

SIGAR

**Special Inspector General for
Afghanistan Reconstruction**

SIGAR 18-63 Inspection Report

**Wardak Prison: Inadequate Department of
State Oversight and Contractor Non-Compliance
Have Increased Safety and Health Risks and
Resulted in Wasted U.S. Funds**



**JULY
2018**

SIGAR

Special Inspector General for Afghanistan Reconstruction

WHAT SIGAR REVIEWED

In 2006, the Department of State's Bureau of International Narcotics and Law Enforcement Affairs (INL) established the Corrections System Support Program to assist the Afghan government in building a safe, secure, and humane prison system that meets international standards and Afghan cultural requirements. While INL initiated its project to both design and build the Wardak prison, located in Wardak province, under this program, the construction was completed under a separate contract.

In March 2006, INL tasked Pacific Architects and Engineers (PAE) to design the Wardak prison. PAE subcontracted this work to Suraya Construction and Production Company (Suraya). Based on the design package, INL sent the American Consulate General's Regional Procurement Support Office (RPSO), in Frankfurt, Germany, a Statement of Work to award a contract to build the prison. The Wardak prison consists of 38 buildings and pieces of supporting infrastructure, such as inmate housing, staff housing, family visitation buildings, guard towers, a security gate, and utilities. In September 2010, RPSO awarded a \$6.8 million firm-fixed-price construction contract to the Afghanistan Rehabilitation & Architecture Organized Company (ARAO). RPSO modified the contract six times, increasing the contract's value to \$7.6 million. On November 18, 2013, INL transferred the Wardak prison to the Afghan Ministry of Interior (MOI) and initiated the 1-year warranty period.

The objectives of this inspection were to determine whether the Wardak prison (1) was designed and constructed in accordance with contract requirements and technical specifications, and (2) is being used and maintained.

July 2018

Wardak Prison: Inadequate Department of State Oversight and Contractor Non-Compliance Have Increased Safety and Health Risks and Resulted in Wasted U.S. Funds

SIGAR 18-63 INSPECTION REPORT

WHAT SIGAR FOUND

During six site visits to the Wardak prison in 2017, SIGAR found 17 deficiencies, consisting of 8 design and 9 construction deficiencies. The design deficiencies resulted primarily because INL did not specify in the task order for the prison's design that PAE and Suraya should follow the International Building Code (IBC) and the Unified Facilities Criteria (UFC), which includes the National Fire Protection Association (NFPA) standards. Most significantly, PAE and Suraya designed the prison without fire doors and frames, smoke detectors, fire extinguishers, emergency lights, and illuminated building exit signage, in violation of the IBC and NFPA. These fire protection systems are critical for the safety of prison staff and inmates. The other design deficiencies SIGAR identified have also created health and safety risks for prison staff and inmates. For example, SIGAR found that PAE and Suraya designed a sewage system that did not have sufficient capacity to manage the volume of sewage produced. As a result, wastewater had overflowed in prison toilets, and raw sewage had collected in standing pools inside the prison complex. Additionally, the prison's design did not specify that the electric water heaters have temperature and pressure relief valves and expansion tanks, or that there be explosion-proof light fixtures and switches in hazardous locations, such as the ammunition room.

SIGAR determined that the construction deficiencies resulted from ARAO not adhering to the contract requirements and technical specifications. For example, SIGAR found that ARAO installed single-walled fuel storage tanks at the prison instead of the required double-walled tanks, and did not attach the required safety markings. Moreover, ARAO constructed the perimeter wall to varying heights, in some places as low as 8.5 feet, which is more than four feet lower than the designed height. The lower wall height reduces the prison's physical security. Due to the lack of contract and payment information required for fixed-fee contracts, SIGAR could not estimate other overpayments for other required material not used or substituted for non-compliant material.

Both the design and construction deficiencies also resulted from INL's inadequate oversight of the project. INL accepted a prison design that did not conform to required standards. In addition, most of the construction deficiencies involved items that the bureau paid for but did not receive or items installed that were of lesser quality and value than the contract required. As a result, INL accepted and transferred the prison to the MOI with deficiencies that were never addressed. Because the warranty period has expired, the U.S. government cannot recoup any of the funds wasted in these items.

SIGAR found that most of the Wardak prison's facilities were being used. As of April 2018, the prison was housing about 300 inmates. However, SIGAR found that two generators installed under the construction contract were not used because, according to prison officials, the fuel was not affordable. SIGAR estimated that INL wasted an estimated \$39,000 on the generators. SIGAR also found that the prison was not being well maintained and had fallen into in a state of disrepair, which could jeopardize the U.S. government's investment in the prison.

WHAT SIGAR RECOMMENDS

SIGAR recommends that the Assistant Secretary of State, INL, work with MOI and Wardak prison officials, who are responsible for the prison's operation and maintenance, to take the following actions and report the results back to SIGAR within 90 days:

- 1. Develop a plan to address the safety deficiencies at the prison that resulted from design and construction non-compliance with the IBC, UFC, and construction contract, specifically, the**
 - a. lack of smoke and fire detection and protection;
 - b. lack of lightning protection;
 - c. inadequate sewage system;
 - d. lack of sufficient mechanical ventilation;
 - e. lack of grounding for electrical systems;
 - f. lack of safety equipment on electric water heaters;
 - g. lack of explosion-proof fixtures in designated locations;
 - h. use of non-laminated, single-glazed windows;
 - i. use of non-detention-grade door hardware; and
 - j. insufficient height of perimeter walls.

