

A *udit*



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**BULK FUEL INFRASTRUCTURE MILITARY
CONSTRUCTION PROJECT REVIEW PROCESS--PACIFIC**

Report No. D-2001-134

June 4, 2001

**Office of the Inspector General
Department of Defense**

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Acronyms

| | |
|--------|----------------------------------------|
| AFB | Air Force Base |
| DESC | Defense Energy Support Center |
| DFSP | Defense Fuel Supply Point |
| DLA | Defense Logistics Agency |
| JPO | Joint Petroleum Office |
| IPRB | Installation Planning and Review Board |
| MAJCOM | Major Command |
| MILCON | Military Construction |
| MR&E | Maintenance, Repair, and Environmental |
| PACAF | Pacific Air Forces |
| PACOM | U.S. Pacific Command |



INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-4704

June 4, 2001

MEMORANDUM FOR COMMANDER IN CHIEF, U.S. PACIFIC COMMAND

SUBJECT: Audit Report on Bulk Fuel Infrastructure Military Construction Project
Review Process: Pacific (Report No. D-2001-134)

We are providing this report for information and use. This report is one in a series about bulk fuel storage and delivery systems infrastructure requirements. We considered management comments on a draft of this report when preparing the final.

The U.S. Pacific Command comments conformed to the requirements of DoD Directive 7650.3; therefore, additional comments are not required.

Questions on the audit should be directed to Ms. Deborah L. Carros at (703) 604-9217 (DSN 664-9217) (dlcarros@dodig.osd.mil) or Mr. Wayne K. Million at (703) 604-9312 (DSN 664-9312) (wmillion@dodig.osd.mil). See Appendix C for the report distribution. The audit team members are listed inside the back cover.

A handwritten signature in cursive script that reads "David K. Steensma".

David K. Steensma
Acting Assistant Inspector General
for Auditing

Office of the Inspector General, DoD

Report No. D-2001-134
(Project No. D1999CG-0088.006)

June 4, 2001

Bulk Fuel Infrastructure Military Construction Project Review Process: Pacific

Executive Summary

Introduction. This report is one in a series that addresses the accuracy and reliability of maintenance, repair, and environmental and military construction (MILCON) requirements for bulk fuel storage and delivery systems infrastructure. The Defense Energy Support Center, Defense Logistics Agency, provides fuel to DoD customers and is responsible for budgeting and funding military construction and maintenance and repair projects, including environmental projects, at all DoD fuel terminals.

Objectives. Our overall objective was to evaluate the accuracy and reliability of DoD maintenance, repair, and environmental and MILCON requirements for bulk fuel storage and delivery systems infrastructure. Specifically, this audit evaluated maintenance, repair, and environmental and MILCON project requirements at Hickam Air Force Base, Hawaii; and Eielson; and Elmendorf Air Force Bases, Alaska. We also reviewed the adequacy of the management control program as it applied to the audit objective.

Results. Major command personnel approved requirements for 40 maintenance, repair, and environmental projects, valued at \$16.1 million, but could not demonstrate that the projects were properly validated in accordance with DoD guidance. Report No. D-2001-040, "Bulk Fuel Infrastructure Maintenance, Repair, and Environmental Project Review Process: Pacific," January 30, 2001, addressed that issue and recommended corrective actions. The implementation of those corrective actions will ensure proper validation of future maintenance, repair, and environmental project requirements.

Headquarters, Pacific Air Forces personnel approved and validated four bulk fuel-related MILCON projects at Hickam, Eielson, and Elmendorf Air Force Bases. However, requirements for a \$26 million bulk fuel storage MILCON project at Elmendorf Air Force Base were inaccurate and unnecessary. As a result, the Installation Planning and Review Board, Defense Energy Support Center, considered a \$26 million MILCON project that was not necessary to support operational requirements. In June 2000, the Elmendorf Air Force Base project was categorized as a high priority for the FY 2004 Defense Logistics Agency MILCON Program. Although the project was deferred, it was not cancelled. The Joint Petroleum Office, U.S. Pacific Command, must cancel the \$26 million unnecessary bulk fuel storage project so that the funds may be put to better use. In addition, the Joint Petroleum Office, U.S. Pacific Command, must take corrective action to improve the MILCON project requirements review and validation process to prevent misuse of future funds. For details of the audit results, see the Finding section of the report. The management controls that we reviewed were not effective in that a material management control weakness was identified. See Appendix A for details on the management control program.

Summary of Recommendations. We recommend that the Joint Petroleum Officer, U.S. Pacific Command, cancel the military construction project for bulk fuel storage at Elmendorf Air Force Base and establish procedures to validate future military construction project requirements in accordance with DoD guidance.

Management Comments. The U.S. Pacific Command concurred and stated that the bulk fuel storage project at Elmendorf Air Force Base was canceled April 6, 2001, and the USCINCPAC instruction will be updated to enhance the validation of future MILCON project requirements. A discussion of the management comments is in the Finding section of the report, and the complete text is in the Management Comments section.

