contract administration.

Management Comments on the Finding and Evaluation Response

Management Comments. The Assistant Secretary agreed to limit the use of undefinitized contract actions, but did not agree that UCAs were used excessively. The Assistant Secretary stated that the AFCEE used UCAs for only 6 of 83 contract actions awarded. The Assistant Secretary stated that an Air Force Materiel Command review of the UOP showed that the HSC complied with Air Force Materiel Command policies and procedures. The Assistant Secretary stated that HSC supported each contract award with a determination and finding, and developed independent government estimates to establish the price for delivery orders awarded using the unilateral ordering procedure. The Assistant Secretary stated that those independent government estimates contained as much cost and pricing detail as is required from the contractor when requesting a proposal. Also, the Assistant Secretary stated that the UOP does not increase risk to the Government because the level of contract surveillance is increased.

Evaluation Response. The finding states that the excessive use of undefinitized contract actions was noted in 5 of 6 contracts associated with the MMR, not in all AFCEE contracts. We do not agree with other management comments on the finding concerning the use of UCAs, Government risk associated with the use of UOPs, and contracting officer review of invoices. AFCEE issued UCAs, estimated at $175 million, on 5 of the 12 contract actions awarded for work at the MMR. The five UCAs included a May 1997 $131 million letter contract, approved as an urgent requirement. As of September 11, 1997, no work had been awarded on the contract. The nonuse showed that the contract was not urgent and, therefore, did not meet the FAR and Defense Federal Acquisition Regulation Supplement criteria for UCAs. Despite that fact, the HSC definitized the contract in November 1997 at a cost of $131 million and has issued 11 actions on it valued at more than $27 million (see Appendixes C and D).

As discussed in the finding, the UOP contradicts FAR requirements for time-and-material contracts. The FAR states that time-and-material contracts should be used only when the time frame and the extent of work cannot be reasonably determined at the time of contract award. Air Force Materiel Command directives state that the UOP may be used for time-and-materiel contracts when the extent of work and the time required to complete the requirement may be
determined with reasonable certainty at the date of contract award. Obtaining an independent Government estimate does not reduce the risk of contractor nonperformance, and does not provide the Government a remedy for defective pricing. Also, we do not agree that Government surveillance at MMR is adequate to minimize Government risk on the UOP. Any benefits gained from a fast award of time-and-material contracts awarded using the UOP may not justify the increased cost and manpower required to effectively monitor performance and cost on the contracts.

Also, the AFCEE should place additional emphasis on existing procedures to ensure timely contracting officer review of contractor invoices, and prompt resolution of any questioned or unallowable contractor costs. Although procedures may already be in place, the contracting officer had not reviewed or approved contractor invoices for DO 25 in 8 months. Those invoices totaled $37.7 million. The Defense Contract Audit Agency audit requested by AFCEE should be used to supplement the contracting officer review of questionable contractor charges and not as a substitute for a timely contracting officer review of contractor invoices.
Recommendations, Management Comments, and Evaluation Response

Deleted Recommendation, Renumbered Recommendations, and Revised Recommendation. As a result of management comments on the draft report, we deleted Draft Recommendation 2.c. Draft Recommendation 2.d. has been renumbered Recommendation 2.c. and Draft Recommendation 2.e. has been renumbered Recommendation 2.d. As a result of management comments, we revised Recommendation 3. to clarify our intention on whom should establish an effective management control plan.

1. We recommend that the Commander, Air Force Materiel Command:

   a. Perform periodic reviews of the support for the use of undefinitized contract actions at the Air Force Center for Environmental Excellence to ensure that undefinitized contract actions are used only for unforeseen urgent requirements, rather than to routinely expedite obligations.

Assistant Secretary of the Air Force (Acquisition) Comments. The Assistant Secretary did not provide comments on this recommendation, but addressed the recommendation in comments on Recommendation 2. The Assistant Secretary agreed with our recommendation that undefinitized contract actions should be used only for unforeseen, urgent requirements. However, the Assistant Secretary stated that undefinitized contract actions were used for only 6 of 83 total contract actions, and that all 6 actions were issued in compliance with applicable regulations and policies.

Evaluation Response. We consider the Assistant Secretary comments to be responsive. Our review showed that the Air Force Center for Environmental Excellence awarded undefinitized contract actions for 5 of the 12 contract actions (11 delivery orders and 1 letter contract) awarded for work at the MMR. The estimated cost for the five undefinitized contract actions was more than $175 million, and included a $131 million letter contract. The letter contract was approved in April 1997, but still had not been used as of September 1997. The nonuse showed that the contract was not urgent and, therefore, did not meet the FAR and Defense Federal Acquisition Regulation Supplement criteria for undefinitized contract actions. Despite that fact, the Human System Center definitized the contract in November 1997 at a cost of $131 million and has issued 11 actions on it valued at more than $27 million (see Appendix C and Appendix D). Because a significant amount of work has been performed and funds have been awarded on the contract, we agree that it would not be reasonable to terminate or request reapproval for the contract at this time.
b. Rescind the approval for the unilateral ordering procedure for time-and-materials contracts.

