SIGAR

Special Inspector General for Afghanistan Reconstruction

SIGAR 16-48 Inspection Report

Bagrami Industrial Park: Lack of Adherence to Contract Requirements Left this \$5.2 Million Park without Adequate Water Supply and Sewer Collection and Treatment Systems



JULY **2016**



July 26, 2016

The Honorable Gayle E. Smith Administrator, U.S. Agency for International Development

Mr. Herbert B. Smith
USAID Mission Director for Afghanistan

This report discusses the results of SIGAR's inspection of Bagrami Industrial Park in Kabul province, Afghanistan. The U.S. Agency for International Development (USAID) funded the design and construction of this \$5.2 million park. We found that the contractor, Technologists, Inc. (TI), did not build the industrial park according to contract requirements. As a result, the park lacks adequate water and sewer collection and treatment systems. Further, although TI installed a storm drainage system, TI did not properly design the system to capture the large volume of rain water generated by man-made surfaces, such as roofs, built during the park's construction. We also found that at the time of our July 2015 site inspection, Bagrami Industrial Park was being used, with 27 out of a possible 32 businesses occupying the park and employing about 700 Afghans. During our follow-up site inspection on June 12, 2016, we noted that the 27 businesses were still operating; however, the number of Afghans employed had decreased to about 500 workers.

In commenting on a draft of this report, USAID stated that at the end of the contract, it accepted Bagrami Industrial Park "as-is" with a functional water supply and sewer system. Because it accepted the park, the agency asserts that it can no longer take action against TI to obtain a refund for the park's water supply and sewer collection and treatment systems that the contractor was paid for, but never properly constructed. Since no further action can be taken to either correct the defects or obtain a refund, we removed the recommendation from the report. USAID's comments are reproduced in appendix II.

This is the final in a series of reports on our inspections of the construction of three industrial parks throughout Afghanistan. We reported on our inspections of Gorimar Industrial Park in Balkh province and Shorandam Industrial Park in Kandahar province in January and April 2015, respectively.

SIGAR conducted this inspection under the authority of Public Law No. 110-181, as amended; 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

On May 24, 2004, the U.S. Agency for International Development (USAID) awarded a \$10 million contract to Technologists, Inc. (TI), a U.S. company, for the development of three industrial parks in Afghanistan: Bagrami Industrial Park in Kabul province, Gorimar Industrial Park in Balkh province, and Shorandam Industrial Park in Kandahar province. Figure 1 shows the location of the three industrial parks. These industrial parks were being built to promote economic growth and to create employment opportunities for the local population. After

11 modifications, the contract's value increased to \$21.1 million.

The contract called for TI to oversee the solicitation and bids for the design and construction of the three industrial parks. However, the third contract modification added a requirement for TI to build the infrastructure for the parks, in addition to overseeing the solicitations and bids. The infrastructure at the parks included (1) a power plant and electrical distribution system, (2) a water supply system, (3) a sewer collection and treatment system, (4) paved roads, (5) a communications system, and (6) flood channels.³

We reported on our inspections of Gorimar Industrial Park and Shorandam Industrial Park in January and April 2015, respectively.⁴ This inspection focuses on Bagrami

Figure 1 - Location of the Three Industrial Parks in Afghanistan



Source: SIGAR analysis

Industrial Park, which sits on 22 acres of government-owned land and is located about 7.5 kilometers east of Kabul on the road to Bagrami Village.⁵ Bagrami Industrial Park was designed as a secure location with 34 sites for Afghan entrepreneurs to establish businesses. The park cost \$5.2 million and opened in October 2005. As a result of some missing documents, including the record of final payment, USAID could not tell us when the

¹ An industrial park is an area zoned for industrial development. These three industrial parks were intended to provide entrepreneurs with a place where they could (1) enter risky new markets with reduced financial exposure; (2) forego delays related to site acquisition, zoning, and permitting; (3) move directly into fully functional facilities; (4) locate facilities that share supplies, customers, and service providers; and (5) reduce up-front investments for land, buildings, and architecture/engineering services.

² The contract number is GS10F-0132N.

³ The contract documents use the terms flood channel, storm runoff, and storm drainage when referring to a storm water management system.