Table of Contents

| | |
|----------------------------------------------------------------------------------------------|----|
| Executive Summary | i |
| Introduction | |
| Background | 1 |
| Objectives | 2 |
| Maintenance, Repair and Environmental Projects | 2 |
| Finding | |
| Validation of Bulk Fuel Storage Military Construction Requirements | 3 |
| Appendixes | |
| A. Audit Process | |
| Scope | 11 |
| Methodology | 11 |
| Management Control Program Review | 12 |
| Prior Coverage | 12 |
| B. Headquarters, Pacific Air Forces, Validated Bulk Fuel-Related MILCON Project Requirements | 14 |
| C. Report Distribution | 17 |
| Management Comments | |
| U.S. Pacific Command | 19 |

Background

This report is one in a series being issued by the Inspector General, DoD, addressing DoD maintenance, repair, environmental (MR&E), and military construction (MILCON) requirements for bulk fuel storage and delivery systems infrastructure (storage tanks, pipelines, dispensing facilities, hydrants, etc.). The Defense Energy Support Center (DESC), Defense Logistics Agency (DLA), is responsible for budgeting and funding MR&E and MILCON projects for DoD bulk fuel terminals worldwide.

In 1991, DoD Program Budget Decision 735 authorized the transfer of MILCON funding authority to DLA for fuel-related infrastructure on military installations. Actual transfer of the funding responsibilities, however, was managed in two phases. The period from 1993 through 1996 was characterized by very low fuel-related MILCON expenditures. During that period when the Services would have historically expended an average of \$66 million per year, DLA only averaged \$17 million. Low funding levels over an extended period precipitated infrastructure deterioration to the point where environmental issues became a concern. Additionally, the DoD changed from a forward-deployed force to one based largely in the continental United States. Therefore, an enhanced en route refueling infrastructure to support worldwide deployment of U.S. forces was needed to meet timeline requirements for a two major theatre war strategy. Consequently, there was a growing demand for MILCON and MR&E projects supporting infrastructure.

In 1997, the Office of the Deputy Under Secretary of Defense (Logistics) completed a study on DoD fuels MILCON funding. The study identified 114 MILCON projects totaling \$1.5 billion in fuel-related MILCON requirements to meet environmental, operational, and strategic planning objectives for the proposed Future Years Defense Program (FYs 1999 through 2003). During FY 1998 budget considerations, the transfer of MILCON authority to DLA created a funding issue because the Defense budget did not provide for increased funding for DLA. For FY 2000, DLA funded and approved \$101.2 million for five projects. For the FY 2001 President's Budget to Congress, DLA programmed 14 projects with an estimated cost of \$168 million.

DESC was responsible for DoD fuel inventory management, including procurement and sales, and environmental oversight. DLA funded fuel-related infrastructure requirements from two different funding sources. Maintenance and repair projects were funded through the Defense Working Capital Fund, which is a revolving fund that is continually replenished by a DLA surcharge added to the sale price of fuel. Renovation and major construction projects were funded from the DLA allocation of MILCON appropriations.

The Military Departments were responsible for operating bulk fuel facilities under their cognizance. The Military Departments were also responsible for reviewing, validating, and prioritizing MR&E and MILCON projects before submitting the projects to DESC for review and funding approval.

Objectives

Our overall objective was to evaluate the accuracy and reliability of DoD MR&E and MILCON requirements for bulk fuel storage and delivery systems infrastructure. Specifically, this audit evaluated MR&E and MILCON project requirements at Hickam Air Force Base (AFB), Hawaii; and Eielson and Elmendorf AFBs, Alaska. We also reviewed the adequacy of the management control program as it applied to the audit objective. See Appendix A for a discussion of the audit scope and methodology and the review of management control program.

Maintenance, Repair and Environmental Projects

Major command personnel approved requirements for 40 MR&E projects, valued at \$16.1 million, but could not demonstrate that the projects were properly validated in accordance with DoD guidance.

- Eight MR&E projects, valued at \$4.8 million, at Hickam AFB;
- Nineteen MR&E projects, valued at \$6.2 million, at Eielson AFB; and
- Thirteen MR&E projects, valued at \$5.1 million, at Elmendorf AFB.

Report No. D-2001-040, "Bulk Fuel Infrastructure Maintenance, Repair, and Environmental Project Review Process: Pacific," January 30, 2001, addressed the validation issue and recommended corrective actions. The implementation of those corrective actions will ensure proper validation of future MR&E project requirements.