- 2. Develop a comprehensive routine maintenance plan for the prison.**

SIGAR received written comments on a draft of this report from INL. INL concurred with both recommendations. With respect to recommendation one, INL stated that it conducted a maintenance needs assessment at the prison and will work with the General Directorate of Prisons and Detention Centers of Afghanistan to address items A through J. With respect to recommendation two, INL stated that a comprehensive routine maintenance plan for the General Directorate of Prisons and Detention Centers of Afghanistan is being developed. INL also stated that the General Directorate of Prisons and Detention Centers of Afghanistan is working to effectively implement the work order plan, which is a component of the comprehensive maintenance plan, on a facility-by-facility basis.



SIGAR

Office of the Special Inspector General
for Afghanistan Reconstruction

July 30, 2018

The Honorable Mike Pompeo
Secretary of State

The Honorable Kirsten D. Madison
Assistant Secretary, Bureau of International Narcotics
and Law Enforcement Affairs

The Honorable John R. Bass
Ambassador to Afghanistan

This report discusses the results of SIGAR's inspection of the Wardak prison located in Wardak province, Afghanistan. The Department of State's Bureau of International Narcotics and Law Enforcement Affairs (INL) initiated this project to design and build the Wardak prison under its Corrections System Support Program. The prison consists of 38 buildings and pieces of supporting infrastructure, such as inmate housing, staff housing, family visitation buildings, guard towers, a security gate, and utilities.

In March 2006, INL tasked Pacific Architects and Engineers (PAE) to design the prison. In September 2010, the Department of State's Regional Procurement Support Office (RPSO) in Frankfurt, Germany, awarded a \$6.8 million firm-fixed-price contract to the Afghanistan Rehabilitation & Architecture Organized Company (ARAO) to build the prison using PAE's design. RPSO modified the contract six times, increasing its value to \$7.6 million and extending the performance period to September 30, 2013. In November 2013, INL accepted the Wardak prison from ARAO and transferred it to the Afghan Ministry of Interior (MOI). This initiated the 1-year warranty period, which ended on November 17, 2014.

We are making two recommendations in this report. We recommend that the Assistant Secretary of State, INL, work with MOI and Wardak prison officials to take the following actions and report the results back to SIGAR within 90 days: (1) develop a plan to address the life and safety deficiencies at the prison that resulted from design and construction non-compliance with the International Building Code, Unified Facilities Criteria, and construction contract, specifically the lack of smoke and fire detection and protection; lack of lightning protection; inadequate sewage system; lack of sufficient mechanical ventilation; lack of grounding for electrical systems; lack of safety equipment on electric water heaters; lack of explosion-proof fixtures in designated locations; use of non-laminated, single-glazed windows; use of non-detention-grade door hardware; and insufficient height of perimeter walls; and (2) develop a comprehensive routine maintenance plan for the prison.

INL provided written comments on a draft of this report, which are reproduced in appendix III. INL concurred with both of our recommendations. With respect to recommendation one, INL stated that it conducted a maintenance needs assessment at the prison and will work with the General Directorate of Prisons and Detention Centers of Afghanistan to address the items we identified. With respect to recommendation two, INL stated that a comprehensive routine maintenance plan for the General Directorate of Prisons and Detention Centers of Afghanistan is in development. INL also stated that the General Directorate of Prisons and Detention Centers of Afghanistan is working to effectively implement the work order plan, which is a component of the comprehensive maintenance plan, on a facility-by-facility basis. INL also provided technical comments, which we incorporated, as appropriate.



SIGAR

Office of the Special Inspector General
for Afghanistan Reconstruction

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

ARAO	Afghanistan Rehabilitation & Architecture Organized Company
FAR	Federal Acquisition Regulation
IBC	International Building Code
INL	Bureau of International Narcotics and Law Enforcement Affairs
MOI	Ministry of Interior
NFPA	National Fire Protection Association
PAE	Pacific Architects and Engineers
RPSO	Regional Procurement Support Office
UFC	Unified Facilities Criteria

In 2006, the Department of State's Bureau of International Narcotics and Law Enforcement Affairs (INL) established the Corrections System Support Program. This program was intended to assist the Afghan government in building a safe, secure, and humane prison system that meets international standards and Afghan cultural requirements. Within the government, the Afghan Ministry of Interior (MOI) is responsible for managing and overseeing the Afghan prison system. While INL initiated its project to both design and build the Wardak prison, located in Wardak province, under this program, the construction was completed under a separate contract.