⁴ See SIGAR, Gorimar Industrial Park: Lack of Electricity and Water Have Left This \$7.7 Million U.S.-Funded Industrial Park Underutilized by Afghan Businesses, SIGAR 15-30-IP, January 27, 2015; and SIGAR, Shorandam Industrial Park: Poor Recordkeeping and Lack of Electricity Prevented a Full Inspection of this \$7.8 Million Facility, SIGAR 15-50-IP, April 17, 2015

⁵ Although the Afghan name for the park is Juma Mohammad Mohammadi Industrial Park, the contract documents refer to the park as Bagrami Industrial Park.

park was completed or when the park was transferred to the Afghanistan Investment Support Agency (AISA), the Afghan government agency responsible for managing all industrial parks in Afghanistan.⁶

The objectives for our inspection of Bagrami Industrial Park were to determine whether (1) construction was completed in accordance with contract requirements and applicable construction standards, and (2) the industrial park was being used.

We conducted our work in Bagrami and Kabul, Afghanistan, from February 2015 through July 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 engineer 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.

BAGRAMI INDUSTRIAL PARK WAS NOT CONSTRUCTED ACCORDING TO CONTRACT REQUIREMENTS AND, AS A RESULT, LACKS ADEQUATE WATER SUPPLY AND SEWER COLLECTION AND TREATMENT SYSTEMS

We visited Bagrami Industrial Park on July 15, 2015, and found that some of the infrastructure components—such as the power plant, electrical and water distribution systems, communications system, guard house,

roads, and sidewalks-had been completed. We did not observe any major construction problems with these components. Although we found cracks in the park's roadways and sidewalks, we could not determine whether they were due to poor workmanship or lack of maintenance during the 10 years that the park has been operating. In addition, we found that the telecommunications system had been properly installed but had never been made operational. The contract documents did not specify who was responsible for connecting the system to a provider source outside of the park. We also found that the water supply and sewer collection and treatment systems had not been constructed according to contract requirements. Further, although TI installed a storm drainage system, TI did not properly design the system to capture the volume of rain water generated by man-made surfaces, such as building roofs. During our follow-up site inspection on June 12, 2016, we noted that the problems with the

Photo 1 - Entrance to Bagrami Industrial Park



Source: SIGAR, June 12, 2016

water supply and sewer collection and treatment systems still existed. Photo 1 shows the entrance to Bagrami Industrial Park.

Because USAID had limited documentation available for the project at the time of our inspection, we were unable to assess the extent to which USAID provided the required oversight of the project. However, per the Federal Acquisition Regulation Subpart 4.8, "Government Contract Files," USAID was no longer required to maintain documentation for the project.⁷

⁶ Our inspections of the Gorimar and Shorandam Industrial Parks revealed similar instances of missing contract documents.

⁷ Federal Acquisition Regulation Subpart 4.8, "Government Contract Files," states that agencies are required to retain contract documentation for 6 years after final payment. Although USAID could not provide a record of its final payment to

The Water Supply System Was Not Completed

During our inspection, we found that TI had only partially completed Bagrami Industrial Park's water supply system. According to the contract, TI was required to install a water supply system consisting of (1) water wells, (2) a well house, (3) a pump house with two booster pumps to provide adequate water pressure for industrial processes and fire protection, (4) underground pipes to distribute the water to each building site, (5) two reservoir tanks to store water, and (6) a water treatment system to ensure safe drinking water. The contract also required TI to install five fire hydrants throughout the park. We found that none of these components, except for the underground water distribution pipes and the park's fire hydrants, had been installed. USAID officials could not explain to us why the water supply system had not been completed.

Due to the absence of a completed water supply system, the park did not have its planned on-site water source. Instead, according to AISA officials, Bagrami Industrial Park Union representatives negotiated an agreement with the Ministry of Finance to purchase water from a local textile factory.⁸ The factory's water wells are located almost 2 miles from the industrial park. The water is pumped from a hillside tank through the local residential area and then to the industrial park.

The Sewer Collection and Treatment System Was Not Built

During our inspection, we found that TI did not construct a sanitary sewer collection and treatment system at the park. The contract required the park's sanitary collection and treatment sewer system to consist of pipes to collect the wastewater from each business site and transport it to a treatment pond and then to a separate

holding pond. However, TI's submitted design consisted of pipes leading to communal septic tanks, which do not allow the sewage to be treated as required. A U.S. Army Corps of Engineers architect who reviewed the industrial park project's construction documents, including final drawings and technical specifications, stated in a January 2005 email to U.S. Embassy personnel and others that the project appeared to be well designed. However, the architect acknowledged that his office did not have a civil engineer available to review the project. Further, USAID contracting officials could not tell us why TI did not build the required sanitary sewer collection and treatment system, or why a civil engineer was not consulted to review the final drawings or technical specifications.

