

SIGAR

**Special Inspector General for
Afghanistan Reconstruction**

SIGAR 17-03 Inspection Report

**Special Mission Wing Facilities at Kandahar Airfield:
Construction Generally Met Contract Requirements,
but Problems with Noncompliance, Maintenance,
and Quality Assurance Need to be Addressed**



OCTOBER
2016

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WHAT SIGAR REVIEWED

On December 13, 2012, the U.S. Army Corps of Engineers (USACE) awarded a \$26.3 million firm-fixed-price contract to Environmental Chemical Corporation (ECC), a U.S. company, to construct facilities and infrastructure for the Special Mission Wing's (SMW) 3rd Air Squadron at Kandahar Airfield. The SMW, headquartered in Kabul, Afghanistan, established the 3rd Air Squadron in 2014. The project included the design, materials, labor, and equipment to construct the facilities, which included a command headquarters building, an administration building, a vehicle maintenance building, and multiple barracks buildings.

On January 17, 2013, USACE modified the contract to decrease the scope of work, which caused the contract's price to decrease by \$2.5 million to \$23.8 million. On September 30, 2014, USACE transferred the SMW 3rd Air Squadron facilities to the Combined Security Transition Command-Afghanistan (CSTC-A). In October 2015, the Afghan government reorganized the SMW, and the 2nd Air Squadron now occupies the Kandahar facilities.

The objectives of this inspection were to determine whether (1) construction was completed in accordance with contract requirements and applicable construction standards, and (2) the facilities are being used and maintained.

October 2016

Special Mission Wing Facilities at Kandahar Airfield: Construction Generally Met Contract Requirements, but Problems with Noncompliance, Maintenance, and Quality Assurance Need to be Addressed

SIGAR 17-03 INSPECTION REPORT

WHAT SIGAR FOUND

SIGAR found that the SMW 2nd Air Squadron's facilities and infrastructure were generally constructed in accordance with contract requirements and technical specifications. For example, the command headquarters, administration, and barracks buildings, along with other facilities, were well constructed. Generally, these buildings contained all of the required systems, such as heating and air conditioning and fire protection. None of the facilities showed signs of structural cracks or peeling paint.

SIGAR found five instances in which ECC did not fully comply with contract requirements and technical specifications, some of which have health and safety implications. These instances included (1) the absence of fire extinguishers in the security building and passenger terminal; (2) the lack of spill containment and spill treatment systems at the vehicle fuel point; (3) the failure to install a gasoline fuel pump in the motor pool service yard; (4) the placement of fuel storage tanks at the power generation plant too close together and without required water draw-off lines and nameplates to identify the tanks' contents; and (5) an improperly constructed vehicle wash rack for which USACE paid ECC approximately \$78,000.

USACE did not fully comply with its own quality assurance procedures. Although USACE engineers filed daily quality assurance reports during most of the 607-day construction period, SIGAR found that for 102 of 114 days in the middle of construction period, the daily quality assurance report consisted of a blank page. Quality assurance reports are important because they provide information on safety inspections, contractor quality control, and the results of quality control tests. Further, SIGAR found no evidence that there was a 4-month warranty inspection, and although there was a 9-month warranty inspection, the documentation provided did not show that CSTC-A, the project's customer, was present to help identify deficiencies.

The SMW 2nd Air Squadron's facilities at Kandahar Airfield were being used to support SMW training and operations, but some facilities were not being used at full capacity. However, as the squadron continues to grow from its current size of about 100 personnel, usage is likely to increase. SIGAR also found that with a few exceptions, such as the partially functioning wastewater treatment plant, the facilities were being reasonably well maintained.

WHAT SIGAR RECOMMENDS

SIGAR is making two recommendations. First, SIGAR recommends that the Commander, CSTC-A, in coordination with the Commanding General and Chief of Engineers, USACE, correct all health and safety hazards identified in this report, specifically: (a) install the fire extinguishers in the security building and passenger terminal; (b) remove or move the propane tanks and combustible materials near the cooking building; (c) repair the wastewater treatment plant's non-working tank and ensure the plant is fully operational; and (d) repair the heating system in the aircraft maintenance hangar. Second, SIGAR recommends that the Commander, CSTC-A, in coordination with the Commanding General and Chief of Engineers, USACE, pursue a refund from ECC for infrastructure that USACE paid for, but did not receive, including the (a) spill containment and spill treatment systems for the vehicle fuel point, (b) vehicle wash rack with all required features, and (c) gasoline fuel pump in the motor pool service yard.

USACE provided written comments on a draft of this report. USACE did not concur with the first recommendation and partially concurred with the second recommendation.



SIGAR

Office of the Special Inspector General
for Afghanistan Reconstruction

October 14, 2016

The Honorable Ashton B. Carter
Secretary of Defense

General Joseph L. Votel
Commander, U.S. Central Command

General John W. Nicholson, Jr.
Commander, U.S. Forces–Afghanistan and
Commander, Resolute Support

Lieutenant General Todd T. Semonite
Commanding General and Chief of Engineers,
U.S. Army Corps of Engineers

Major General Richard G. Kaiser
Commanding General, Combined Security Transition Command–Afghanistan

This report discusses the results of SIGAR’s inspection of the Special Mission Wing (SMW) 3rd Air Squadron’s facilities at Kandahar Airfield. The SMW, headquartered in Kabul, Afghanistan, established the 3rd Air Squadron in early 2014. In October 2015, the Afghan government reorganized the SMW, and the 2nd Air Squadron now occupies the Kandahar facilities. As of April 2016, the SMW consisted of about 100 Afghan personnel. The U.S. Army Corps of Engineers (USACE) contracted for and managed the construction of the SMW 2nd Air Squadron’s facilities, which included a command headquarters building, an administration building, and multiple barracks buildings.