On March 6, 2006, using an existing contract, INL tasked Pacific Architects and Engineers (PAE), a U.S. company, to design the Wardak prison.¹ PAE sub-contracted the design work to Suraya Construction and Production Company (Suraya), an Afghan company. Suraya, with PAE's oversight, designed the Wardak prison to accommodate 225 male and female inmates. Based on the design package PAE and Suraya developed, INL sent the American Consulate General's Regional Procurement Support Office (RPSO), located in Frankfurt, Germany, a Statement of Work to award a contract to build the prison.

On September 26, 2010, RPSO awarded a \$6.8 million firm-fixed-price contract to the Afghanistan Rehabilitation & Architecture Organized Company (ARAO), an Afghan company, for the prison's construction.² The contract required ARAO to build 38 buildings and pieces of supporting infrastructure, such as inmate housing, staff housing, family visitation buildings, guard towers, a security gate, and utilities.³ On November 1, 2010, RPSO issued the Notice to Proceed to ARAO, initiating a 720-day performance period. RPSO modified the contract six times, increasing the contract's value to \$7.6 million and the performance period to 1,065 days, with a completion date of September 30, 2013. On November 18, 2013, INL accepted the Wardak prison from ARAO and transferred it to the MOI. This initiated the 1-year warranty period, which ended on November 17, 2014.

The objectives of this inspection were to determine whether the Wardak prison (1) was designed and constructed in accordance with contract requirements and technical specifications, and (2) is being used and maintained.

We conducted our work at the Wardak prison in Wardak province and in Kabul, Afghanistan from March 2017 through July 2018, in accordance with the *Quality Standards for Inspection and Evaluation* published by the Council of the Inspectors General on Integrity and Efficiency. Our professional engineers conducted the engineering assessment in accordance with the National Society of Professional Engineers' *Code of Ethics for Engineers*. Appendix II provides a detailed description of our scope and methodology.

INL'S INADEQUATE OVERSIGHT AND CONTRACTOR NON-COMPLIANCE CONTRIBUTED TO DESIGN AND CONSTRUCTION DEFICIENCIES AT THE WARDAK PRISON

We made six site visits to the Wardak prison from April through May 2017, and identified 17 deficiencies, consisting of 8 design and 9 construction deficiencies. The design deficiencies resulted primarily because INL did not specify in the task order for the prison's design that PAE and Suraya should follow the International Building Code (IBC) and Unified Facilities Criteria (UFC). The construction deficiencies resulted from ARAO not adhering to the contract requirements and technical specifications.⁴ Some of the design and construction

¹ INL awarded task order number SAQMP0D06FAZ96 under contract number SLMAQM-04-C-0033.

² The contract number is SGE500-10-C-0030.

³ Appendix I lists each of the buildings and pieces of infrastructure the contract required ARAO to build.

⁴ The International Code Council developed the IBC in 1997 to serve as a worldwide building code standard. The UFC strives to unify all technical criteria and standards pertaining to planning, design, construction, and operation and maintenance of real property facilities. At least 12 U.S. government departments and agencies, including the Department of State, cite the UFC in construction contracts.

deficiencies present health and safety hazards for prison staff and inmates. INL failed to identify the deficiencies due to inadequate oversight and transferred it to the MOI.

INL's Task Order for the Prison's Design Did Not Specify That PAE and Suraya Should Adhere to the IBC and Other Standards

We found that PAE and Suraya's design did not fully comply with the IBC, UFC, and other standards, including the National Fire Protection Association (NFPA), the International Mechanical Code, and the International Plumbing Code, that the Department of State follows when designing construction projects. This happened because INL's task order did not require PAE and Suraya to comply with these standards. Nonetheless, INL wrote in the Statement of Work for the construction contract that the Wardak prison's design adhered to the IBC and the UFC. We found that the design omitted items such as fire doors, smoke detectors, fire extinguishers, emergency lights, and other fire protection and detection systems in buildings with occupants. Due to its inadequate oversight during the design process, INL failed to identify the design deficiencies and accepted a deficient prison design. The design deficiencies we identified have the potential to expose prison staff and inmates to safety and health risks resulting from hazardous situations, such as a fire, a lightning storm, or an explosion.

The Prison's Design Did Not Incorporate the Results of a Life Safety Analysis

The NFPA requires that life safety factors be analyzed and included in the design of occupied buildings. The life safety analysis should determine the number of building exits, travel distances to exits, and fire area separations. Although we requested it, INL could not provide us with documentation showing that PAE and Suraya considered a life safety analysis in its design of the Wardak prison. As a result, prison staff and inmates could be at risk during an emergency, such as a fire.

The Prison Lacks Smoke and Fire Detection and Protection Systems

The IBC requires occupied buildings to have steel fire and smoke doors, smoke detectors, frames that automatically close when smoke is detected, fire extinguishers, emergency lights, and continuously illuminated building exit signs. PAE and Suraya's design package did not include these detection and protection items, which places prison staff and inmates at risk should a fire occur.

The Prison's Buildings Lack Lightning Protection Systems

The NFPA requires that a lightning protection system be installed on each occupied building. However, PAE and Suraya's design package did not include a lightning protection system on any prison buildings occupied by staff or inmates. This deficiency increases the risk of a fire or explosion if the buildings are struck by lightning.