Validation of Bulk Fuel Storage Military Construction Requirements

Headquarters, Pacific Air Forces (PACAF) personnel approved and validated requirements for four bulk fuel-related MILCON projects at Hickam, Eielson, and Elmendorf Air Force Bases, and project requirements were accurate and necessary. However, requirements for an additional \$26 million bulk fuel storage MILCON project at Elmendorf AFB were inaccurate and unnecessary. This condition occurred because Headquarters, PACAF, and the Joint Petroleum Office (JPO), U.S. Pacific Command (PACOM) personnel did not validate the project requirement in accordance with DoD guidance. As a result, the Installation Planning and Review Board, Defense Energy Support Center, considered a \$26 million MILCON project that was not necessary to support operational requirements. In June 2000, the Elmendorf Air Force Base project was categorized as a high priority for the FY 2004 Defense Logistics Agency MILCON Program. Although the project was deferred, it was not cancelled. Because the project was not necessary to support operational requirements, the \$26 million in MILCON funds should be put to better use.

Policy Guidance

DoD guidance prescribes policy for bulk fuel storage and delivery systems infrastructure, documents the processes, and assigns responsibilities for managing the infrastructure.

DoD Directive 4140.25, “DoD Management Policy for Energy Commodities and Related Services,” April 20, 1999. DoD Directive 4140.25 prescribes DoD policy for energy and related programs (for example, petroleum, natural gas, coal, and propellants). The directive states that the programs shall support DoD peacetime and wartime missions, and permit successful and efficient deployment and employment of forces. The directive also states that DoD Components shall minimize inventories consistent with peacetime and contingency needs.

DLA Responsibilities. The Director, DLA, plans, programs, and budgets facility maintenance and repair; environmental compliance of petroleum storage and distribution facilities; and construction of new permanent storage and distribution facilities. DLA must coordinate these functions with the Services and the combatant commanders.

Military Department Responsibilities. The DoD Directive 4140.25 states that the Military Departments are to operate petroleum facilities under their cognizance.

DoD 4140.25–M, “DoD Management of Bulk Petroleum Products, Natural Gas, and Coal,” June 1994. DoD 4140.25-M implements DoD Directive

4140.25, prescribes policy guidance, and assigns functional responsibilities for integrated materiel management of bulk petroleum products and associated bulk fuel storage facilities. The objective of integrated materiel management is to purchase, store, and distribute bulk petroleum products in an economic and efficient manner. DoD 4140.25-M states that the Combatant Command JPOs, and the Service control points are to review and validate MILCON and MR&E projects, as well as develop consolidated project priority lists. The JPOs are responsible for overseas projects. The JPOs and the Service control points forward projects for consideration and consolidate project priority lists to DESC. The DESC reviews, validates, programs, and budgets funds for approved projects. DoD 4140.25-M details the MILCON and MR&E project submission cycle for DESC.

Air Force Instruction 32-1021, “Planning and Programming of Facility Construction Projects,” May 12, 1994. Air Force Instruction 32-1021 provides guidance for developing facilities through the use of MILCON and minor construction. Air Force Instruction 32-1021 states that installation commanders will plan and program facilities to support their mission according to MAJCOM guidance, ensure existing facilities are used economically and efficiently, and submit MILCON projects to the MAJCOMs. The instruction also states that MAJCOMs will review and validate facility requirements and cost estimates.

MAJCOMs and installations must validate each MILCON project by taking the following actions:

- Verify the requirement that creates the need for the proposed project
- Confirm that the proposed project is the most cost-effective means of satisfying the requirement.
- Confirm that the DD Form 1391 data is accurate and complete.

U.S. Pacific Command

The PACOM JPO was responsible for reviewing, validating, and prioritizing all fuel-related MILCON projects for the U.S. Army Pacific, U.S. Pacific Fleet, U.S. Pacific Air Forces, and Marine Forces Pacific subordinate Service components.

Headquarters, PACAF, located at Hickam AFB is the air component of the U.S. Pacific Command. Headquarters, PACAF, is the MAJCOM for the 15th Air Base Wing at Hickam AFB, and for the 11th Air Force at Eielson, and Elmendorf AFBs. MAJCOM personnel were responsible for reviewing, validating, and prioritizing all fuel-related MILCON project requirements for PACAF installations and submitting the projects to the PACOM JPO. See Appendix B for a discussion of the validated MILCON projects.

MILCON Project Review Process

MAJCOM personnel stated that they reviewed, validated, and prioritized MILCON project requirements in accordance with DoD 4140.25-M. PACOM JPO personnel stated that they reviewed and prioritized MILCON projects with input from the subunified commands, but DESC was responsible for validation because DESC had MILCON funding responsibility.

MAJCOM Project Review. MAJCOM engineering and logistics personnel reviewed and validated all MILCON project requirements for PACAF installations. Engineering and logistics personnel were involved in the MILCON process from conception through design, construction, and maintenance. MAJCOM personnel stated that although there was no documented validation process, they had documentation to support proper validation of MILCON requirements. MAJCOM logistics personnel described the MILCON process as follows.

- MAJCOM personnel identified infrastructure needs based on daily fuel usage required by operational plans. The Air Mobility Command also identified infrastructure needs based on wartime requirements. MAJCOM personnel stated that installation personnel could initiate projects, but competition for available funds ensured that only the highest priorities received attention.
- MAJCOM personnel forwarded requirements to the installation for preparation of the DD Form 1391.
- MAJCOM personnel reviewed all supporting documentation and DD Form 1391s for accuracy, and validated project requirements. The projects were prioritized for the entire MAJCOM, and submitted to the PACOM JPO.