We are making two recommendations in this report. First, we recommend the Commander, Combined Security Transition Command–Afghanistan (CSTC-A), in coordination with the Commanding General and Chief of Engineers, USACE, correct all health and safety hazards identified in this report, specifically: (a) install the fire extinguishers in the security building and passenger terminal; (b) remove or move the propane tanks and combustible materials near the cooking building; (c) repair the wastewater treatment plant’s non-working tank and ensure the plant is fully operational; and (d) repair the heating system in the maintenance hangar. Second, we recommend that the Commander, CSTC-A, in coordination with the Commanding General and Chief of Engineers, USACE, pursue a refund from Environmental Chemical Corporation for infrastructure that USACE paid for, but did not receive, including the: (a) spill containment and spill treatment systems for the vehicle fuel point, (b) vehicle wash rack with all required features, and (c) gasoline fuel pump in the motor pool service yard.

In commenting on a draft of this report, USACE did not concur with our first recommendation and partially concurred with our second recommendation. USACE’s comments are reproduced in appendix II.



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SIGAR conducted this work under the authority of Public Law No. 110-181, as amended, and the Inspector General Act of 1978, as amended; and in accordance with the *Quality Standards for Inspection and Evaluation*, published by the Council of the Inspectors General on Integrity and Efficiency.

John F. Sopko
Special Inspector General
for Afghanistan Reconstruction

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ABBREVIATIONS

CSTC-A	Combined Security Transition Command–Afghanistan
ECC	Environmental Chemical Corporation
SMW	Special Mission Wing
UFC	Unified Facilities Criteria
USACE	U.S. Army Corps of Engineers

In July 2012, the Afghan government commissioned the Special Mission Wing (SMW) as a new air wing, independent of the Afghan Air Force, to provide operational reach and manned intelligence, surveillance, and reconnaissance capability to support the government's counterterrorism and counter-narcotics missions. The SMW is headquartered in Kabul, Afghanistan, with additional air squadrons located at Kandahar Airfield in Kandahar province and at Mazar-e Sharif in Balkh province. The SMW established the 3rd Air Squadron at Kandahar Airfield in early 2014.¹

On December 13, 2012, the U.S. Army Corps of Engineers (USACE) awarded a \$26.3 million firm-fixed-price contract to Environmental Chemical Corporation (ECC), a U.S. company, to construct facilities and infrastructure for the SMW 3rd Air Squadron at Kandahar Airfield.² The contract required ECC to construct a command headquarters building; an administration building; a barracks with latrines and showers for officers, enlisted, and temporary personnel; an aircraft maintenance hangar with a maintenance shop; a vehicle maintenance building; and a security building and passenger terminal. The contract also required construction of other facilities and infrastructure, including parade grounds, a car parking area, two primary and one secondary entry control points, a small arms storage building, a vehicle wash rack, a vehicle fuel point, a motor pool area, perimeter fencing, roadways, a water tank, a pump house and water well, water storage tanks, a generator, a wastewater treatment plant, and a volleyball court. The project included the design, materials, labor, and equipment to construct the facilities, and provide utilities for approximately 400 personnel. On January 17, 2013, USACE modified the contract to decrease the scope of work, which caused the contract's price to decrease by \$2.5 million to \$23.8 million.³

On January 19, 2013, USACE issued the notice-to-proceed to ECC directing the contractor to complete construction in 365 days, or by January 19, 2014. During construction, USACE modified the contract 11 times, resulting in schedule slippage that extended the project completion timeline by about 8 months, for a total of 607 days of construction. On September 30, 2014, USACE transferred the SMW 3rd Air Squadron's facilities to the Combined Security Transition Command–Afghanistan (CSTC-A). In October 2015, the Afghan government reorganized the SMW, and the 2nd Air Squadron replaced the 3rd Air Squadron at the Kandahar facilities.⁴

The objectives of this inspection were to determine whether (1) construction was completed in accordance with contract requirements and applicable construction standards, and (2) the facilities are being used and maintained.

We conducted our work in Kabul and Kandahar, Afghanistan, from July 2015 through October 2016, in accordance with the *Quality Standards for Inspection and Evaluation*, published by the Council of the Inspectors General on Integrity and Efficiency. The engineering assessment was conducted by our professional engineers in accordance with the National Society of Professional Engineers' *Code of Ethics for Engineers*. Appendix I contains a detailed discussion of our scope and methodology.

¹ A U.S. Special Operations Aviation Team is embedded with and provides training for the squadron.

² The contract number is W912DQ-13-C-4002.

³ USACE exercised three contract options for the construction of a mentor barracks, multi-purpose facility, and a parking area at the time of contract award. However, USACE later determined that it should not have exercised the options at the time of award, and the options were reversed by a contract modification on January 17, 2013. Ultimately, USACE did not re-exercise the options, and the structures were never constructed.

⁴ Hereafter, we refer only to the 2nd Air Squadron because it currently occupies the facilities.