The Prison's Sewage System Was Not Designed to Manage the Volume of Sewage Produced

The UFC sets requirements for the design of sewage systems, including requirements that the design include an independent geo-technical report recording the results of soil condition analyses and soil penetration tests to determine the location of septic tanks and drain fields.⁵ The UFC requires the sewage system to consist of pipes from the sewage source to septic tanks that collect and hold the sewage. After collection, additional pipes carry liquid waste to underground drain fields. The drain fields should be located in an area where the soil allows for dispersion and diffusion of the effluent. Pipes must be of a size sufficient to carry the volume of liquid waste produced without backing up to the source.

We found that the septic tanks did not contain all of the prison's raw sewage and saw that the raw sewage had spilled over into open ditches and dry wells. This indicates that the sewage system did not have enough

⁵ A drain field is a network of perforated pipes laid in gravel-filled trenches or beds to allow sewage to dissipate into the earth.

capacity to carry the volume of sewage produced. Further, we found that the sewage system’s design placed the septic tank and drain field in a different area than was specified in the geo-technical report. As a result, wastewater has overflowed in prison toilets, and raw sewage has collected in standing pools inside the prison compound. This situation has created unsanitary and unhealthy conditions for prison staff and inmates.

The Prison Buildings Lack Sufficient Mechanical Ventilation

The International Mechanical Code states that occupied buildings should have natural or mechanical ventilation to ensure that there is adequate airflow and exchange. However, we found that the prison design did not provide for any mechanical ventilation systems within the prison complex. As a result, mold is growing on the ceilings and walls of staff and inmate work and living spaces (see photos 1 and 2). This mold can negatively affect the health of staff and inmates.

Photo 1 - Ceiling Mold at the Inmate Housing Clinic Building



Source: SIGAR, May 2, 2017

Photo 2 - Ceiling and Wall Mold at the Juvenile Housing Building



Source: SIGAR, May 2, 2017

The Prison’s Electrical Systems Lack Grounding

The NFPA establishes requirements for electrical systems to be designed with grounding, which is a path created for electric current to pass safely to the ground, bypassing humans and equipment. Power panels, circuits, circuit breakers, and exposed non-current carrying metallic parts in all buildings should be grounded. We found that the prison’s design package did not specify that all electrical equipment and metal pipes be connected to grounding rods.⁶ Further, the design drawings did not indicate whether the electrical systems are grounded and did not identify these locations for periodic testing. Due to the lack of grounding, the electrical current will not transfer to the ground if a short circuit occurs, presenting a safety hazard to prison staff and inmates.

The Prison’s Electric Water Heaters Lack Required Safety Equipment

The International Plumbing Code requires electric water heaters to have temperature and pressure relief valves and expansion tanks. Temperature and pressure relief valves are safety devices that redirect water to expansion tanks when pressure or heat in water heaters exceeds a set limit. We found that the design drawings did not include these safety features. As a result, ARAO did not install temperature and pressure relief

⁶ A grounding rod is a metal rod driven into the earth to redirect electricity into the ground.

valves and expansion tanks in the prison's electric water heaters. Without relief valves and expansion tanks, the prison's pressure could build up in the water heaters and cause them to explode, resulting in damage to water pipes and injury to prison staff and inmates.

The Prison Does Not Contain Explosion-Proof Fixtures in Designated Locations

The NFPA requires the use of laboratory-rated explosion-proof switches and devices in hazardous locations. Laboratory-rated explosion-proof switches and devices are intended to contain an explosion originating from within the switches or devices and withstand the effects of an exterior explosion. For the Wardak prison, this requirement applies to light fixtures, sockets, and switches in the ammunition room in the storage building, in the generator building, and in the fuel tank shed. We found that the design drawings did not include explosion-proof fixtures in these areas, and during our site visits, we did not find any explosion-proof fixtures installed in them. As a result, explosive vapors could build in those areas, increasing the risk of explosion when exposed to an open flame or spark. This explosion could cause injury or death to prison staff and inmates.

ARAO Did Not Comply with Contract Requirements and Technical Specifications When Constructing the Wardak Prison, Resulting in Safety and Health Risks and Wasted U.S. Funds

During our 2017 site visits, we identified nine construction deficiencies where ARAO did not adhere to contract requirements or technical specifications during the Wardak prison's construction. For three of the deficiencies, ARAO substituted items the contract required with less expensive items. For example, ARAO installed non-laminated, single-glazed windows throughout the prison instead of the required laminated, double-glazed windows. In another example, ARAO installed ordinary, less durable hardware, such as locks and door handles, throughout the prison rather than the required detention-grade hardware. For the six remaining deficiencies, ARAO did not install the required items at all. Similar to the design deficiencies, some of these construction deficiencies could jeopardize the health and safety of prison staff and inmates.

These construction deficiencies have also resulted in wasted U.S. funds. We could not determine the overall amount of waste because the construction contract was firm-fixed-price and did not break down the costs of individual items. Further, INL did not provide us with the cost data for each of these items as we requested. For example, we found ARAO installed two single-walled fuel storage tanks at the prison instead of double-walled tanks as required by the contract. However, the U.S. government cannot recoup any of the funds wasted on these items because the warranty period ended on November 2014. Much like the design deficiencies, INL failed to identify these construction deficiencies due to inadequate oversight and ultimately accepted and transferred the facility to the MOI.