We found that in lieu of the required sanitary sewer collection and treatment system, business owners installed small gravity absorption septic tanks in the ground when they developed their business sites. Photo 2 shows the lid

Photo 2- Lid Covering a Gravity Absorption Septic Tank



Source: SIGAR, July 15, 2015

the contractor, it is reasonable to believe that the payment occurred 6 years prior to our inspection, given that the park opened in October 2005.

⁸ The Bagrami Industrial Park Union was established in 2009. Its responsibilities include operating and maintaining the park, and resolving issues between business owners and the Afghan government. At the time of our inspection the union had 18 members, including two vice-presidents, managers, security guards, plumbers, an electrician, gardeners, and street cleaners.

⁹ USAID requested that the U.S. Army Corps of Engineers review and provide an assessment of the final design and specifications package for the Bagrami Industrial Park. The U.S. Army Corps of Engineers was not responsible for the construction of the park.

covering a gravity absorption septic tank. When initially installed, these tanks allowed the ground to absorb industrial toxic and conventional pollutants discharged by the park's businesses. However, over time, the ground stopped absorbing the polluted water. As a result, the park's union officials had to hire a contractor to pump out the septic tanks and remove the polluted water from the park.

The Storm Drainage System Was Not Adequately Designed

TI designed the park's storm drainage system, which only required storm water drainage inlets at roadside curbs to be connected to underground storm water pipes that flow into storm water ditches on each side of the roadway at the park's entrance. However, the design did not include a plan for capturing or treating the storm water from the entire park. Further, we found that TI installed the pipes and water intakes, but that it did not construct the roadway to allow the water to flow over the pavement and into the water intakes. The design documents did not show any finished grade elevation or required slope for the roadway intersections, which would allow the water to properly flow to the water intakes. In an August 2006 inspection report, International Relief and Development, USAID's contracted quality assurance agent, noted that the road was not sloped properly to allow water to flow into the water intakes and that the manner in which the landscaping was done resulted in standing water in some locations. However, USAID did not take corrective action to address either of these problems.

We also found that TI's storm drainage system design did not meet International Building Code minimum requirements to prevent storm water from flowing across property lines once the park had been developed.

TI's storm water calculations focused on the park's pre-development volume of rain that would run over natural surfaces, such as lawns and meadows. However, TI's calculations did not factor in the postdevelopment volume of rain generated by man-made surfaces, such as driveways and buildings. Based on engineering principles, the volume of rain water generated by man-made surfaces is greater than the volume generated by natural surfaces. We found that because there was no system designed to capture the large volume of rain water generated by the manmade surfaces, water could run off of the industrial park's property and onto an adjacent property and into a nearby wadi. 10 In addition, TI's system design did not provide for treating the water run-off, and we found that the park's factories were releasing water with industrial contaminants into the park's streets (see photo 3). Due to the inadequately constructed and designed storm drainage system, there is a potential health risk to the park's workers and patrons, as well as to the local residents in the surrounding neighborhood.

Photo 3 – Untreated Factory Water Flowing into the Park's Streets



Source: SIGAR, July 15, 2015

¹⁰ A wadi is a gully, streambed, or valley that is usually dry except during the rainy season.

BAGRAMI INDUSTRIAL PARK IS BEING USED BUT NOT TO ITS FULL CAPACITY

According to TI's contract, the construction of Bagrami Industrial Park was meant to create a model industrial complex for small businesses. Afghanistan would benefit from both the income generated and the creation of about 3,000 new jobs at the park. During our July 15, 2015, on-site inspection of the park, which was nearly 10 years after it opened, we determined that 27 out of a possible 32 businesses were operating in the park. According to AISA and Bagrami Industrial Park Union officials, at the time of our inspection, these 27 businesses combined employed about 700 people. However, a union official told us that in 2011 and 2012, the park employed approximately 2,200 people, which he said was not far from the park's goal of creating about 3,000 jobs for the local population.