FACILITIES WERE GENERALLY CONSTRUCTED IN ACCORDANCE WITH CONTRACT REQUIREMENTS, BUT INSTANCES OF NONCOMPLIANCE WITH BOTH THE CONTRACT AND USACE'S QUALITY ASSURANCE PROCEDURES EXIST

We inspected the SMW 2nd Air Squadron's facilities on July 25, 2015; August 26, 2015; and February 10, 2016, and found that ECC generally constructed the facilities in accordance with contract requirements and technical specifications.⁵ For example, we found that the command headquarters was a well-constructed, two-story concrete building with heat and air conditioning, a fire alarm system, and emergency exit signs. In addition, the officers' barracks was a well-constructed, insulated one-story concrete building, with the required private and shared bedrooms, as well as toilets, showers, sinks, and running water in the latrine room. None of the facilities that we inspected showed signs of structural cracks or peeling paint. However, we found several instances where ECC did not meet contract requirements and technical specifications by, for example, not installing a gasoline fuel pump and improperly constructing the vehicle wash rack. We also found that USACE did not consistently follow its quality assurance procedures.

Instances of Infrastructure Construction Not Complying with Contract Requirements

During our inspections, we found five instances where ECC did not fully comply with contract requirements and technical specifications. Some of these issues, such as the absence of fire extinguishers and lack of spill containment systems for the vehicle fuel point, have safety and health implications associated with them.

Specifically, we found that ECC:

- **Did not install fire extinguishers in the security building and passenger terminal:** The contract's technical specifications required ECC to provide each building with fire extinguishers. However, we found that the security building and passenger terminal did not have fire extinguishers. The absence of fire extinguishers in these facilities creates a potential fire and safety hazard.
- **Did not install spill containment or spill treatment systems for the vehicle fuel point:** The contract's technical specifications required ECC to construct the vehicle fuel point with spill containment and spill treatment systems to prevent toxic elements from entering the ground during fuel spills. Although ECC constructed the fuel point, we found that it did not build the required spill containment and spill treatment systems. Without these systems, spilled fuel could seep into the ground and possibly contaminate the water supply, thereby creating a health and environmental hazard at the site.
- **Did not install a gasoline fuel pump in the motor pool service yard:** Contract design drawings show that ECC should have installed one gasoline and one diesel fuel pump in the motor pool service yard. We found that a diesel fuel pump had been installed in the motor pool service yard, but no gasoline pump had been installed. The SMW 2nd Air Squadron currently has three Ford Ranger trucks that run on diesel fuel. As the squadron grows, the lack of a gasoline pump may limit the types of vehicles that the squadron can acquire and use.
- **Built a power generation plant and fuel storage tanks that do not comply with Department of Defense regulations:** Our inspection of the fuel storage tanks at the power generation plant showed that ECC did not build the tanks in compliance with the Department of Defense's Unified Facilities Criteria (UFC), which require that fuel tanks be spaced 5 feet apart and have a nameplate stating the tanks

⁵ We conducted our July 2015 site visit as part of the fieldwork for our audit of the Department of Defense's oversight of facilities and infrastructure transferred to the Afghan government. We subsequently announced our inspection of the SMW 2nd Air Squadron's facilities on August 5, 2015.

are approved for that material and service.^{6, 7} We found that the tanks were 4 feet 3 inches apart and did not have the required nameplates. The UFC also requires the fuel tanks to have water draw-off lines, which separate water from the fuel.⁸ However, we found that the tanks did not have the water draw-off lines installed. The draw-off lines remove water from the bottom of the fuel tank to prevent it from mixing with the fuel.

In addition, the UFC requires the power generation plant to have a storm water collection system to transport, treat, and discharge water from the power plant.⁹ However, a storm water collection system could not be located during the site visits. Additionally, the access steps, which workers use to enter and leave the power plant, did not have a UFC-required handrail.¹⁰

- **Improperly constructed the vehicle wash rack:** The contract required ECC to construct the foundations, mountings, pumps, wash stations, equipment configurations, and a chain link security fence for the vehicle wash rack. In addition, each vehicle wash station was required to have water supply piping with valve boxes, concrete pads with vehicle barriers and trench drains, light towers, cleanup hydrants with hose connections, and lighting.¹¹ ECC also was required to build a wastewater treatment facility for the vehicle wash rack. Although ECC also constructed a wash rack, it only consisted of one concrete pad, a yard hose bib, and an unfinished power cabinet along a gravel road outside the motor pool fence (see photo 1).¹² None of the required hoses, lighting, trench drains, fencing, or wastewater treatment infrastructure were located during the site visits. According to transfer documents, the wash rack cost approximately \$78,000.

Photo 1 - Improperly Constructed Vehicle Wash Rack



Source: SIGAR, August 26, 2015

USACE Did Not Fully Comply with Its Quality Assurance Procedures

USACE personnel filed daily quality assurance reports during most of the 607-day construction period from February 1, 2013, through September 30, 2014. Although USACE engineers only visited the construction site

⁶ The Department of Defense initiated the UFC program to unify all technical criteria and standards pertaining to planning, design, construction, and operation and maintenance of real property facilities. The program seeks to streamline the military criteria system by eliminating duplication of information, increasing reliance on private-sector standards, and creating a more efficient criteria development and publishing process.

⁷ See UFC 3-460-01, Section 8-3.5.3, *Horizontal Aboveground Tanks*.

⁸ See UFC 3-460-01, Section 8-6.2, *Tank Design Requirements*.

⁹ See UFC 3-460-01, Section 8-14.7, *Stormwater Collection Systems*.

¹⁰ See UFC 3-460-01, Section 8-14.8, *Dike Access*.

¹¹ The contract did not specify the number of wash stations ECC was required to build within the wash rack.

¹² A yard hose bib is a pipe or spigot from where the water comes.