ARAO Installed Single-Walled Fuel Storage Tanks That Had No Safety Markings, Instead of Double-Walled Tanks

The technical specifications in the Wardak prison contract required the aboveground fuel storage tanks to be insulated and double-walled to comply with the Underwriters Laboratories' standards, and to display approval stamps showing that the tanks were built to those standards. The technical specifications also required the storage tanks to be marked with warning signs, such as "FLAMMABLE," "COMBUSTIBLE," and "NO SMOKING." The specifications further required the tank's manufacturer to have at least 5 years of experience in tank manufacturing and to be certified by the International Fire Code Institute to install storage tank equipment. However, we found that ARAO installed single-walled tanks that did not have the required safety markings, approving information, or manufacturer labels. Further, ARAO did not provide the required documentation of the manufacturer's experience and certification to install the tanks. ARAO's installation of non-compliant fuel storage tanks has created a safety hazard for prison staff and inmates.

ARAO Installed Non-Laminated, Single-Glazed Rather Than Laminated, Double-Glazed Windows in the Prison

The contract's technical specifications required ARAO to install laminated, double-glazed glass windows throughout the Wardak prison. However, we found that ARAO installed non-laminated, single-glazed glass windows instead. Laminated, double-glazed glass consists of two glass panes with a vinyl interlayer that holds the glass together when it shatters, thus limiting the amount of glass fragments. Laminated, double-glazed glass windows also provide heat and sound insulation. When shattered, non-laminated, single-glazed glass windows produce jagged fragments that are safety hazards and could be used as weapons.

ARAO Did Not Install Detention-Grade Door Hardware throughout the Prison

The contract's technical specifications required ARAO to install detention-grade hardware—specifically, locks, latches, handles, and hinges—on all doors throughout the Wardak prison. However, we found that ARAO installed ordinary, less durable door hardware, and we saw broken hardware throughout the prison (see photos 3 and 4). Ordinary, non-detention-grade door hardware breaks more easily than detention-grade hardware, and increases replacement costs. In addition, the broken hardware could be used as improvised weapons.

Photo 3 - Broken Door Hardware in the Dining Hall Building



Source: SIGAR, May 30, 2017

Photo 4 - Broken Door Hardware in the Family Visitation Building



Source: SIGAR, May 2, 2017

ARAO Did Not Install Corner Beads for Exterior Walls and Interior Corners or Expansion and Control Joints for Plastered Surfaces

The contract's technical specifications required ARAO to install corner beads for the exterior walls and internal exposed corners, and expansion joints and control joints for the plastered surfaces.⁷ However, ARAO did not install these items. As a result, we found cracking, peeling, and crumbling plaster on interior and exterior walls of all buildings throughout the prison. Cracking, peeling, and crumbling plaster has exposed the walls and reinforced concrete structural elements of the buildings to wind, rain, and other weather conditions. In addition to being unsightly, this exposure could eventually degrade the structural integrity of the buildings.

⁷ Corner beads are light gauge metal strips that are applied to finish dry wall and plaster wall angles, and provide strength to the plastered area and allow mortar to remain in place under impact. Expansion and control joints are metal strips placed between materials to allow for movement. This helps to keep the walls from cracking, peeling, and crumbling.

ARAO Did Not Install Control Valves in the Prison's Plumbing System

The contract's technical specifications required ARAO to install three control valves—a non-return valve, gate valve, and air relief valve—to assure proper functioning of the prison's plumbing system. The non-return valve prevents the backflow of water from the supply pipe to the water source, the gate valve controls the flow of water through the system, and the air relief valve controls the water pressure in the system. We found that ARAO did not install any of these three control valves in the prison's plumbing system, which could decrease the system's functionality.

ARAO Did Not Install Expansion and Control Joints in Prison Building Floors and Walls

The contract's technical specifications required ARAO to install expansion and control joints in the floors and walls of all buildings the Wardak prison. These joints absorb stresses resulting from expansion and contraction due to changes in the concrete's temperature. We found that ARAO did not install expansion and control joints in any of the prison buildings. As a result, cracks have developed in multiple buildings, such as the male detention building and the industrial building (see photos 5 and 6). These cracks can multiply over time and weaken the integrity of the walls and floors, creating both unsightly and unsafe conditions.

Photo 5 - Cracks in the Male Detention Building's Floor



Source: SIGAR, May 2, 2017

Photo 6 - Cracks in the Industrial Building's Wall



Source: SIGAR, May 2, 2017

ARAO Did Not Insulate the Exposed Hot and Cold Water Pipes

Although the contract's technical specifications required insulation on all exposed hot and cold water pipes throughout the Wardak prison, we found that ARAO did not install any. When hot water pipes are not insulated, the temperature of the water drops as it travels to the point of delivery, resulting in an inefficient use of energy. Further, uninsulated hot water pipes are a burn hazard to staff and inmates. Uninsulated cold water pipes can burst in freezing temperatures, thus disrupting water delivery and requiring expensive repairs.