Assistant Secretary of the Air Force (Acquisition) Comments. The Assistant Secretary did not provide comments on this recommendation, but adequately addressed the recommendation in its comments on Recommendation 2. The Assistant Secretary agreed with the recommendation, stating that based on our findings and those from the Air Force Materiel Command, the Human Systems Center will rescind the unilateral ordering procedure.

Evaluation Response. Comments from the Assistant Secretary are responsive to our recommendation.

2. We recommend that the Director, Air Force Center for Environmental Excellence:

a. Discontinue use of undefinitized contract actions, except those requirements that meet the criteria defined in the Federal Acquisition Regulation and DoD Federal Regulation Supplement.

Assistant Secretary of the Air Force (Acquisition) Comments. The Assistant Secretary concurred with the recommendation, but stated that use of undefinitized contract actions by the AFCEE was limited, and was in compliance with applicable directives.

Evaluation Response. We consider the comments from the Assistant Secretary to be responsive to our recommendation, but not responsive to the finding.

b. Discontinue the use of the unilateral ordering procedure for time-and-materials contracts.

Assistant Secretary of the Air Force (Acquisition) Comments. The Assistant Secretary concurred, with reservations, and stated that an Air Force Materiel Command review of the UOP showed that the Human Systems Center complied with Air Force Materiel Command policy and procedures, and supported each contract award with a determination and finding. The UOP does not increase risk to the Government because the level of contract surveillance is increased. Also, the Human Systems Center developed independent government estimates to establish the price for delivery orders awarded using the unilateral ordering procedure. The Assistant Secretary stated that those independent government estimates contained as much cost and pricing detail as is required from the contractor when requesting a proposal. However, the Assistant Secretary agreed to rescind the unilateral ordering procedure and investigate an alternate contracting procedure to respond to mission needs.
c. Require that the contracting officer validate contractor charges and certify invoices for payment within 30 days of receipt. Initiate actions to resolve all charges questioned by the contracting officer representative and the support contractors within 30 days of receipt. Initiate actions to recover all costs determined to be unallowable.

Assistant Secretary of the Air Force (Acquisition) Comments. The Assistant Secretary concurred and stated that policies and procedures are already in place to require the AFCEE to implement the recommendation, and that all invoices for work at the MMR had been reviewed and approved except DO 25. Based on a preliminary review of contractor charges, the contracting officer requested the Defense Contract Audit Agency to audit contractor charges for DO 25. The Air Force stated that findings from the ongoing audit have, thus far, resulted in more than $600,000 in questioned costs. The Assistant Secretary stated that hundreds of comments from the COR and contracting officer's representative remain unresolved, but are being negotiated with the contractor. The AFCEE invoicing process requires that all issues be resolved before invoices are signed and approved.

Evaluation Response. Comments from the Assistant Secretary partially meet the intent of our recommendations. Although procedures may be in place, the contracting officer had not reviewed or approved contractor invoices for DO 25 in 8 months. The invoices totaled $37.7 million. The Defense Contract Audit Agency should be used to supplement the contracting officer review of questionable contractor charges and not as a substitute for a timely contracting officer review of contractor invoices. The AFCEE should place additional emphasis on existing procedures to ensure that the contracting officer reviews contractor invoices in timely manner, and to ensure prompt resolution of any questioned or unallowable contractor costs.

d. Require AFCEE to review environmental contract administration as a part of its self evaluation.

Assistant Secretary of the Air Force (Acquisition) Comments. The Assistant Secretary did not provide a specific response to this recommendation, but addressed it in the comments on Recommendation 4. The Assistant Secretary concurred with the recommendation and agreed to establish an assessable unit for environmental contract administration and perform periodic self assessments of this function.

3. We recommend that the Commander, Human Systems Center coordinate with the Air Force Center for Environmental Excellence to establish a management control plan that includes target dates for reviews and assessments of environmental contract administration.

Assistant Secretary of the Air Force (Acquisition) Comments. The Assistant Secretary concurred and agreed to take corrective action. The Assistant Secretary stated that the Human Systems Center Handbook, published in October 1997, documents management control procedures and oversight activities that are applicable to the various contracting divisions of the Human Systems Center. Also, self-assessments are performed to help improve
processes and identify additional training needs. The Assistant Secretary stated that in November 1997, a team of contract specialists from the Human Systems Center conducted a post award review of FY 1997 contracting actions at AFCEE and presented the significant findings in three training seminars.

4. We recommend that the Director, Air Force Center for Environmental Excellence include environmental contracting in an assessable unit in the Center’s Management Control Plan and conduct periodic self assessments to help ensure that effective controls are in place for environmental contract administration.

Assistant Secretary of the Air Force (Acquisition) Comments. The Assistant Secretary concurred and agreed to establish an assessable unit for environmental contracting.
Appendix A. Evaluation Process

Scope

Work Performed. We reviewed all 11 open delivery orders on 6 contracts issued by the AFCEE for work at MMR. As of June 2, 1997, the delivery orders were valued at $87.2 million. We also reviewed the $131 million undefinitized letter contract for follow-on work at MMR. In addition, we judgmentally selected seven delivery orders on four open contracts issued by the National Guard Bureau and the U.S. Property and Fiscal Office.