57 out of a possible 607 days, an Afghan quality assurance specialist, employed by USACE, was on-site and submitted most of the information for the daily reports. USACE's quality assurance guidance states that quality assurance representatives should prepare a complete and accurate daily report indicating whether the contractor is completing work in accordance with contract requirements and technical specifications.¹³ These daily reports should provide information on safety inspections, contractor quality control efforts, and the results of quality control tests. For example, on May 28, 2013, USACE reported that it rejected ECC's fuel tank design submittals because the submittals lacked adequate information and detail. In another example, on June 16, 2013, USACE's report verified 14 quality control requirements, including compressive testing and compaction testing of concrete samples at various locations on the project site.

However, we identified a reporting gap in the middle of the construction period. Specifically, we found that for 102 of 114 days from September 9, 2013, through December 31, 2013, the daily quality assurance reports consisted of a blank page except for the date. According to USACE officials, in December 2013, the Afghan quality assurance specialist filed the daily reports, but the officials stated that those reports were lost due to an unsuccessful interface with USACE's main computer system.

USACE also was required to perform 4-month and 9-month warranty inspections after it transferred the SMW's facilities to CSTC-A, the project customer. USACE regulations state that USACE and the project customer should perform joint warranty inspections to identify construction defects and plan corrective actions.¹⁴ However, we did not find any evidence that USACE conducted the 4-month inspection. USACE officials acknowledged that they lacked documentation for the 4-month inspection, but stated that they believe the inspection was conducted because USACE requested that ECC address some warranty items shortly after the time period in which the inspection would have occurred. We did find evidence that, on June 23, 2015, USACE conducted the 9-month inspection, which covered 19 separate facilities at the site. USACE documented four pages of items requiring repair or maintenance, including cracked plaster in some buildings and inoperable lights and fans.

However, USACE's inspection report, produced prior to our inspections, did not mention any of the noncompliance issues we found. Moreover, although USACE officials and ECC's quality control manager were present at the 9-month inspection, there was no evidence that a CSTC-A representative was present, contrary to USACE guidance. The customer's presence is important for identifying construction deficiencies, so that the contractor can fix them during the warranty period at no additional cost to the government.

THE SMW 2ND AIR SQUADRON'S FACILITIES ARE BEING USED AND MAINTAINED

The SMW 2nd Air Squadron's facilities at Kandahar Airfield are being used to support SMW training and operations. However, some facilities are not being used at full capacity. For example, we found that some offices in the administration building had never been used, and a U.S. training official stated that only about 45 percent of the beds in the barracks were occupied. The official stated that some facilities were underutilized because the SMW is still growing and is expected to reach 90 percent of its capacity by December 2016. The official also stated the SMW's current plan calls for the squadron to have 152 personnel, but as of April 2016, according to the U.S. Special Operations Aviation Team Commander, the 2nd Air Squadron only had about 100 personnel on site. We also found that the motor pool, vehicle maintenance building, and vehicle wash rack had never been used, primarily because, according to the U.S. Special Operations Aviation Team Commander, the SMW lacks the trained personnel.

We found that most of the SMW 2nd Air Squadron's facilities, including the command headquarters building, administration building, maintenance shop, and the various barracks' buildings, were reasonably well maintained. For example, floors were clean, the paint looked fresh, no windows were broken, and the lights

¹³ See USACE, Quality Assurance Representative's Guide, EP 415-1-261, Volume 1, January 1992.

¹⁴ See USACE Engineer Regulation 415-345-38, Construction Transfers and Warranties, June 30, 2000.

worked. However, a senior U.S. training official working with the squadron stated that there are some operation and maintenance problems, such as the operation of the wastewater treatment plant. Nevertheless, U.S. personnel working with the squadron stated that the maintenance challenges, while inconvenient, did not prevent U.S. trainers and the squadron from achieving their missions.

We also found issues with the squadron's water quality, the wastewater treatment plant's operation, the storage of combustible material next to the dining facility, and the maintenance hangar's heating system. Specifically, we found that:

- ECC drilled the required water well in an attempt to provide the squadron with potable water that meets World Health Organization standards. Based on the real property transfer document, the U.S. government paid \$224,687 for the water well.¹⁵ USACE performed multiple tests on the well, including a water quality test in December 2014 that showed levels of chloride and other chemicals in excess of World Health Organization standards. While we determined that the water is still technically potable, a senior SMW official stated that the squadron's personnel do not drink the water because they believe it is unhealthy. In addition, World Health Organization guidelines state that water with excessive amounts of these types of chemicals may cause excessive scaling in water pipes, heaters, boilers, and household appliances.¹⁶ The U.S. Special Operations Aviation Team official responsible for maintenance at the aircraft hangar stated that he has used an excessive number of replacement parts for the water system due to the chemicals in the water. The official also told us that water for washing, drinking, and cooking is trucked to the SMW facilities from another location on Kandahar Airfield. The official added that four pallets of bottled water are delivered to the SMW each week, at a cost of about \$10,000 per month.

On April 12, 2016, CSTC-A issued a memorandum stating that it would purchase services from USACE to assess and provide courses of action to improve the water quality and repair the water tank, well, and filtration system at the SMW facilities. The memorandum stated that USACE would determine whether the water quality could be improved to attain potable water that meets required standards. The memorandum directs USACE to assess the water tank and water well to determine what repairs are needed for their long-term operability with minimum operation and maintenance costs. The memorandum further directed USACE to determine whether a water filtration system existed and to determine what repairs would be required to improve water quality. CSTC-A required USACE to provide its assessment by July 31, 2016.¹⁷

- ECC constructed the wastewater treatment plant as required. Although the treatment plant has two treatment tanks, during our site visits, we observed that only one of the two tanks was functioning. As a result, the operating tank was producing excessive amounts of white foam that breached its sides and spilled onto the ground (see photo 2). Excessive white foam indicates that the water is not being treated effectively, and the water could be a health hazard when it is discharged from the plant. The treated

Photo 2 - Wastewater Treatment Plant with One Functioning Tank



Source: SIGAR, February 10, 2016

¹⁵ Department of Defense real property transfers are recorded on Form DD 1354.