ARAO Did Not Install a Watertight Building Roof Assembly

The contract's technical specifications required ARAO to install watertight building roof assemblies. However, we found that ARAO did not install these assemblies on buildings throughout the facility. As a result, water is penetrating the roof slabs and staining the ceilings (see photos 7 and 8). In addition, because the water is accumulating, the ceilings are staying moist, causing mold to grow in some places and creating a health hazard for building occupants. Wet conditions can also promote corrosion of the roof slabs' concrete steel reinforcing bars.

Photo 7 - Water Damage to the Male Detention Building's Ceiling



Source: SIGAR, May 2, 2017

Photo 8 - Water Damage to the Female Detention Building's Ceiling



Source: SIGAR, May 2, 2017

ARAQ Did Not Construct the Prison's Perimeter Walls to the Required Height

Due to ambiguity in the design package, ARAQ requested clarification from INL regarding the height of the prison's perimeter. In response, INL specified that ARAQ should construct the wall to a height of 13.1 feet high, as measured from the ground. Subsequently, INL modified the contract to lower the height to 9.8 feet. Based on our measurements, we found that ARAQ constructed the perimeter wall to varying heights with segments measuring 10.8 feet, 9.5 feet, and 8.5 feet. The lower wall height reduces the prison's physical security, especially considering that INL removed other perimeter protection measures—a boundary chain link fence and an anti-vehicle ditch—from the contract. In September 2017, a senior prison official told us the insufficient height of the perimeter wall was his biggest concern in operating the facility.

INL Failed to Identify Prison Design and Construction Deficiencies Due to Inadequate Oversight

The Federal Acquisition Regulation (FAR) states that the government should perform quality assurance, as necessary, to determine whether supplies or services conform to contract requirements.⁸ The FAR also requires the government to perform quality assurance at sub-contractor facilities, when necessary. However, the FAR does not specify what quality assurance activities the government should employ in the oversight process. Rather, the FAR allows individual departments and agencies to determine their own quality assurance processes and procedures.

We found that INL did not perform adequate oversight of PAE and Suraya while they were designing the Wardak prison. Although INL stated that it conducted quality assurance reviews at the 15 percent, 35 percent, and 100 percent work completion stages of the design, the bureau did not provide us with documentation of those reviews as we requested. As a result, we could not determine what, if any, changes or deviations INL approved while the design was in progress or at design acceptance. Instead, we found that INL accepted a prison design that did not conform to IBC, UFC, or Underwriters Laboratories standards. PAE and Suraya could have corrected these deficiencies before final design acceptance if INL had discovered them during the design

⁸ See FAR, Section 46-4, Government Contract Quality Assurance.

process. As a result, and as discussed earlier in this report, the Wardak prison was constructed with eight design deficiencies that have created safety and health risks for prison staff and inmates.

We also found that INL did not perform adequate oversight during the prison's construction. The FAR states that the government should prepare a quality assurance plan in conjunction with preparing the Statement of Work, and that the plan should specify all work requiring oversight and the oversight method the government will utilize. We found that INL did not have a quality assurance plan for Wardak prison construction. INL stated that it performed some monitoring and inspections during the prison's construction, and employed Afghan nationals to perform some construction oversight. When we inquired about oversight reports, INL officials told us that the Afghan inspectors did not provide regular reports. The INL officials stated that instead, the inspectors communicated and coordinated with INL's engineering team directly via telephone, e-mail, and in-person.

However, given the construction deficiencies described earlier in this report, this oversight was not adequate because INL paid for items that were of lesser value than what was required, such as the single-walled fuel storage tanks installed in place of the double-walled fuel storage tanks, and for items, such as pipe insulation, that it never received. As a result, INL accepted and transferred the prison to the MOI with deficiencies that were never addressed. After the prison's completion, INL took the initiative to establish formal guidelines and standard operating policies and procedures for implementing a quality assurance process that went into effect on January 4, 2016.

MOST OF THE WARDAK PRISON WAS BEING USED, BUT THE PRISON WAS NOT WELL MAINTAINED

As of April 24, 2018, Wardak prison housed about 300 inmates. We observed most buildings, such as the male and female detention buildings, and the administrative, medical, and kitchen buildings, were being used. However, we identified some vacant buildings and unused infrastructure, and other buildings that were not being used for their intended purposes. For example, we found that the juvenile housing building was vacant, two family visitation areas were being used for storage and trash containment, one male staff housing building was being used for office space and a prayer room, and one female staff housing building was being used for office space. We also found that the two generators, which were installed under the construction contract to serve as the prison's primary power source, were not in use. Prison officials told us that because generator fuel was not affordable, the MOI connected the prison to the national power grid after project turnover. We requested from INL data on the generators' costs but did not receive any. Instead, we estimated the cost of the generators on the Kabul market. We found a local supplier that sold a similarly powered generator for \$19,500. Based on this, we estimated that INL wasted \$39,000 for two generators at the Wardak prison that are not being used.