Limitations to Evaluation Scope. We did not evaluate the cost-effectiveness of acquiring IRP services through DoE. Numerous Inspector General, DoD; Air Force Audit Agency; and Army Audit Agency reports have identified systemic problems with contracting for services through DoE. Management responsibility for the MMR IRP was transferred to AFCEE in May 1996; therefore, our evaluation of the cost-effectiveness of contracting for IRP services was performed at AFCEE. See Appendix B for a summary of prior coverage.

We performed a limited review of information provided by the Office of the Inspector General, DoE, to determine whether the expected benefits of an evaluation at HAZWRAP would justify the estimated costs. The information we reviewed included:

- HAZWRAP funding history,
- MMR funding utilization,
- MMR subcontract summary,
- summary of outstanding final deliverables, and
- costs by project category.

Also, the Office of the Inspector General, DoE, was performing an internal cost verification review of contract charges from HAZWRAP.

DoD-wide Corporate Level Government Performance and Results Act (GPRA) Goals. In response to the GPRA, the Department of Defense has established 6 DoD-wide corporate level performance objectives and 14 goals for meeting these objectives. This report pertains to the achievement of the following objective and goal:

Objective: Fundamentally reengineer the Department and achieve a 21st century infrastructure. Goal: Reduce costs while maintaining required military capabilities across all DoD mission areas. (DoD-6)
Appendix A. Evaluation Process

DoD Functional Area Reform Goals. Most major DoD functional areas have also established performance improvement reform objectives and goals. This report pertains to the following functional area objective and goal:

Environment Functional Area. Objective: Reduce, in a cost effective-manner, risks to human health and the environment attributable to contamination resulting from past DoD activities. Goal: Comply with statutes, regulations, Executive Orders, and other legal requirements governing cleanup of contamination. (ENV-1.3)

General Accounting Office High Risk Area. The General Accounting Office (GAO) has identified several high risk areas in the DoD. This report provides coverage of the Defense Contract Management area.

Methodology

Use of Computer-Processed Data. We did not use computer-processed data in performing this evaluation.

Universe and Sample. We interviewed contracting personnel and environmental managers and reviewed the contracting instruments that were used to obtain IRP services. We reviewed:

- IRP decision documentation,
- IRP funding documents,
- contracts,
- justification and approval documentation,
- statements of work,
- contract status reports, and
- contractor invoices.

Evaluation Type, Dates and Standards. We performed this economy and efficiency evaluation from May through December 1997, in accordance with evaluation standards implemented by the Inspector General, DoD. The evaluation included tests of management controls considered necessary.

Contacts During the Evaluation. We visited or contacted individuals and organizations within DoD. Further details are available on request.
Appendix A. Evaluation Process

Management Control Program

DoD Directive 5010.38, "Management Control Program," August 26, 1996, requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of Review of the Management Control Program. We reviewed the adequacy of management controls over the procurement and oversight of AFCEE environmental contracts at MMR.

Adequacy of Management Controls. We identified material management control weaknesses as defined by DoD Directive 5010.38. The AFCEE management control program did not include an assessable unit for environmental contract management. The Human Systems Center had established environmental contracting as an assessable unit, but did not develop a plan for periodic evaluations of management controls. Recommendations 2.d. and 3., if implemented, will improve environmental contract management procedures. A copy of the report will be sent to the senior Air Force officials in charge of management controls.

Adequacy of Management's Self-Evaluation. As indicated in this report, AFCEE had not identified functions of the environmental contracting office as an assessable unit. The Human Systems Center identified environmental contract management as an assessable unit but did not prepare a management control plan to schedule self-evaluations of environmental contract administration. Therefore, neither AFCEE nor the Human Systems Center identified or reported the material management control weaknesses identified by our audit.
Appendix B. Summary of Prior Coverage

Inspector General, DoD

Inspector General, DoD, Report No. 97-204, "Undefinitized Contract Actions," August 15, 1997. The report states that although compliance with the statutory provisions on UCAs has improved, there is still widespread noncompliance, despite much attention from Congress, the Office of the Secretary of Defense, and the Military Departments during the last 8 years. For the 189 letter contracts reviewed during the audit, valued at $10.7 billion, contracting officials did not:

- adequately justify issuance of 65 letter contracts, valued at $3.9 billion;
- definitize 90 letter contracts, valued at $6.8 billion, within the required 180-day time frame (29 percent were not definitized within 1 year); and
- document the reasonableness of negotiated profits of $26.8 million that were not commensurate with contractor risk.

As a result, the Military Departments assumed increased cost risk in the reward and negotiation process, and negotiated profits of $26.8 million that were not commensurate with contractor risk.

Additionally, the report states that the Defense Contract Action Data System identifies letter contracts, but does not identify other categories of undefinitized contract actions. As a result, DoD does not have an effective system to track the award and definitization of all undefinitized contract actions.

The report recommended that the Service Acquisition Executives issue guidance to their contracting organizations requiring:

- justification documents for all letter contracts to provide specific details on the procurement requirement, the procurement planning performed, and the adverse effect if the procurement is delayed;
- contracting officers to meet milestone dates established for the issuance of letter contracts; and
- each contracting organization to establish performance goals for definitizing undefinitized contract actions and compliance with other statutory and regulatory requirements for undefinitized contract actions and to report annually their performance in meeting goals.
Appendix B. Summary of Prior Coverage

The report recommended that the Director of Defense Procurement implement a design change to the Defense Contract Action Data System to collect information on all categories of undefinitized contract actions and request the contracting organizations to periodically verify the status of undefinitized letter contracts in the Defense Contract Action Data System.