During our on-site inspection, we interviewed owners of 4 of the 27 businesses operating at Bagrami Industrial Park, specifically owners of a garment factory, a detergent products company, a printing company, and an electrical panel company. These business owners stated that the park has suffered from unreliable power, poor water supply, and lack of marketing support from the Industrial Parks Commission and Working Group's Project Implementation Unit.¹¹

According to a garment factory owner we interviewed, in 2011 and 2012, he had more than 900 Afghan employees working full-time under two contracts with the Department of Defense to make uniforms for the Afghan National Army and the Afghan Border Police. ¹² These contracts were cancelled in late 2012, forcing him to reduce his staff to 60 full-time employees. At the time of our inspection, the garment factory owner was training about 400 women in sewing techniques with the hope that he could obtain new contracts (see photo 4). However, these trainees were not factory employees and did not receive wages. ¹³

Photo 4 - Afghan Women Trainees at the Garment Factory



Source: SIGAR, July 15, 2015

During a follow-up site inspection of Bagrami Industrial Park on June 12, 2016, we noted that the same 27 business were still operating; however, the number of Afghans those businesses employed had decreased to about 500 workers. We noted that the trainees were no longer at the garment factory. According to the owner, he had to end the training program because he did not receive any new contracts. He also had to reduce his staff further from 60 to 40 full-time employees.

¹¹ We did not assess the extent to which the Afghan government was providing support, such as marketing, to businesses at the industrial park because it was beyond the scope of this inspection.

¹² We currently conducting an audit of the Department of Defense's procurement and accountability for organizational clothing and individual equipment, which includes uniforms, provided to the Afghan National Army and Police.

¹³ AISA officials on-site corroborated the garment factory owner's comments. Although we were able to confirm that the garment factory owner was awarded the two contracts, we cannot attest to the validity of his statement regarding the cancellation of the contracts or its impact on employment at the factory.

CONCLUSION

More than 10 years have passed since Bagrami Industrial Park opened as a secure site for Afghans to establish businesses. Although the contractor, TI, properly constructed some of the park's infrastructure components, such as the electrical distribution, water distribution, and telecommunications systems, it did not construct the water supply and sewer collection and treatment systems required by the contract. It appears that USAID did not provide adequate oversight or thoroughly inspect the park before acceptance because it paid TI for these two systems. It is critical that the agency ensure that its contractors fulfill contract requirements and address deficiencies in a timely manner before accepting and paying for a project.

Despite the missing and deficient systems, the park flourished in 2011 and 2012, employing 2,200 people or almost three-fourths of its 3,000 employee goal. However, at the time of our July 2015 site inspection, the number of employees had decreased to about 700 across the 27 out of 32 possible businesses operating in the park. During our follow-up site inspection in June 2016, nearly a year later, we noted that the 27 businesses were still operating, but the number of Afghans employed had decreased to about 500 workers.

AGENCY COMMENTS

We provided a draft of this report to USAID for review and written comments, which are produced in appendix II. USAID also provided technical comments, which we incorporated into this report, as appropriate.

In its comments, USAID noted that at the end of the contract, USAID inspected and accepted the park "as-is, including a functional water supply and sewer system." However, we are skeptical that complete water supply and sewer collection and treatment systems existed at the time USAID conducted its inspection. Our engineers conducted two on-site inspections, and each time they noted that the water supply system was not completed in accordance with contract requirements and that the sewer collection and treatment system was not built. It is troubling that USAID failed to exercise due diligence in protecting \$5.2 million of U.S. taxpayers' money by accepting the park "as-is" from TI without an adequate water supply system and a sewer collection and treatment system, and before paying TI the full cost of the contract.

Our draft report included one recommendation for USAID to "use all means available to obtain a refund from TI for the park's water supply and sewer [collection and treatment] systems that USAID paid for, but were never properly constructed, or, if obtaining a refund is not possible, provide the reason why." USAID stated in its comments that it is no longer possible to pursue a refund from TI. According to the terms of Federal Acquisition Regulation 52.246-12, which was incorporated as a provision of the contract, "Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee." Because USAID claims that it accepted the system "as-is" and the agency is not alleging any latent defects, fraud, or any of the other exceptions noted in FAR 52.246-12, then it appears that no further action can be taken against the contractor to recover the funds spent on the deficient and, in some cases, nonexistent systems discussed in this report. Since no further action can be taken, we removed the recommendation.