MAJCOM engineering personnel stated that requirement validation was an evolutionary process that included input from other organizations. The engineering personnel stated that they coordinated justification issues, technical requirements, cost estimate details, and other related information with DESC. MAJCOM engineering personnel stated they were aware of the physical condition of the infrastructure at PACAF installations. MAJCOM logistics personnel were also aware of the installations' operating conditions and mission requirements. MAJCOM engineering and logistics personnel also performed periodic infrastructure assessments at all PACAF installations. The MAJCOM logistics personnel stated that several MILCON projects were initiated because of the age and deterioration of fuel-related infrastructure in the Pacific, and strategic mobility mission requirements documented in Pacific theater operational plans.

PACOM JPO MILCON Project Review. The DoD 4140.25-M states that the Combatant Command JPO must review and validate fuel-related infrastructure MILCON requests, establish project priorities, and submit the requirements to DESC for review and prioritization at the DESC IPRB. PACOM JPO personnel stated that they did not validate MILCON project requirements, and that the

MAJCOMs and DESC were responsible for project validation. PACOM JPO personnel described the MILCON project review process as follows.

- MAJCOMs submitted prioritized projects to the PACOM JPO.
- PACOM JPO prepared and submitted a consolidated prioritization list to the subunified commands for review.
- Subunified commands returned the consolidated prioritization list with requested changes to the PACOM JPO.
- PACOM JPO submitted the consolidated prioritization list to DESC for validation and funding eligibility review.

PACOM JPO personnel stated that MAJCOM and DESC personnel communicated and coordinated requirements throughout the MILCON review process. Projects with specific mission requirements were coordinated with additional organizations, when applicable. For example, MILCON projects that supported strategic en route requirements were coordinated with the U.S. Transportation Command. The PACOM JPO personnel stated that communication and coordination were often verbal, and supporting documentation may not be available.

Elmendorf AFB Bulk Fuel Storage MILCON Project

Elmendorf AFB is located near Anchorage, Alaska. Elmendorf AFB is a PACAF installation supported by U.S. Pacific Command strategic airlift mission requirements. The base had a 685,000-barrel fuel inventory requirement. Fuel inventory was stored on Elmendorf AFB and at the Defense Fuel Supply Point (DFSP), Chevron, a bulk fuel tank farm located 5 miles from the base in Anchorage.

- Elmendorf AFB had 249,000 barrels of fuel stored in three 83,000-barrel bulk fuel tanks that were commissioned in FY 2000, as a result of an FY 1998 MILCON project.
- The Chevron facility stored 414,918 barrels of fuel through a lease agreement initiated in 1995 between Chevron and DLA.

The Elmendorf AFB fuel inventory requirement was unmet by approximately 21,000 barrels. DESC personnel stated that the unmet fuel requirement was insignificant to daily fuel-related operations, and that Chevron would meet the need, in the event of a contingency. Bulk fuel storage available on the base and at the Chevron facility was sufficient to meet the mission requirements for Elmendorf AFB.

Leased Bulk Fuel Storage. DESC leased bulk fuel storage for Elmendorf AFB from the Chevron facility in 1995. However, Elmendorf's fuel inventory was stored on the base and at DFSPs in the cities of Whittier, and Anchorage, Alaska, until 1995 when DFSP Whittier closed. When the Whittier facility closed, DESC submitted a \$22 million MILCON bulk fuel storage project to address the storage requirement created by the DFSP Whittier closing. The DESC also performed an economic analysis to determine whether other fuel storage options were available and more cost-effective. The DESC economic analysis determined that leasing fuel storage from the Chevron tank farm at Anchorage was the best solution to meeting the fuel storage requirement. DESC subsequently canceled the MILCON project. In 1996, DFSP Anchorage closed, and DESC modified the existing Chevron lease to include the fuel storage requirement created by the DFSP Anchorage closing.

Inaccurate Project Requirements. PACOM JPO personnel instructed installation and MAJCOM engineering personnel to initiate a MILCON project requirement for bulk fuel storage at Elmendorf AFB in FY 1997. The engineers at Elmendorf AFB and the MAJCOM acknowledged that fuel storage requirements were already being met with the leased storage at the Chevron facility. PACOM JPO personnel submitted a DD Form 1391 for a \$32 million bulk fuel storage MILCON project at Elmendorf AFB in FY 1997. The project cost estimate decreased to \$26 million in FY 1999. The DD Form 1391 documented a requirement for an additional 436,000 barrels of bulk fuel storage capacity in four 109,000-barrel aboveground JP-8 fuel storage tanks. The DD Form 1391 stated that the project was necessary to support strategic en route mission requirements. Project documentation also indicated that an Exception to Requirement for Economic Analysis was prepared. The Exception to Requirement for Economic Analysis indicated that, ". . . an economic analysis is not required for this project because no other alternative solution exists to meet the requirement to store enough fuel to sustain a surge operation until supply tankers can arrive." It also stated that "Elmendorf is already leasing all available commercial fuel storage. These leased facilities will be retained, in addition to the proposed project, to meet the requirement."