The Army and Air Force agreed with the recommendations. The Navy did not comment. The Director of Defense Procurement nonconurred with the recommendation to implement a design change to the Defense Contract Action Data System, and partially concurred with the recommendation to request contracting organizations to periodically verify the status of undefinitized letter contracts in the Defense Contract Action Data System.

Inspector General, DoD, Report No. 98-076, “Funds Used for the Arctic Environmental Cooperation Program,” February 17, 1998. The report states that the Inspector General, DoD, could not verify that Environmental Security Technology Certification Program funds provided for the Arctic Military Environmental Cooperation Program were used for their intended purpose. The funds were not used in the most efficient manner, and contracting functions were not always properly performed. As a result, the Government has no assurance it will receive expected products and services for the $1.2 million provided to support the Arctic Military Environmental Cooperation Program, and the plan to direct a contractor to subcontract with a specific subcontractor may have been improper direction if it had been implemented.

The report recommended that:

- the Principal Assistant Deputy Under Secretary of Defense (Environmental Security) develop and implement procedures for ensuring that all transfers of funds to other organizations include sufficient guidance for the fund recipients to properly use the funds and to obtain the desired products and services,
- the Principal Assistant Deputy Under Secretary of Defense (Environmental Security) eliminate the plan to direct the AFCEE to direct a contractor to subcontract with a Navy contractor,
- AFCEE develop and implement controls to document contractor taskings, correspondence, and statements of work in order to increase the Government’s ability to obtain desired funds for services, and
- Navy Research Laboratory develop and implement procedures to prevent acceptance of a fund transfer if the funds to be transferred cannot be used before the funds expire.

Air Force Audit Agency

Project No. 920640011 “Contracting for Installation Restoration Program Requirements,” March 3, 1993. The report states that the Air Force installation and major command environmental offices did not evaluate the cost-
Appendix B. Summary of Prior Audits and Other Reviews

effectiveness of other acquisition alternatives for IRP projects before using service agencies and DoD service centers; prepare independent cost estimates or complete detailed cost analysis for the service agency projects reviewed; perform surveillance for the 42 service agency-contracted IRP projects and 11 AFCEE-managed projects reviewed; or obtain sufficient data to monitor project costs. As a result, the Air Force paid administrative fees to the service agencies and centers that may have been avoided. The Air Force did not determine whether cost increases were valid or ensure that total IRP costs were commensurate with the amount of work performed. It did not have assurance that projects were progressing in a timely manner, or substantiate that the work completed was commensurate with the funds paid to contractors through service agencies. Finally it could not determine whether the project costs were reasonable and did not use the reports as historical data to estimate costs on future projects. The report recommended improvements to acquisition and oversight of IRP services obtained through service agencies and DoD service centers. Management concurred with the findings and recommendations.
## Appendix C. AFCEE Contracts and Delivery Orders for Massachusetts Military Reservation

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<tr>
<th>Contract/Delivery Order Number</th>
<th>Contractor</th>
<th>Contract Type</th>
<th>Amount</th>
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**Total** $218,238,872

<sup>1</sup> Contract and delivery order amounts are as of June 2, 1997.

<sup>2</sup> Time-and-materials.

<sup>3</sup> Firm-fixed-price.

<sup>4</sup> Cost-plus-award-fee.
Appendix D. Summary of Undefinitized Contract Actions

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<sup>1</sup>Defin. = Definitization.  
<sup>2</sup>FFP = Firm-fixed-price.  
<sup>3</sup>Mod = Modification  
<sup>4</sup>CPAF = Cost-plus-fixed-fee.
Appendix E. Summary of Delivery Orders Awarded Using Unilateral Ordering Procedures

<table>
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<tr>
<th>Contract Number</th>
<th>Delivery Order Number</th>
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<td>F41624-</td>
<td>0031-Basic</td>
<td>04/22/96</td>
<td>$74,388</td>
<td>Plume containment management plan, Chemical Spill 19</td>
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<tr>
<td></td>
<td>0031-Mod 1</td>
<td>05/01/96</td>
<td>151,360</td>
<td>Partnering facilitation, miscellaneous analyses</td>
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<tr>
<td></td>
<td>0031-Mod 2</td>
<td>06/07/96</td>
<td>198,264</td>
<td>Feasibility study, Record of Decision (Fuel Spills 9 and 19)</td>
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<tr>
<td></td>
<td>0031-Mod 3</td>
<td>08/20/96</td>
<td>500,000</td>
<td>Install monitoring wells, sampling analysis, site characterization</td>
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<tr>
<td></td>
<td>0031-Mod 5</td>
<td>05/22/97</td>
<td>539,716</td>
<td>Residential sampling and analysis, Mashpee and Falmouth, MA</td>
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<td>0031-Mod 6</td>
<td>03/06/97</td>
<td>2,135,063</td>
<td>Install monitoring wells-Ashumet and Johns Pond, MA</td>
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<td>0031-Mod 7</td>
<td>03/26/97</td>
<td>269,935</td>
<td>Monitoring wells for Deep Pond, sample 185 residential wells, and provide bottled water</td>
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<td></td>
<td>0031-Mod 8</td>
<td>03/29/97</td>
<td>48,672</td>
<td>Ground control, aerial surveys, update maps and other documents</td>
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<td>Total for DO 31</td>
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<td>$3,917,398</td>
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<td>0036-Basic</td>
<td>02/27/97</td>
<td>$188,584</td>
<td>Groundwater monitoring</td>
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<td>Total for DO 36</td>
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<td>94-D-8053</td>
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<td>03/29/96</td>
<td>$149,944</td>
<td>Community relations support</td>
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<td>0034-Mod 1</td>
<td>08/08/96</td>
<td>99,747</td>
<td>Add title II oversight</td>
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<td>0034-Mod 2</td>
<td>09/19/96</td>
<td>14,949</td>
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<td>649,954</td>
<td>Meeting facilitation, administrative record</td>
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<td>0034-Mod 4</td>
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<td>1,143,717</td>
<td>Scope increase, review of submittals</td>
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<td>94-D-8138</td>
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<td>0040-Mod 1</td>
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<td>16,350</td>
<td>Additional work increased ceiling price</td>
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<td>$6,499,371</td>
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Appendix F. Report Distribution