¹⁶ Scaling is the covering of incrustation formed from the separation of salts from the water.

¹⁷ We requested this assessment but had not received it as of the date of this report.

wastewater flows into a drainage ditch; however, USACE officials could not tell us where the water goes after it leaves Kandahar Airfield.

- ECC constructed a storage yard adjoining the dining facility, as required. The yard was fully graveled and fenced, and was designed to store supplies for the dining facility. During our inspection, we observed piles of combustible material—including wood, paper, and other debris—and what SMW officials stated were empty propane tanks on the ground outside of the cooking building (see photo 3). The contract design drawings required propane tanks to be stored at least 26 feet from occupied buildings, but we found that the tanks were stored within 15 feet of the cooking building. Storing the propane tanks so close to the cooking building with combustible material creates a safety hazard.

Photo 3 - Propane Tanks Stored Too Close to the Cooking Building



Source: SIGAR, July 25, 2015

- A U.S. Special Operations Aviation Team official stated that the maintenance hangar's heating system generates smoke when operating and that the cause is unknown. The official also stated that the air in the hangar does not circulate well, resulting in a lot of smoke accumulating in the hangar. The SMW leaves the hangar door open to improve air circulation, but the open door allows more dust to enter the hangar, which dirties the equipment and aircraft, and results in more maintenance issues and increased costs. The official also explained that the hangar does not have its own electrical generator, and electricity transmitted to the building must be stepped down from 220 volts, which is typical in Afghanistan, to 110 volts. The official added that the converter that steps down the voltage does not operate efficiently due to the smoke and dust in the hangar.

CONCLUSION

It is encouraging that the SMW 2nd Air Squadron is using the facilities to house and train personnel, and to conduct operations. With the squadron's expected growth, usage of these facilities is likely to increase.

Although the facilities were mostly well constructed and are generally well maintained, there are some health and safety issues that need to be addressed, such as the lack of fire extinguishers at the security building and passenger terminal, the inoperable wastewater treatment tank, and the propane tanks and combustible material near the cooking building. USACE paid for some of the items we identified as being noncompliant with contract specifications or that were not installed at all, including the incomplete vehicle wash rack and spill containment and treatment systems. However, we also recognize that not all of the deficiencies are necessarily the result of poor contractor performance or inadequate contractor oversight. Rather, some deficiencies, such as the inoperable wastewater treatment tank and the improperly stored propane tanks, are likely the result of operations and maintenance challenges following the project's transfer to CSTC-A.

Regarding contractor oversight, although USACE had a quality assurance specialist on-site throughout the project, there was no recorded reporting for more than 3 months in the middle of the construction period. Moreover, USACE did not provide us with any evidence showing that CSTC-A officials were present during warranty inspections. The warranty inspection process plays a significant role in ensuring that the contractor corrects construction deficiencies at no additional cost to the government. Not conducting warranty inspections with CSTC-A officials present increases the risk that construction defects will not be identified and that plans for corrective action will not be properly implemented.

RECOMMENDATIONS

To protect the U.S. taxpayers' investment in the Special Mission Wing 2nd Air Squadron's facilities, and to ensure the health and safety of the squadron's personnel, we recommend that the Commander, CSTC-A, in coordination with the Commanding General and Chief of Engineers, USACE, take the following action and report the results back to SIGAR within 90 days:

1. **Correct all health and safety hazards identified in this report, specifically:**
 - a. **Install the fire extinguishers in the security building and passenger terminal;**
 - b. **Remove or move the propane tanks and combustible materials near the cooking building;**
 - c. **Repair the wastewater treatment plant's non-working tank and ensure the plant is fully operational; and**
 - d. **Repair the heating system in the aircraft maintenance hangar.**
2. **Pursue a refund from ECC for infrastructure that USACE paid for, but did not receive, including the:**
 - a. **Spill containment and spill treatment systems for the vehicle fuel point,**
 - b. **Vehicle wash rack with all required features, and**
 - c. **Gasoline fuel pump in the motor pool service yard.**

AGENCY COMMENTS

We provided a draft of this report to the Office of the Under Secretary of Defense for Policy, U.S. Central Command, U.S. Forces–Afghanistan, and USACE. In our draft report, we first recommended that the Commander, CSTC-A, in coordination with the Commanding General and Chief of Engineers, USACE, correct all health and safety hazards, including (a) install the fire extinguishers in the security building and passenger terminal; (b) remove the propane tanks and combustible materials near the cooking building; (c) install the water draw-off lines in the power generation plant; (d) repair the wastewater treatment plant's non-working tank and ensure the plant is fully operational; and (e) repair the heating system in the aircraft maintenance hangar. Our second recommendation did not change from the draft report to this final report. Our draft report also included a third recommendation for the Commander, CSTC-A, in coordination with the Commanding General and Chief of Engineers, USACE, to determine why CSTC-A officials were not present at the 9-month warranty inspection and take steps, as appropriate, to reinforce the importance of including all required parties in warranty inspections for other USACE-constructed projects in Afghanistan.

In its comments, USACE did not concur with our first recommendation and partially concurred with our second recommendation. USACE provided written comments, which are reproduced in appendix II.