Project Requirements Were Not Validated. MAJCOM engineering and logistics personnel did not validate the bulk fuel storage MILCON project requirement at Elmendorf AFB. MAJCOM personnel assisted installation personnel with the DD Form 1391 for the bulk fuel storage project in accordance with verbal instructions from the PACOM JPO. Installation and MAJCOM personnel acknowledged that fuel storage space provided by the base and the Chevron facility met operational requirements. Therefore, the bulk fuel storage MILCON project requirement was unnecessary.

The DD Form 1391 documented a requirement for 436,000 barrels of bulk fuel storage capacity but did not indicate that approximately 415,000 barrels of the fuel storage requirement was met through an existing lease agreement with Chevron. The MILCON project did not go through normal validation and approval procedures at the MAJCOM, and the PACOM JPO did not validate the requirement before submitting the project to DESC. In addition, U.S. Transportation Command JPO personnel stated they did not support the project because the fuel storage requirement was met through the Chevron lease.

Installation and MAJCOM personnel stated that the project requirement was developed by PACOM JPO personnel. MAJCOM engineering personnel stated that they developed the DD Form 1391 and necessary Program Objectives Memorandum checklist documentation in accordance with instructions from the PACOM JPO.

DESC Installation and Planning Review Board

DESC coordinated planning, programming, and budgeting functions with the Services, Combatant Commanders, and Joint Staff through the DESC IPRB. The IPRB met annually to prioritize DoD worldwide fuel-related MILCON projects. The IPRB considered the following factors in their decision: environmental compliance, mission criticality and type, facility type and condition, and command priority. Those factors were crucial to the IPRB ensuring that the highest priority projects successfully competed for limited available funding. For FYs 2000 through 2004 MILCON funding, the IPRB provided the highest priority to those projects that had the highest impact on peacetime and wartime missions; those projects that were necessary to meet strategic en route* mission requirements.

Bulk Fuel Storage Project Submitted to the DESC IPRB. The PACOM JPO submitted the Elmendorf project to DESC from 1997 through 2000. The DESC IPRB designated the Elmendorf project as a high priority each year because the DD Form 1391 stated that the project was necessary to meet strategic en route mission requirements. PACOM JPO personnel deferred the project each year, but the requirements were never validated.

DLA Aware of More Economical Alternatives. DLA personnel stated no technical validation and approval of MILCON project requirements were performed until the DESC IPRB endorsed them. DLA personnel did not review or validate the Elmendorf fuel storage project because it had been deferred at the DESC IPRB. DLA personnel added that the Elmendorf fuel storage project was not validated or approved because they were aware of an economical alternative that was previously identified.

* In April 1994, the Deputy Secretary of Defense directed the Chairman, Joint Chiefs of Staff to conduct an updated Mobility Requirements Study. The new study, known as the Mobility Requirements Study Bottom Up Review Update, established strategic mobility requirements for conventional war scenarios. The study also provided intertheater strategic mobility airlift requirements and identified the amount of airlift capacity required for various operational plans. The Joint Chiefs of Staff, through the Defense Planning Guidance of 1997, required that the strategic en route airlift through the European and Pacific areas of responsibility be given the highest priority in order to carry out the airlift requirements established by the study. The mobility studies were updated again when the Mobility Requirements Study 2005 was issued in January 2001.

Lease Benefits and Impact on Future Requirements

The DESC financial evaluation of the Elmendorf bulk fuel storage project stated that a, “. . . lease of the Chevron facility meets the warfighters requirements, is the economically better alternative, and provides flexibility for any reduction in requirements.” In addition, DESC personnel stated that any future increase in the fuel storage requirement at Elmendorf AFB would probably result in a commercial lease as the alternative to MILCON. DESC correspondence indicated that the Chevron facility had approximately 300,000 barrels of additional storage space available for lease, over and above the 414,918 barrels of storage space already being leased. DESC personnel added that the Chevron lease was a “win-win” alternative because Chevron prevented its facility from closing by leasing to DESC, and the government obtained favorable lease terms as the only customer at the Chevron facility.

DESC personnel stated that the Chevron lease was an attractive option to MILCON for additional reasons. DESC personnel stated that potential fuel leaks, repair costs, fines and penalties, and cleanup costs were all Chevron responsibilities, and the government was protected from liability under the lease agreement terms. Furthermore, DESC personnel stated that additional MILCON funds would be required to make the proposed storage tank MILCON project operational because the proposed storage tanks would not have the capability to receive fuel; the only method of receiving fuel on Elmendorf AFB was through the Port of Anchorage. DESC personnel noted that the additional MILCON requirements would not only be costly, but would also be unnecessary because the Chevron facility is located at the Port of Anchorage and can receive fuel by barge, rail, tanker, and truck. Additionally, the Chevron facility is already connected to Elmendorf AFB by pipeline.