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   Director, Defense Procurement
Under Secretary of Defense (Comptroller)
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- Senate Committee on Armed Services
- Senate Committee on Governmental Affairs
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- House Subcommittee on National Security, Committee on Appropriations
- House Committee on Government Reform and Oversight
- House Subcommittee on Government Management, Information, and Technology,
  Committee on Government Reform and Oversight
- House Subcommittee on National Security, Internal Affairs, and Criminal Justice,
  Committee on Government Reform and Oversight
- House Committee on National Security
Part III - Management Comments
MEMORANDUM FOR DOD/IG (Director, Contract Management Directorate)

FROM: SAF/AQCO
1060 Air Force Pentagon
Washington DC  20330-1060


As requested on 27 January 1998, I hereby transmit to you the official Air Force management comments on your project 7CB-5028. Should you have any questions about this official response, please contact my action officer, Major Brian Magazu, at (703) 588-7032.

BRADLEY ORTON, Colonel, USAF
Chief, Operational Contracting Division
Deputy Assistant Secretary (Contracting)
Assistant Secretary (Acquisition)

Attachment:
SAF/AQ Management Comments dated 7 Apr 98
DoD/IG Draft Audit
Project 7CB-5028, Evaluation of Contracting Practices for the Installation Restoration Program at Massachusetts Military Reservation

RECOMMENDATION a.: Recommend the Director, Air Force Center for Environmental Excellence (AFCEE) discontinue use of undefinitized contract actions, except those requirements that meet the criteria defined in the Federal Acquisition Regulation and DoD Federal Regulation Supplement.

Concur. Undefinitized Contract Actions (UCAs) should only be used in those situations that meet all regulatory criteria. The urgency for issuance of UCAs was supported in all cases for the MMR requirements. The primary issue supporting the urgency of these actions was the untimely transfer of the program from the Air National Guard (ANG) to the Air Force Center for Environmental Excellence (AFCEE) which made it extremely difficult to meet the mission requirements driven by the regulatory agencies and community sensitivities. The AFCEE was notified on 17 April 96 of the program management transfer without sufficient lead-time to plan for the execution of these requirements using normal acquisition procedures. An AFCEE requirement assessment team was sent to MMR on 22 April 96. The Federal Facilities Agreement (FFA) included enforceable milestones with fines and penalties assessed against the installation if the milestone dates were not met. UCAs were issued at the onset of the program on 28 May 96 and 3 June 96 after the Air Force could identify and define specific program requirements. The UCAs were essential in order to avoid fines and penalties that were not relaxed despite the untimely transfer of the responsibility to AFCEE.

In the autumn of 1996 and the spring of 1997, public health issues arose in the towns of Mashpee and Falmouth. The use of UCAs for these acquisitions was predicated on CERCLA 42 USC 9601(23) and 40 CFR Part 300 that authorizes alternative water supplies "when necessary for immediately reducing exposure to contaminated household water."

No UCAs have been issued for the MMR program since 24 April 97. All AFCEE UCAs for the MMR program were definitized well within the DFARs requirement of 180 days. In all cases where a cost reimbursement arrangement was used, an award fee plan established incentives for technical, management and cost control. The award fee pool was reduced on delivery orders with costs incurred similar to the requirements in DFARs 215.971-3(d)(2) whereby the Weighted Guidelines method reduces profit/fee on other than award fee contracts. Of the 83 contract actions required to support the MMR program, AFCEE has used UCAs on only 6 of those actions (including the letter contract).

AFMC/PK has reviewed the UCAs and also finds little reason to question HSC/PK's contracting strategy.
Each of the UCAs discussed in the report and the issues surrounding them are briefly described below:

(1) UCA F41624-94-D-8115-0025: On 22 May 96 at a Senior Management Board (public) meeting, a commitment was made to the community at large by a senior SAF representative, to install a wellhead treatment system on a town well with system start up by the 4th of July. Issuance of the UCA was approved 24 May 96 and award was made 28 May 96. The definitization of this UCA was completed on 15 Aug 96 (79 days) simultaneously with the definitization of F41624-94-D-8115-002501.