USACE did not concur with our recommendation to install the fire extinguishers in the security building and passenger terminal, stating that the fire extinguishers were installed at the time it transferred the facility to CSTC-A. However, we did not observe the fire extinguishers at the time of our inspection, which occurred after the transfer. Further, we directed the recommendation to CSTC-A, in coordination with USACE, since CSTC-A is still in control of the facility. As a result, the recommendation remains open until we receive evidence that fire extinguishers are in place to address the current safety hazard.

USACE did not concur with our recommendation to remove the propane tanks and combustible materials near the cooking building, stating that the site was clean and all propane tanks were securely and safely stored under the storage sunshade at the time it transferred the facilities to CSTC-A. USACE stated that the improper storage of the tanks is an operations and maintenance issue. We agree. However, during our inspection, we identified the improper storage of the propane tanks—stored too close to the cooking building—as a safety

hazard (see photo 3 on page 6). As a result, the recommendation to CSTC-A remains open until we receive evidence that all propane tanks are stored the proper distance from the cooking building.

As previously noted, in the draft report, we recommended that CSTC-A, in coordination with USACE, install water draw-off lines at the power generation plant. USACE did not concur with the draft recommendation, stating that the fuel tank was equipped with a freeze-proof water bleed-off valve that is found at the front of the tank. USACE referenced UFC-3-460-01, which states that a water draw-off valve is acceptable to draw off water for diesel fuel tanks. Based on USACE's comments and the documents provided, we removed the recommendation from the final report.

USACE did not concur with our recommendation to repair the wastewater treatment plant's non-working tank and ensure the plant is fully operational, stating that the wastewater treatment plant was properly constructed with two water tanks, in accordance with contract specifications. USACE stated the complex was not yet at full capacity, with only 167 out of 400 individuals on site, and speculated that the second tank was operational but not operating because there was no need for it. However, during our July 2015 and February 2016 site visits, we found that the second tank was not operational because it was in disrepair, and the overflow in the first tank was creating an environmental hazard. We believe that this is a maintenance issue, rather than an ECC failure. However, the recommendation to CSTC-A remains open until we receive evidence that the non-operational water tank is repaired to prevent an environmental hazard caused by the overflow of the first water tank.

USACE did not concur with our recommendation to repair the heating system in the aircraft maintenance hangar, stating that ECC properly installed the heating system in the hangar, in accordance with contract specifications. However, during our inspection, we determined that the failure of the heating system and the resulting smoke and dust in the hangar adversely impacted aircraft maintenance. We agree with USACE that this may be a maintenance issue, rather than an ECC failure. However, the recommendation to CSTC-A remains open until we receive evidence that the heating system is repaired to eliminate the resulting smoke and dust in the hangar.

USACE did not concur with our recommendation to pursue a refund from ECC for the spill containment and spill treatment systems for the vehicle fuel point that the command paid for but did not receive. USACE stated that ECC constructed the fuel point in accordance with contract requirements, and the approved site drawings for the fuel point do not show spill containment or spill treatment systems. We disagree. Section 1.10 of the contract's technical requirements provides a list of codes and technical criteria applicable to the project. The list includes UFC 3-460-01, which identifies requirements for petroleum fuel facilities, including requirements for spill containment and spill treatment systems. Therefore, the recommendation remains open until USACE receives a refund for the vehicle fuel point's spill containment and spill treatment systems that it paid for, but ECC did not install.

USACE did not concur with our recommendation to pursue a refund from ECC for the vehicle wash rack with all required features that the command paid for but did not receive, stating that ECC built the vehicle wash rack in accordance with contract requirements. USACE stated that the standard design drawings depict a concrete slab for the wash rack, and the wash rack was constructed in compliance with typical Afghanistan National Defense and Security Forces construction standards, which USACE used with CSTC-A's concurrence. We disagree with USACE. The additional features are specifically identified in section 01015-6.11 of the site-adapt project specifications, and ECC did not provide those features. Further, the design drawings do not remove the requirements identified in the site-adapt project specifications. As a result, the recommendation remains open until USACE receives a refund the required features that it paid for, but ECC did not install, at the vehicle wash rack.

USACE concurred with our recommendation to pursue a refund from ECC for the gasoline fuel pump in the motor pool service yard that the command paid for but did not receive. USACE stated that ECC should have installed one gasoline and one diesel fuel pump in the service yard but only installed the diesel fuel pump.

USACE stated that it is reviewing the circumstances. As a result, the recommendation remains open until USACE receives a refund for the one gasoline pump that it paid for, but ECC did not install.

As noted, in the draft report, we recommended that CSTC-A, in coordination with USACE, determine why its officials were not present at the 9-month warranty inspection and take steps, as appropriate, to reinforce the importance of including all required parties in warranty inspections for other USACE-constructed projects in Afghanistan. USACE did not concur with this recommendation, stating that CSTC-A officials were present at the 9-month warranty inspection, and a sign-in sheet validates CSTC-A's presence. Although USACE provided no evidence during our inspection to support its position, on September 27, 2016, the Office of the Under Secretary of Defense for Policy provided us with a sign-in sheet showing that CSTC-A representatives were present at the inspection. Based on this documentation, we removed the recommendation from the final report.

APPENDIX I - SCOPE AND METHODOLOGY

This report provides SIGAR's inspection results of the Special Mission Wing (SMW) 3rd Air Squadron's facilities at Kandahar Airfield. For this inspection, we assessed whether (1) construction was completed in accordance with contract requirements and applicable construction standards, and (2) the facilities were being used and maintained. Specifically, we:

- reviewed contract documents, design submittals, quality assurance and quality control reports, and other relevant project documentation;
- conducted site inspections on July 25, 2015; August 26, 2015; and February 10, 2016; and
- interviewed SMW, U.S. Army Corps of Engineers (USACE), Combined Security Transition Command – Afghanistan, and U.S. Special Operations Aviation Team officials concerning the facility's construction, use, and maintenance.