Summary

The bulk fuel storage MILCON project at Elmendorf AFB was not necessary to support operational requirements. Fuel storage tanks located on the base and at the Chevron facility satisfied operational mission requirements. The DESC financial evaluation determined that leasing bulk fuel storage from Chevron was the best alternative to satisfy the fuel storage deficiency. The MILCON project was not processed through normal validation and approval procedures at the MAJCOM, and the requirement was not validate by the PACOM JPO.

Recommendations and Management Comments

We recommend that the Joint Petroleum Officer, U.S. Pacific Command:

1. **Cancel Project No. FXSB983018, “Construct Bulk Jet Fuel Storage.”**
2. **Establish procedures to validate military construction project requirements in accordance with policies outlined in DoD 4140.25-M, “DoD Management of Bulk Petroleum Products, Natural Gas, and Coal,” June 1994. At a minimum, procedures should verify whether adequate project requirement validation was performed by the major command sponsoring the project.**

Management Comments. The U.S. Pacific Command concurred and stated that the bulk fuel storage project at Elmendorf Air Force Base was canceled April 6, 2001, and the USCINCPAC instruction will be updated to enhance the validation of future MILCON project requirements.

Appendix A. Audit Process

Scope

Work Performed. We reviewed DoD and Air Force guidance for validating bulk fuel-related infrastructure project requirements and conducted on-site visits to determine whether the guidance was adequately implemented. We reviewed documentation for FY 1996 through June 2000 used to support current MILCON and MR&E projects at Hickam AFB, Eielson AFB, and Elmendorf AFB. Additionally, we reviewed the methods used to prepare supporting documentation for MILCON and MR&E project requests.

DoD-Wide Corporate Level Government Performance and Results Act (GPR) Coverage. In response to the GPR, the Secretary of Defense annually establishes DoD-wide corporate level goals, subordinate performance goals, and performance measures. This report pertains to achievement of the following goals and performance measures.

- **FY 2000 DoD Corporate Level Goal 2:** Prepare now for an uncertain future by pursuing a focused modernization effort that maintains U.S. qualitative superiority in key warfighting capabilities. Transform the force by exploiting the Revolution in Military Affairs, and reengineer the Department to achieve a 21st century infrastructure. **(00-DoD-2).**
- **FY 2000 Subordinate Performance Goal 2.3:** Streamline the DoD infrastructure by redesigning the Department's support structure and pursuing business practice reforms. **(00-DoD-2.3).**
- **FY 2000 Performance Measures 2.3.1:** Percentage of the DoD Budget Spent on Infrastructure. **(00-DoD-2.3.1).**

General Accounting Office High-Risk Area. The General Accounting Office has identified several high-risk areas in the DoD. This report provides coverage of the Defense Infrastructure high-risk area.

Methodology

Use of Computer-Processed Data. We did not use computer-processed data to perform this audit.

Audit Type, Dates, and Standards. We performed this economy and efficiency audit from March 2000 through March 2001, according to auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. Accordingly, we included tests of management controls considered necessary.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD. Further details are available on request.

Management Control Program Review

DoD Directive 5010.38, "Management Control (MC) Program," August 26, 1996, and DoD Instruction 5010.40, "Management Control (MC) Program Procedures," August 28, 1996, require 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 the Review of the Management Control Program. We reviewed the adequacy of the PACAF and the PACOM JPO management controls over bulk fuel storage and delivery systems infrastructure MILCON projects. Specifically, we reviewed management controls over the review and validation process for bulk fuel infrastructure MILCON project requirements. We reviewed management's self-evaluation applicable to those controls.

Adequacy of Management Controls. We identified a material management control weakness for the Joint Petroleum Office, U.S. Pacific Command, as defined by DoD Instruction 5010.40. Management controls for MILCON projects were not adequate to ensure that bulk fuel-related infrastructure MILCON project requirements were adequately reviewed and validated at the Combatant Command level, prior to submission to DESC for review and prioritization. Recommendation 2, if implemented, will establish controls at the U.S. Pacific Command to ensure bulk fuel infrastructure MILCON project requirements are adequately reviewed and validated. A copy of the report will be provided to the senior official responsible for management controls in the U.S. Pacific Command.

Adequacy of Management's Self-Evaluation. The U.S. Pacific Command did not identify bulk fuel infrastructure MILCON project review and validation as an assessable unit and, therefore, did not identify or report the specific material management control weaknesses identified by the audit.