(2) UCA F41624-94-D-8115-002501: Requirement identification began when the AFCEE assessment team and Jacobs team (under contract no. F41624-94-D-8046-0031) arrived at the MMR on 22 April 96 immediately after the program transfer from the ANG to AFCEE. Requirements included development and implementation of a comprehensive plan for the simultaneous containment of seven existing groundwater plumes (commonly called plume response) emanating from the MMR. From 8 to 23 May 96, the team worked to further refine the plume response requirements. The timing of the receipt of a detailed set of plume response requirements could not be predicted at the time the wellhead treatment requirement was identified. This situation, coupled with the extremely aggressive schedule for installation of the well head treatment system identified on 22 May 96 determined the need to separate the well head treatment requirement from the plume response requirement. All parties in coordination on the basic delivery order UCA were aware of this additional requirement, but the consensus was to have each UCA standalone. Additionally, request for UCA approval for this modification did address the basic DO award in its request for issuance from the approval authority, HSC/CC.

Efforts to avoid issuance of the UCA on plume response was made impossible by the untimely transfer of the program to AFCEE and FFA schedules/milestones already established with regulators. Issuance of this UCA was approved 3 Jun 96 and award was made on 7 Jun 96. The definitization was completed on 15 Aug 96 (68 days) simultaneously with the basic Delivery Order UCA definitization.

(3) UCA F41624-94-D-8115-002506: A Request For Proposal was issued 29 Oct 96 for the FY97 plume response requirements; however, the proposal received far exceeded the available budget. Original assumptions regarding the project estimate were based on previous ANG site data and reports on the extent of contamination. These were used to formulate the original FY97 budget. By Dec 96, further Remedial Investigations (RIs) by AFCEE determined that original performance requirements were based on significantly outdated information resulting in severely underestimated FY97 cost estimates. The material aspects of these changes were of such a magnitude that it was determined by the CO to accomplish a restructure and rebaselining of the FY96 projects under F41624-94-D-8115-002506. These changes depleted most of the available FY97 funds leaving limited funds for work intended to be performed on the new contract. No budget could have been accurately established for these unknown circumstances. As a
result of substantial changes in original assumptions, restructuring of the plume response requirements was also needed. From early Jan until mid-Mar 97, the AFCEE team worked with Jacobs and federal and state regulators to revalidate the requirements and scope them within the available FY97 budget while complying with the regulatory deadlines. Revised requirements within available FY97 budgets were validated 11 Mar 97. Since the requirements were not validated until this time, no other contracting options were available except to issue a UCA to continue the program without work stoppages. Work stoppages would result in cost and schedule impacts, including fines and penalties, upon the MMR. Mission requirements could not have been met without the use of UCA procedures. Additionally, it would have cost "... a minimum $1M for demobilization and remobilization" as stated in the UCA request if normal contracting procedures were followed. Issuance of the UCA was approved on 14 April 97 and award was made on 24 April 97. The definitization was completed on 30 Jun 97 (67 days).

(4) F41624-94-D-8115-0041 and 0042, F41624-94-D-8034-0012: Private well contamination required residential water connections to a public water supply in the towns of Mashpee and Falmouth. This was a serious public health concern related to the ingestion (drinking) and inhalation (showering) of contaminated water that necessitated immediate action. Delivery order 0012 called for residential biweekly sampling of wells and provided bottled water to residents.

(5) F41624-97-D-8006: Letter contract to Jacobs is discussed under recommendation 2.c. below.

In summary, these UCAs were all driven by a "no notice" transfer of a huge Installation Restoration Program (IRP) to AFCEE. HSC relied, perhaps mistakenly, that budget estimates inherited from the prior agency accurately depicted the funds needed for MMR actions, and regulator and community interest that did not wane when program responsibility was shifted to AFCEE. Therefore, we concur with this recommendation since all the UCAs for the MMR program were issued using proper FAR and DFARs procedures and criteria.

RECOMMENDATION 2.a.: Recommend the Director, AFCEE discontinue the use of the unilateral ordering procedure (UOP) for time-and-materials (T&M) contracts.

Concur with reservations: After reviewing this strategy, AFMC/PK found that HSC/PK complied with current policy and procedure. However, the MAJCOM questions the soundness of these UOP procedures from a business perspective.

There are elements of risk associated with any T&M contract action. The use of UOPs versus negotiating with the contractor under a T&M pricing arrangement does not increase this risk. The UOP is a locally developed contracting tool available as an alternative to negotiating procedures. Circumstances at the time the requirement is ready for delivery order issuance dictate appropriate use of this unique tool. Specifically, the application is limited to requirements that the government can independently determine...
the estimated level of effort based on other similar efforts and no real value would be realized by the additional time taken for traditional negotiations with the contractor. The procedure interprets the vision of the Federal Acquisition Regulations' (FAR) guiding principles "to deliver on a timely basis the best value product or service to the customer..." (FAR 1.102)." It is responsive to the customers' needs by expediting the issuance of delivery orders with the benefit of more effective use of time by focusing on the more critical post award contract surveillance under T&M contracts. The independent government estimate (IGE) received from the AFCEE technical representative includes as much cost and pricing detail as is required from the contractor when requesting a proposal. The DoD IG report is critical of delivery order 0031 because it was issued using unilateral ordering procedures that assumed "too much government risk." The modifications to delivery order 0031 became necessary as the program progressed for additional effort, i.e. new work. The CO determined that segregating that effort into a new delivery order was not advisable to ensure effective administration of all "study type" actions under the MMR program and avoid proposal preparation charges and duplication of monthly status and cost reporting. The T&M determination is in each file to support the use of the T&M pricing arrangement in accordance with FAR 16.601. Additionally, a CO determination and findings is filed with each modification to support use of UOP for new work under the authority of FAR 52.216-18 "Ordering."