We also found that the Wardak prison is not being adequately maintained. For example, we found broken plumbing fixtures, missing floor tiles, broken electrical fixtures, and exposed electrical wiring (see photos 9 and 10). According to a senior prison official, prison personnel do not conduct routine maintenance. A senior prison official told us that INL made provisions to maintain the prison for 6 months after project turnover. However, the MOI is now responsible for the prison's maintenance. The official also stated that he does not have enough maintenance staff and needs at least four personnel to cover the necessary mechanical, plumbing, electrical, and structural maintenance of the prison.

Photo 9 - Broken Toilet in the Guard Quarters Building



Source: SIGAR, May 9, 2017

Photo 10 - Broken Light Fixtures in the Guard Quarters Building



Source: SIGAR, May 9, 2017

CONCLUSION

Although the Wardak prison is complete, it has multiple deficiencies that resulted from INL's poor oversight of the project from design through construction and ARAO's non-compliance with contract requirements. These deficiencies, such as the lack of fire protection systems, an inadequately designed sewage system, and the perimeter wall that is shorter than required, have created unsanitary, unhealthy, and unsafe conditions for prison staff and inmates. As a result, INL wasted at least \$39,000 in U.S. funds for required materials the contractor did not install, substituted for non-compliant material of lesser quality, or could not use based on available contract and payment information. These deficiencies went undetected, and INL accepted and transferred the prison to the MOI. However, the U.S. government cannot recoup the price difference because the project was accepted and transferred to the Afghan government and the warranty period expired more than 3 years ago.

Despite these deficiencies, the Wardak prison was being used and housed about 300 inmates as of April 2017. The MOI is now responsible for maintaining the prison, but it appears that there are not enough staff assigned to carry out this task. As a result, the prison is not well maintained and has fallen into a state of increasing disrepair, which could jeopardize the U.S. government's investment in its design and construction. Although the Wardak prison is no longer the U.S. government's responsibility, INL could draw upon its knowledge and experience to provide guidance to the MOI on how to address the deficiencies that have life and safety implications, and improve the prison's maintenance activities.

RECOMMENDATIONS

To ensure the safety of Wardak prison staff and inmates, and protect the U.S. government's investment in the prison, we recommend that the Assistant Secretary of State, INL, work with MOI and Wardak prison officials to take the following actions and report the results back to SIGAR within 90 days:

- 1. Develop a plan to address the life and safety deficiencies at the prison that resulted from design and construction non-compliance with the IBC, UFC, and construction contract, specifically the**
 - a. lack of smoke and fire detection and protection;**
 - b. lack of lightning protection;**
 - c. inadequate sewage system;**

- d. lack of sufficient mechanical ventilation;
 - e. lack of grounding for electrical systems;
 - f. lack of safety equipment on electric water heaters;
 - g. lack of explosion-proof fixtures in designated locations;
 - h. use of non-laminated, single-glazed windows;
 - i. use of non-detention-grade door hardware; and
 - j. insufficient height of perimeter walls.
2. Develop a comprehensive routine maintenance plan for the prison.

AGENCY COMMENTS

We provided a draft of this report to INL for review and comment. INL provided written comments, which are reproduced in appendix III. INL concurred with both of our recommendations. INL also provided technical comments, which we incorporated, as appropriate.

With respect to recommendation one, INL stated that it conducted a maintenance needs assessment at the prison and will work with the General Directorate of Prisons and Detention Centers of Afghanistan to address items A through J. With respect to recommendation two, INL stated that a comprehensive routine maintenance plan for the General Directorate of Prisons and Detention Centers of Afghanistan is in development. INL also stated that the General Directorate of Prisons and Detention Centers of Afghanistan is working to effectively implement the work order plan, which is a component of the comprehensive maintenance plan, on a facility-by-facility basis

APPENDIX I - BUILDINGS AND SUPPORTING INFRASTRUCTURE AT THE WARDAK PRISON

The Wardak prison consists of 38 buildings and pieces of supporting infrastructure. Table 1 lists the buildings and supporting infrastructure and the quantity for each.

Table I - Wardak Prison Buildings and Supporting Infrastructure

Building/Supporting Infrastructure	Quantity
Male Detention Housing	2
Visitation Building	2
Medical Clinic	2
Administrative Building	3
Storage Building	1
Industrial Building	1
Vocational Building	1
Kitchen Building	2
Dining Facility	1
Female Staff Housing	1
Female Detention Housing	1
Juvenile Detention Housing	1
Male Staff Housing	1
Guard Quarters Building	1
Generator Building	1
Transformer Building	1
Water Well and Booster Building	1
Staff Parking	1
Visitor Parking	1
Secure Vehicle Parking	1
Guard Tower	5
Trash Point	1
Boom Gate	1
Sanitary/Septic Tank Area	1
Sports Area	1
Checkpoint	2
Fuel Tank Shed	1
Total	38

Source: INL

APPENDIX II - SCOPE AND METHODOLOGY

This report provides the results of SIGAR's inspection of the Wardak prison. For this inspection, we assessed whether the Wardak prison (1) was designed and constructed in accordance with contract requirements and technical specifications, and (2) is being used and maintained. Specifically, we

- reviewed contract documents, design submittals, site visit reports, building codes, and other relevant project documentation;
- conducted engineering assessments of the project drawings and construction methods used;
- interviewed U.S. and Afghan government officials concerning the project's construction and maintenance; and
- made six site visits to the prison from April through May 2017.