Prior Coverage

Inspector General

Inspector General, DoD, Report No. D-2001-040, "Bulk Fuel Infrastructure Maintenance, Repair, and Environmental Project Review Process: Pacific," January 30, 2001

Inspector General, DoD, Report No. D-2001-006, "Bulk Fuel Storage Requirements for Maintenance, Repair, and Environmental Projects at Fort Hood, Texas," October 23, 2000

Inspector General, DoD, Report No. D-2001-003, "Bulk Fuel Storage and Delivery Systems Infrastructure Requirements for Japan," October 12, 2000

Inspector General, DoD, Report No. D-2000-164, "Bulk Fuel Storage and Delivery Systems Infrastructure Requirements for Yakima Training Center, Washington," July 20, 2000

Appendix B. Headquarters, Pacific Air Forces, Validated Bulk Fuel-Related MILCON Project Requirements

Hickam AFB planned one fuel-related MILCON project. Eielson, and Elmendorf AFBs each planned two fuel-related MILCON projects. PACAF personnel demonstrated that they properly validated the MILCON requirements for the projects at Hickam and Eielson AFBs and for one MILCON project at Elmendorf AFB in accordance with DoD guidance.

Hickam AFB MILCON Project Requirement. PACAF personnel submitted a DD Form 1391 in FY 1998, to replace two existing type II hydrant refueling systems with one 32-hydrant type III system, and replace two aboveground and three underground fuel storage tanks with two aboveground tanks. The DD Form 1391 indicated that the project was necessary to support strategic mobility* requirements and that complete failure of the existing system was imminent as components continued to age and corrode. The DD Form 1391 included a detailed cost estimate of \$37 million.

Project Validation. PACAF personnel stated that Air Mobility Command, in coordination with U.S. Transportation Command, initiated the project to support a specific total number of tanker and wide-bodied aircraft in support of strategic airlift mission requirements. Hickam AFB personnel prepared a draft of the DD Form 1391. PACAF personnel coordinated with Air Mobility Command personnel on the necessary requirements. PACAF and Air Mobility Command personnel provided documentation to support the requirements for the strategic airlift mission. PACAF personnel also provided additional documentation to support their validation efforts.

- Correspondence between DLA engineering programmers and PACAF engineering programmers detailed coordination of project requirements and justification for technical specifications.
- A memorandum from DLA to PACAF personnel, dated November 5, 1997, “. . . validated the hydrant outlet requirement for 32 hydrant outlets.” The memorandum states that validation was based on a review of the Wartime Aircraft Activity report, a classified document detailing the maximum daily aircraft refueling activity during a contingency.
- Air Mobility Command personnel provided the results of their modeling and simulation analyses to support the project requirements.

* Hickam AFB was part of the southern route of the Pacific air bridge for strategic mobility support. Hickam AFB provides strategic airlift and tanker aircraft support to installations in Asia and other parts of the Pacific during wartime contingencies.

The project was scheduled to begin construction in FY 2002. PACAF personnel demonstrated that they validated the project requirement in accordance with their established procedures. See the finding for a discussion on PACAF procedures.

Eielson AFB MILCON Projects. Eielson AFB personnel submitted two FY 2000 MILCON projects for the FY 2004 DLA MILCON program. The two projects were FTQW983006, “Construct Type III Fueling System,” and FTQW993006, “Construct Arctic POL Rail Off-Load Shelter.”

Project FTQW983006, “Construct Type III Fueling System.” The PACAF submitted a DD Form 1391 to construct a type III hydrant fueling system with 16 hydrants for \$25 million. The DD Form 1391 indicated that the project was necessary to support strategic mobility requirements. PACAF and Air Mobility Command personnel identified a requirement at Eielson AFB for a total of 41 hydrant refueling pits to support operation plans. Air Mobility Command personnel provided documentation on the results of their modeling and simulation analyses to support the requirement for 16 hydrants to meet the strategic airlift mission.

The DESC IPRB endorsed the project in June 2000. DLA personnel planned to begin design review in early 2001.

Project FTQW993006, “Construct Arctic POL Rail Off-Load Shelter.” Eielson AFB engineering personnel submitted a DD Form 1391 to construct a railhead shelter and rack structure with handrails and 16 air hydraulic adjustable gangways to prevent rain and snow from collecting on the fuel receipt off-loading area and creating hazardous conditions. The DD Form 1391 documented a \$1.6 million cost estimate.

Fuels personnel are required to climb atop ice covered railcars to inspect and unload fuel. There have already been several accidents from personnel falling off ice covered railcars Construction of the facility will enable strategic airlift and power projection missions to be supported, and protect Air Force personnel and equipment, and eliminates a safety violation.

Additional justification included an internal memorandum documenting a November 1995 safety incident where an individual slipped, fell 10 feet, and fractured his left foot while off-loading a fuel tank truck. Other safety incidents were also referenced in the memorandum. Eielson AFB safety office assigned a Code 2 safety risk assessment to the hazard. Code 1 is the most severe. In addition, the ground mishap report worksheet documenting the safety incident stated the following hazard information: “The present process of transferring fuel from rail tank car or tank trunk to bulk fuel tanks creates a serious fall hazard for workers involved in the operation especially during the winter months due to snow and ice.”