AFCEE and HSC/PKV followed all currently existing policies and procedures and used the unilateral ordering procedures properly on T&M contracts. Our files fully document and support the use of this unique tool. In the event AFMC/PK or HSC/PK modify applicable policies and procedures, AFCEE and HSC/PKV will fully comply with those changes.

Based on the IG findings and AFMC/PK recommendations, HSC/PK will rescind UOP and investigate alternative procedure that is responsive to mission needs and consistent with sound business processes.

**RECOMMENDATION 2.c.:** Recommend the Director, AFCEE terminate or request reapproval of the undefinitized letter contract awarded to Jacobs Engineering Group for $131 million.

Concur with IG Finding but nonconcur with their recommendation. The contract is being substantially used at this time and will continue to receive substantial use in the future.

The request for contractual coverage began on 13 September 96 with the drafting of a Justification and Approval (J&A) in accordance with FAR 6.302-2, "unusual and compelling urgency," for an increase of $75M to the ceiling of two existing nationwide IDIQ contracts for environmental remediation. The need for a letter contract was not part of this original request. Nine J&A versions and five months later, after numerous changes by several organizations in the approval chain, SAF/AQ approved the issuance of a letter contract under the authority of FAR 6.302-1, "only one responsible source." Version 9, the final revisions from AF/ILE, included the authority of FAR 6.302-1 as a
stand alone letter contract for $131.1M but changed the rationale for letter contract from "required" to "necessary." The reference to "letter contract" inadvertently remained in the final version of the J&A approved by SAF/AQ on 7 Feb 97. By the time the J&A was approved, the CO intended, based on current circumstances, to issue a definitive contract for the reasons detailed in the following paragraph. The CO was later advised, based on the language of the approved J&A, the initial award must be a letter contract. The letter contract was awarded on 9 May 97. While AFCEE could have amended the J&A to omit the reference to the 'use of a letter contract,' we do not foresee the present benefit in changing a J&A associated with a definitized contract.

Simultaneous with the J&A processing, in Oct 96, the FY97 plume response requirements were being scoped with the intention of using the contracting vehicle addressed in the J&A. Background: the environmental threats at the MMR are based on one large plume of subsoil contaminants, generated and dumped into the soil many years ago, but threatening the future of local ground water and the immense expanses of wetlands in the region. Original assumptions regarding the remediation project estimate were based on previous ANG site data and reports on the extent of contamination. By Dec 96, further Remedial Investigations (RIs) by AFCEE determined that original performance requirements and cost estimates would require substantial revisions. The material aspects of these changes were of such a magnitude that it was determined to accomplish a restructure and rebaselining of the FY96 projects under F41624-94-D-8115-002506. These changes depleted most of the available FY97 funds leaving limited funds for work intended to be performed on the new contract. A revalidation of the requirements to be performed under the new contract was set forth in a Memo for Record (MFR) dated 29 Aug 97, coordinated with AFCEE/ER and HSC/PK. This MFR revalidated the need for the requirements of the basic contract and confirmed the conditions described in the J&A were still in effect.

The genesis of this letter contract to Jacobs Engineering, as outlined above, was certainly complicated but its positive outcomes have potentially saved the MMR program. At the time of this letter contract AFCEE did not have any world-wide remediation action contract with sufficient capacity that could handle the scope of problems at MMR. Jacobs Engineering on the other hand, offered a full range of capabilities in plume capture planning, plume containment, well drilling and unique plume modeling. Each one of these critical competencies was brought to bear and ended the 'study' phase and began actual clean-up.

Since the award of the Jacobs Engineering sole source contract, AFCEE has built an arsenal of Remediation Action (RA) prime contracts that would be suitable to accomplish severable work need to complete this project. However, before any decision could be undertaken to terminate this contract we must consider: the need for continuity in the performance of the nonseverable work required by the Jacobs Engineering contract and the current aggressive Federal Facilities Act RA schedule. Program Managers monitoring this project from all agencies and levels of government insist--AFCEE must continue an
aggressive remediation program while apportioning severable work to other prime RA contractors.

Although we cannot precisely calculate the potential cost associated with termination of the Jacobs Contract, it is AFCEE's estimate that termination costs, fines, and penalties could be upwards of $15M. However, the damage to the credibility of the USAF in its dealings with the people of Massachusetts, state and federal regulators, and government officials are incalculable. Therefore, it would not be in the best interest of the USAF or the MMR remediation effort to terminate the Jacobs Engineering Contract. AFCEE's immediate plans with regard to this contract are as follows: In FY98, they estimate the award of actions valued approximately at $47 million. Currently, 11 actions have been awarded valued at $27.1 million. To ensure the continued proper use of this contract, AFCEE will issue a policy letter to MMR contracting officers reminding them that based on the J&A, all future nonseverable work should continue to be allocated to Jacobs Engineering. Work determined not to comply with the terms of the J&A will be acquired through the competitively awarded AFCEE remediation contracts now in place.