We did not rely on computer-processed data in conducting this inspection. However, we considered the impact of compliance with laws and fraud risk.

In December 2014, SIGAR entered into a cooperative agreement with Afghan civil society partners. Under this agreement, our Afghan partners conduct specific inspections, evaluations, and other analyses. In this regard, Afghan engineers inspected the Wardak prison during six site visits from April through May 2017. We developed a standardized engineering evaluation checklist covering items required by the contract and design/specification documents. Our checklist required our partners to analyze the contract documents, scope of work, technical specifications, and design drawings.

We compared the information our Afghan civil society partners provided to accepted engineering practices and relevant standards, regulations, laws, and codes for quality and accuracy. In addition, as part of our monitoring and quality control process, we;

- met with the Afghan engineers to ensure that the approach and planning for the inspection were consistent with the objectives of our inspection and the terms of our cooperative agreement;
- attended periodic meetings with our partners, and conducted our normal entrance and exit conferences with agency officials;
- discussed significant inspection issues with them;
- referred any potential fraud or illegal acts to SIGAR's Investigations Directorate, as appropriate;
- monitored our partners' progress in meeting milestones and revised contract delivery dates as needed; and
- conducted oversight of them in accordance with SIGAR's policies and procedures to ensure that their work resulted in impartial, credible, and reliable information.

We conducted our work at the Wardak prison in Wardak province and in Kabul, Afghanistan from March 2017 through June 2018. 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 conducted this inspection under the authority of Public Law No. 110-181, as amended, and the Inspector General Act of 1978, as amended.

APPENDIX III - COMMENTS FROM THE DEPARTMENT OF STATE'S BUREAU OF INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT AFFAIRS



United States Department of State

Washington, D.C. 20520

June 25, 2018

Ms. Gabriele A. Tonsil
Assistant Inspector General for Audits and Inspections
Special Inspector General for Afghanistan Reconstruction
1550 Crystal Drive, Suite 900
Arlington, VA 22202

Dear Ms. Tonsil:

The Department of State welcomes the opportunity to comment on this draft Special Inspector General for Afghanistan Reconstruction (SIGAR) report entitled, "Wardak Prison: Inadequate Government Oversight and Contractor Non-Compliance Have Increased Safety and Health Risks and Resulted in Wasted U.S. Funds" (dated June 2018). The Department respects SIGAR's role in safeguarding U.S. taxpayer investment, and we share your goals of implementing programs free from waste, fraud, and abuse. INL notes, however, that while there are sustainability risks associated with this foreign assistance project, some of the risk descriptions in the draft report amplify, if not exaggerate the probability for some risks to occur. Please see the Technical Corrections attachment for specific concerns for your consideration prior to publication.

Responses to Recommendations

Recommendation 1: Develop a plan to address the health and safety deficiencies at the prison that resulted from design and construction non-compliance with the IBC, UFC and construction contract, specifically the:

- A. Lack of smoke and fire detection;
- B. Lack of lightning protection;
- C. Inadequate sewage system;
- D. Lack of sufficient mechanical ventilation;
- E. Lack of grounding for electrical systems;
- F. Lack of safety equipment and electric water heaters;
- G. Lack of explosion-proof fixtures in designated locations;
- H. Use of non-laminated, single glazed windows;

UNCLASSIFIED

- I. Use of non-detention-grade door hardware; and
- J. Insufficient height of perimeter walls.

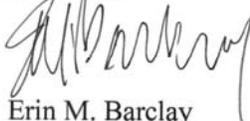
INL Response (June 2018): INL agrees with this recommendation. INL conducted a maintenance needs assessment at the facility and will work with the General Directorate of Prisons and Detention Centers of Afghanistan (GDPDC) to address items A-J.

Recommendation 2: Develop a comprehensive routine maintenance plan for the prison.

INL Response (June 2018): INL agrees with this recommendation. A comprehensive routine maintenance plan for GDPDC, including Wardak Prison, is in development. Meanwhile, the GDPDC is working to effectively implement the work order plan, which is a component of the comprehensive maintenance plan, on a facility-by-facility basis. INL continues to provide facilities maintenance training and advising as allowable.

The Department of State appreciates SIGAR's thorough examination of U.S. foreign assistance programming in Afghanistan's corrections sector. INL looks forward to continuing to work with SIGAR and other relevant authorities on these issues.

Sincerely,



Erin M. Barclay
Executive Director
Bureau of International
Narcotics and Law
Enforcement Affairs

Attachment:
Technical Corrections

APPENDIX IV - ACKNOWLEDGEMENTS

Steven Haughton, Senior Inspection Manager

Michael Kamin, Inspector-in-Charge

Abdul Rahim Rashidi, Program Analyst

Yogin Rawal, Professional Engineer

Aziz Rahman Zaki, Engineer

This inspection was conducted under
project code SIGAR-I-042.

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- improve effectiveness of the overall reconstruction strategy and its component programs;
- 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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