The DD Form 1391 identified the project as a strategic mobility mission requirement. However, the strategic mobility mission requirement was

challenged at the FY 2000 DESC IPRB because the project supported the rail car fuel delivery system; the primary means of receiving fuel at Eielson AFB was the pipeline delivery system. Consequently, the project was not prioritized high enough to successfully compete for limited FY 2004 MILCON funds.

PACAF personnel demonstrated that they reviewed and validated the MILCON requirements for the type III hydrant system and the rail shelter at Eielson AFB in accordance with their established procedures. See the finding for a discussion of the PACAF procedures.

Elmendorf AFB MILCON Project. In FY 1999, Elmendorf AFB personnel submitted a DD Form 1391 to construct a Type IV hydrant fueling system with eight hydrant outlets, two aboveground operating tanks, and associated operating facilities. PACAF personnel stated that the project was necessary for training and in-theater operational requirements. The DD Form 1391 indicated that the project requirement was necessary to support minimum combat turnaround requirements during exercise operations. Elmendorf AFB engineering personnel demonstrated that a type IV hydrant refueling system was required for tactical aircraft in support of combat turnaround requirements in accordance with Air Force guidance. Base personnel stated that aircraft were refueled by truck. However, during exercise operations, refueling trucks could not refuel tactical aircraft fast enough to support the minimum turnaround requirements.

The DESC IPRB did not designate the project as a high priority in June 2000 because it was not necessary to meet strategic en route mission requirements.

PACAF personnel demonstrated that they reviewed and validated the MILCON requirement in accordance with their established procedures. See the finding for a discussion of the PACAF procedures.

Appendix C. Report Distribution

Office of the Secretary of Defense

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House Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform
House Subcommittee on Technology and Procurement Policy, Committee on Government Reform

U.S. Pacific Command Comments



**COMMANDER IN CHIEF, U.S. PACIFIC COMMAND
(USCINCPAC)
CAMP H.M. SMITH, HAWAII 96861-40287**

J053
7500
Ser: 265-01
18 May 01

To: Mr. Paul Granetto, Director, Contract Management Directorate
Department of Defense Inspector General (DODIG)
400 Army-Navy Drive Arlington, VA 22202-2884

Subj: USCINCPAC RESPONSE TO DODIG DRAFT AUDIT REPORT ON PACIFIC
THEATER MILITARY BULK FUEL INFRASTRUCTURE CONSTRUCTION
PROJECT REVIEW PROCESS (ELMENDORF AFB, ALASKA) (PROJECT
NO. D1999CG-0088.006) OF 21 MARCH 2001

Ref: (a) DODIG ltr of 21 Mar 01

1. Reference (a) provided the DODIG draft report for USCINCPAC review and comments. The report discussed major command approved requirements for 40 maintenance, repair, and environmental (MR&E) projects, but could not demonstrate that these projects were properly validated in accordance with DOD guidance. One \$26 million MILCON project for a bulk fuel storage facility at Elmendorf Air Force Base (AFB) was deferred but not cancelled. The DODIG recommended the Elmendorf MILCON project be cancelled and that corrective action be taken to improve the accuracy and reliability for documentation requirements for MILCON MR&E projects in the review and validation process.

2. The U. S. Pacific Command concurs with the finding and recommendation of the DODIG draft report. The Bulk Fuel Storage project at Elmendorf was cancelled 06 April 2001 and the USCINCPAC instruction will be updated to enhance the validation of future MILCON project requirements.

3. While USCINCPAC concurs with the finding and recommendation the following management comments are provided:

The MILCON process works as delineated in Chapter 8 of DOD 4140.25-M, DOD Management of Bulk Petroleum Products, Natural Gas, and Coal. However, given there is always room for improvement the USCINCPAC Joint Petroleum Instruction 4020.5R, 11 Apr 00 has been updated to reflect a more stringent validation requirement. The project was first identified as a requirement in 1997 as the result of a coordinated USCINCPAC and USCINTRANS throughput study. In fact, the study identified 18 needed fuels projects to enhance air bridge throughput in USPACOM. As the Elmendorf tank project matriculated to the top of the worldwide 114 MILCON project list in 1999 and 2000, it was subsequently deferred (not cancelled due to costs associated with development of the project proposal) by the Joint Petroleum Office pending a revalidation of the requirement. Consequently, prior to the 2001 worldwide MILCON funding competition (June 2001) a revalidation of the requirement revealed this project was not only no longer needed but also that the most cost effective solution (should tanks be needed) would be to lease fuel tank space at a near-by Chevron facility vice build tanks on Elmendorf AFB.

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NO. D1999CG-0088.006) OF 21 MARCH 2001

4. Questions, if any, should be directed to the USCINCPAC project officer, COL (Sel)
David King, J422 at DSN (315) 477-1168 or commercial (808) 477-1168.

5. The USCINCPAC audit liaison point of contact is Mr. Wayson Lee, J053 at DSN
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Assistant Deputy Chief of Staff

Copy to: USCINCPAC J42

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