We obtained computer-processed data from USACE's Financial Management System to determine project costs. We tested the accuracy of the data by comparing it with available contract documentation and determined that it was reliable for the purposes of this inspection. We also considered the impact of compliance with laws and fraud risk.

We conducted our inspection work in Kabul and Kandahar, Afghanistan, from July 2015 through October 2016. This work was conducted in accordance with the Quality Standards for Inspection and Evaluation, published by the Council of the Inspectors General on Integrity and Efficiency. The engineering assessment was conducted by our professional engineers in accordance with the National Society of Professional Engineers' *Code of Ethics for Engineers*. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our inspection objectives. We conducted this inspection under the authority of Public Law No. 110-181, as amended; and the Inspector General Act of 1978, as amended.

APPENDIX II - COMMENTS FROM THE U.S. ARMY CORPS OF ENGINEERS



DEPARTMENT OF THE ARMY
UNITED STATES ARMY CORPS OF ENGINEERS
TRANSATLANTIC DIVISION
201 PRINCE FREDERICK DRIVE
WINCHESTER, VIRGINIA 22602-4373

01 SEP 2016

Mr. John F. Sopko
Special Inspector General for Afghanistan Reconstruction
1550 Crystal Drive, Suite 900
Arlington, VA 22202

Dear Mr. Sopko:

This is the U.S. Army Corps of Engineers (USACE) Transatlantic Division's (TAD) response to the SIGAR Draft Report I-035, "Special Mission Wing Facilities at Kandahar Airfield: Construction Generally Met Contract Requirements, but Instances of Noncompliance with the Contract and Quality Assurance Procedures Need to be Addressed" dated August 2, 2016.

Enclosed is TAD's response to the subject report's recommendations. Based on the results of the audit, SIGAR's report developed three recommendations with multiple parts. USACE TAD concurs with SIGAR's recommendation 2. c. and non-concurs with recommendations 1. a. b. c. d. e., 2. a. b. and 3.

Our Transatlantic Afghanistan District conducted a detailed review, including contract documents and photo documentation, of completed work, and determined there were items included in your report they had previously addressed and provided documentation showing completion in accordance with contract specifications. As a result, our response includes a number of non-concurrences.

We believe, as SIGAR found and noted in the report, the Special Mission Wing's Air Squadron's facilities and infrastructure were generally well constructed in accordance with contract requirements, and technical specifications.

Additional details are provided in the enclosure. My point of contact for this response is Mr. Mike Hatchett, Internal Review Auditor. He may be reached by e-mail at [REDACTED] or by telephone at [REDACTED].

Sincerely,

A handwritten signature in black ink, appearing to read "PK", with a long horizontal flourish extending to the right.

Patrick V. Kinsman
Colonel, U.S. Army
Chief of Staff

Enclosure

SIGAR DRAFT REPORT DATED AUGUST 2, 2016
SIGAR I-035

“Special Mission Wing Facilities at Kandahar Airfield: Construction Generally Met Contract Requirements, but Instances of Noncompliance with the Contract and Quality Assurance Procedures Need to be Addressed”

**U.S ARMY CORPS OF ENGINEERS TRANSATLANTIC DIVISION
COMMENTS
TO THE SIGAR RECOMMENDATIONS**

Recommendation 1: Correct all health and safety hazards identified in this report, specifically:

- a. Install the fire extinguishers in the security building and passenger terminal;
- b. Remove the propane tanks and combustible materials near the cooking building;
- c. Install the water draw off lines in the power generation plant;
- d. Repair the wastewater treatment plant's non-working tank and ensure the plant is fully operational; and
- e. Repair the heating system in the aircraft maintenance hangar.

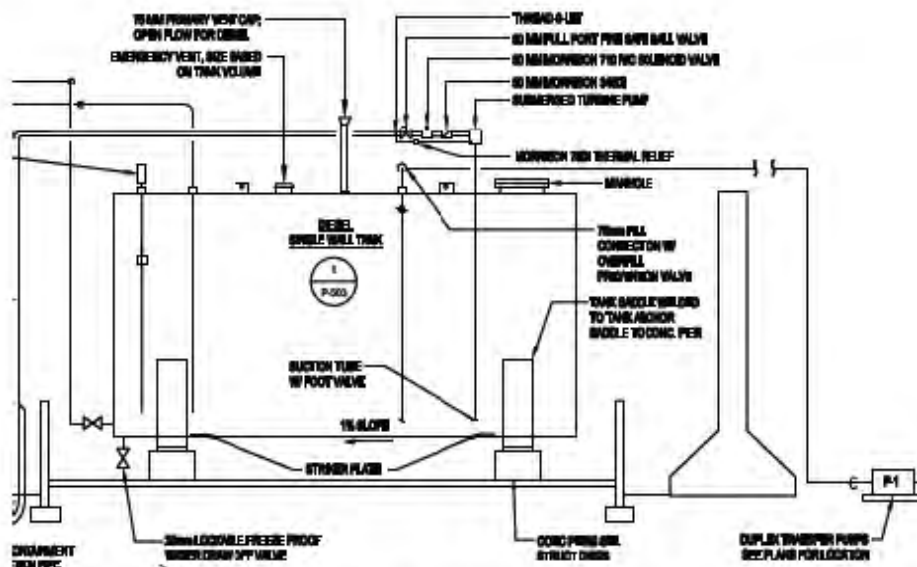
USACE Response:

a. **Install the fire extinguishers in the security building and passenger terminal. Non-Concur.** The items are installed in accordance with the contract specifications. The Security and Passenger Terminal Facility is constructed in accordance with the Site-Adapt drawings, 1 fire extinguisher and 2 exit signs are provided on the interior. USACE's records indicate that the fire extinguishers were installed at the time of turnover of the Security Building and Passenger Terminal Facility.