We also disagree with the recommendation to modify the Jacobs Engineering J&A that was approved last year by SAF/AQ. We agree the contracting activity should have amended the J&A to omit the reference to use a letter contract but, we do not foresee the benefit in changing it now. The J&A went through a rigorous review before it was approved and the exception from competition authority was changed from 'unusual and compelling' to 'only one responsible source.' The justification focuses on the need to establish a long term relationship with a sole source contractor to ensure the continuity of nonseverable cleanup operations. This justification is still valid today and continues to be the basis for work done under this contract. Therefore, it would not be appropriate to terminate the fully definitized Jacobs Engineering contract since it is being substantially used to support the immense, politically charged environmental clean-up operation at the MMR.

Again, we believe AFCEE complied with all appropriate regulatory and policy guidance in the issuance of this contract. However, we do not agree to recommendation to termination the contract or revalidate its' J&A. Neither of these actions are necessary nor are they in the best interest of the MMR program. This recommendation is considered closed.

RECOMMENDATION 2.4: Recommend that the Director, AFCEE require that the contracting officer validate contractor charges and certify invoices for payment within 30 days of receipt. Initiate actions to resolve all charges questioned by the contracting officer representative and the support contractors within 30 days of receipt. Initiate actions to recover all costs determined unallowable.

Concur. Policies and procedures are currently in effect within AFCEE to implement this recommendation. The contracting officer delegates review and approval of invoices to
the contracting officer representative (COR) in accordance with DFARs 201.602-2. All invoices are reviewed and approved within 30 days in accordance with AFCEE policy. The only MMR invoices currently unresolved are from F41624-94-D-8115-0025. These invoices are submitted as public vouchers. Under this delivery order, all vouchers were reviewed and approved through Nov 96 when the COR was reassigned. In Dec 96, a new COR was hired at MMR. The new COR’s review determined a need for more detailed cost backup in order to determine reasonableness of the charges. Based on this input, the CO requested backup for all vouchers as later set forth in modification 06 of the delivery order. After receipt of the detailed backup and COR/CO review, numerous deficiencies were identified. The deficiencies were categorized and on 14 April 97 the CO requested DCAA perform a cost incurred audit of F41624-94-D-8115-0025 to determine if there were any unallowable costs. The DCAA audit is still ongoing with a focus on travel, relocation, labor, and overtime premiums. Due to the extended time it has taken to resolve the audit issues, the CO has requested and received interim findings for labor, travel and relocation. These findings identified questioned amounts totaling in excess of $600,000. Closure on all audit issues are to be submitted to the CO no later than 31 Mar 98. Notwithstanding the open audit issues, the COR continued to review vouchers submitted by Jacobs and has reviewed all vouchers through the most recent billing cycle. Hundreds of comments (53 pages) from the COR/CO remain unresolved but are being negotiated with Jacobs. The AFCEE invoicing process requires the COR to sign the file copies of invoices after all issues are resolved or offset on a future invoice, including outstanding audit issues.

The CO has validated that this delegated function is being accomplished properly and will address all recommendations identified in this report.

**RECOMMENDATION 3:** Recommend that the Commander, Human Systems Center, Environmental Contracting Division [as agreed upon with the DoD IG] coordinate with the Air Force Center for Environmental Excellence to establish a management control plan that includes target dates for reviews and assessments of environmental contract administration.

Concur. Policies and procedures are currently in effect within the Human Systems Center Contracting Directorate. In October 97, the HSC Contracting Handbook was formally published which documents the management control procedures and oversight activities that are applicable to all Center Contracting divisions’ activities, under the FAR and its supplements. Each separate contracting division participates in periodic reviews of these control procedures and oversight to maintain currency and address continuous improvements. Periodic self-assessments within the various contracting divisions are done in a variety of ways consistent with the needs of each division and their customers. In all cases, the self-assessments help to identify the need for additional training and improve processes. Training and assistance are continuously assessed for each buying division and are provided in a variety of forums. Some these include special focus training, cross talk initiatives, early involvement sessions of contracting staff components.
with buying divisions personnel on all new acquisitions of $5 million or more and direct staff participation in buying division staff self-assessment activities.

In November 1997, a multidivisional team of contracting division specialists from within PK conducted a post award review of PKV contracting actions in FY97. The significant findings/trends have been presented in three training seminars. These post award reviews will be accomplished on a semiannual basis to help identify the need for additional training and opportunities for improved processes and procedures.

Corrective action will be taken to correct findings and address this recommendation.

RECOMMENDATION 4: Recommend that the Director, AFCEE include environmental contracting in an assessable unit in the Center's Management Control Plan and conduct periodic self-assessments to help ensure that effective controls are in place for environmental contract administration.

Concur. The establishment of HSC/PKV (environmental contracting) as an assessable unit with periodic self-assessments will be accomplished to address this recommendation.
Audit Team Members

This report was prepared by the Contract Management Directorate, Office of the Assistant Inspector General for Auditing, DoD.

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