APPENDIX I - SCOPE AND METHODOLOGY

This report provides the results of SIGAR's inspection of the infrastructure and supporting facilities at Bagrami Industrial Park. This is the final in a series of three inspection reports involving the construction of industrial parks that the U.S. Agency for International Development (USAID) funded in Afghanistan. We reported on our inspections of Gorimar Industrial Park in Balkh province and Shorandam Industrial Park in Kandahar province in January and April 2015, respectively.¹⁴

Our objectives for this inspection were to determine whether (1) construction was completed in accordance with contract requirements and applicable construction standards, and (2) the industrial park was being used. We reviewed available contract documents, design submittals, and geotechnical reports to understand project requirements and contract administration. In some cases, we reviewed as-built drawings to assess completed construction because USAID could not locate all if its contract files. We conducted a physical inspection of the Bagrami Industrial Park on July 15, 2015, and a follow-up inspection on June 12, 2016. We also interviewed U.S. and Afghan officials, and several business owners operating in the industrial park about the park's operation and maintenance.

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

We conducted our work in Bagrami and Kabul, Afghanistan, from February 2015 through July 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 engineer 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.

¹⁴ See SIGAR, Gorimar Industrial Park: Lack of Electricity and Water Have Left This \$7.7 Million U.S.-Funded Industrial Park Underutilized by Afghan Businesses, SIGAR 15-30-IP, January 27, 2015; and SIGAR, Shorandam Industrial Park: Poor Recordkeeping and Lack of Electricity Prevented a Full Inspection of this \$7.8 Million Facility, SIGAR 15-50-IP, April 17, 2015.



MEMORANDUM

DATE:

July 3, 2016

TO:

John F. Sopko

Special Inspector General for

Afghanistan Reconstruction (SIGAR)

FROM:

Herbert Smith, Mission Director, USAID/Afghanistan

SUBJECT:

Mission Response to Draft SIGAR Report titled "Bagrami

Industrial Park: Lack of Adherence to Contract

Requirements Left this \$5.2 Million Park without Adequate Water Supply and Sewer Systems" (SIGAR Report 16-XX

under Code I-028)

REF:

SIGAR Transmittal email dated 03/30/2015

USAID thanks SIGAR for the opportunity to review SIGAR's draft Inspection Report titled, "Bagrami Industrial Park: Lack of Adherence to Contract Requirements Left this \$5.2 Million Park without Adequate Water Supply and Sewer Systems." USAID expresses appreciation to SIGAR for working collaboratively and cooperatively with USAID personnel.

COMMENTS ON SIGAR'S RECOMMENDATIONS

Recommendation 1:

To protect the U.S. investment in Bagrami Industrial Park, we recommend that the USAID Mission Director for Afghanistan take the following action:

1. Use all means available to obtain a refund from TI for the park's water supply and sewer systems that USAID paid for, but were never properly constructed, or, if obtaining a refund is not possible, report the reason why to SIGAR within 90 days.

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UNCLASSIFIED

USAID Comments:

As acknowledged in SIGAR's inspection report, Bagrami Industrial Park's current occupancy is 27 out of a possible 32 business vacancies filled. At the end of the contract, USAID inspected and accepted the park as-is, including a functional water supply and sewer system.

Blanket Purchase Agreement number 306-O-04-00539 was awarded to Technologist Inc., a U.S. based contractor, on May 24, 2004 under GSA contract number GS-10F-0132M (GSA SIN No. 874-1) on a competitive basis and the contract was completed on December 31, 2007. The total cost of the contract was \$21,151,217.08 and the purpose of the contract was to design and build three industrial parks in Afghanistan, out of which Bagrami Industrial Park is one.

USAID acknowledges SIGAR's inspection report and recommendation. It is no longer possible to pursue the contractor, either to correct the defects or reimburse USAID. According to FAR 52.246-12, Inspection of Construction, "Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee." USAID believes that none of the above reasons provides a justification to take action against the contractor for items which were identified by SIGAR in the report.

Based on the above, USAID requests closure of recommendation 1.

cc: U.S. Embassy/Kabul Coordination Directorate

APPENDIX III - ACKNOWLEDGMENTS

Arthur Granger, Inspector-in-Charge Melissa McAllister, Professional Engineer Rashidi Abdul Rahim, Management Analyst Aziz Rahman Zaki, Civil Engineer This inspection was conducted under project code SIGAR-I-028.

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