b. **Remove the propane tanks and combustible materials near the cooking building. Non-Concur.** The condition that SIGAR found at the site as described in the SIGAR report and shown in the photograph in the report is a result of improper facility operations and maintenance. All required specifications to the contract were met. USACE considers this recommendation an operations and maintenance issue with responsibility belonging to the facility user. The photograph below shows the site when USACE turned it over to the customer. The site was clean and all propane tanks were securely and safely stored under the storage sunshade. Whatever occurred after transfer of the project to the customer that lead to the conditions SIGAR found is not the responsibility of USACE or the USACE construction contractor.



c. Install the water draw off lines in the power generation plant. Non-Concur. The contractor properly constructed the power generation plant in accordance with contract drawings and specifications. The 100% design drawings, shown below, for the fuel tanks, indicate the location of the installed water draw lines. The fuel tank is equipped with a freeze proof water bleed off valve that is found at the front of the tank. The tank is installed with a 1% slope to allow for draining in the direction of the valve. Section 01015, Para. 5.17.1, which is specific language for the power plant generators, has no reference to UFC 3-460-01. It is doubtful whether any of the provisions of UFC 3-460-01 are applicable since they are not specifically referenced.



The fuel tank has a freeze proof water bleed off valve at the front of the tank and it is installed with a 1% slope to drain in the direction of this valve.

d. Repair the wastewater treatment plant's non-working tank and ensure the plant is fully operational. Non-Concur. The waste water treatment plant was constructed with two water tanks in accordance with contract specifications, which was designed to handle 400 individuals. At the time of this review there were 167 individuals at the complex, or 40% of full capacity. Both tanks were fully operational when commissioned and the facility was turned over to our customer on September 30, 2014. It is possible the second tank remains operational but not operating because of the lack of need. Neither ECC nor USACE has the responsibility for operations and maintenance of the facility.

e. Repair the heating system in the aircraft maintenance hangar. Non-Concur. ECC installed the heating system as required and in accordance with contract specifications. The system was fully operational at the time of facility turnover, September 30, 2014. USACE believes this is an operations and maintenance issue.

Recommendation 2. Pursue a refund from ECC for infrastructure that USACE paid for, but did not receive, including the:

- a. Spill containment and spill treatment systems for the vehicle fuel point;
- b. Vehicle wash rack with all required features; and
- c. Gasoline fuel pump in the motor pool service yard.

USACE Response:

a. Spill containment and spill treatment systems for the vehicle fuel point. Non-Concur. ECC constructed the fuel point in accordance with contract requirements. The 100% approved site drawings for the fuel point does not show spill containment or spill treatment systems. Since the spill containment and spill treatment for the vehicle fuel point was not in the contract ECC was not required to provide them.

b. Vehicle wash rack with all required features. Non-Concur. ECC built the vehicle wash rack in accordance with contract requirements. The Standard Design Drawings depict a concrete slab for the wash rack; there are no provisions for vehicle barriers, trench drains, light towers, clean-up hydrants or lighting. There is also no provision for a wastewater treatment facility dedicated to the vehicle wash rack. The wash rack was constructed in compliance with typical Afghanistan National Defense Security Forces construction standards used by USACE with the concurrence of CSTC-A.

c. Gasoline fuel pump in the motor pool service yard. Concur. Contract design drawings indicate ECC should have installed one gasoline and one diesel fuel pump in the motor pool service yard. ECC installed a diesel fuel pump in the motor pool service yard, but no gasoline pump has been installed. We are in the process of conducting a review of the circumstances surrounding the installation of the gasoline fuel pump. We will conclude our review within 90 days and provide SIGAR the results.

Recommendation 3. Determine why CSTC-A officials were not present at the 9-month warranty inspection and take steps as appropriate to reinforce the importance of including all required parties in warranty inspections for other USACE-constructed projects in Afghanistan.

USACE Response:

Non-concur. CSTC-A personnel were present at the 9-month warranty inspection. This recommendation was addressed in USACE's comments to SIGAR's Statement of Facts in May 2016. At that time, USACE provided SIGAR copies of the 9 month sign in sheet which included names and signatures of CSTC-A personnel who attended the inspection. USACE also forwarded this information to CSTC-A.

APPENDIX III - ACKNOWLEDGMENTS

Steven Haughton, Senior Inspection Manager

William Shimp, Senior Auditor

Zeer Hasibullah, Program Analyst

Javed Khairandish, Engineer

Melissa McAllister, Professional Engineer

Wilhelmina Pierce, Professional Engineer

This inspection was conducted
under project code SIGAR-I-035.

SIGAR's Mission

The mission of the Special Inspector General for Afghanistan Reconstruction (SIGAR) is to enhance oversight of programs for the reconstruction of Afghanistan by conducting independent and objective audits, inspections, and investigations on the use of taxpayer dollars and related funds. SIGAR works to provide accurate and balanced information, evaluations, analysis, and recommendations to help the U.S. Congress, U.S. agencies, and other decision-makers to make informed oversight, policy, and funding decisions to:

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- improve management and accountability over funds administered by U.S. and Afghan agencies and their contractors;
- improve contracting and contract management processes;
- prevent fraud, waste, and abuse; and
- advance U.S. interests in reconstructing Afghanistan.

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