May 19, 2016

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

## Dear Administrator Smith:

I am writing to alert you to a safety matter that warrants action by your agency. USAID data indicates that the agency has constructed or renovated 566 schools in Afghanistan since 2003.¹ SIGAR is engaged in efforts attempting to determine the operational status of these schools in provinces throughout Afghanistan. At one such facility in the Kushk district of Herat Province (facility S145A),² which was renovated by the International Organization for Migration³ on behalf of USAID, we observed serious electrical issues and structural damage that could endanger students, teachers, and other occupants.⁴

While the site inspection focused on assessing the overall operating conditions at the facility, inspectors also completed a basic safety review of the structural integrity of classroom buildings at facility S145A that included the collection of photographic documentation. Following the site visit, SIGAR engineers examined photographs of facility S145A and found damage that is both substantial and potentially life-threatening. We identified several structural deficiencies including deteriorating and failing roofs, cracked and crumbling walls, and improper installation of Concrete Masonry Units (CMU).<sup>5</sup> Additionally, we identified serious electrical hazards.

Structural failures observed in photos taken at the facility indicate that the roofing and walls at educational facility S145A cannot withstand heavy loads, such as snowfall, heavy rains, and other natural events. It appears that the continued lack of proper maintenance paired with improper construction methods likely caused these deficiencies. Continued roof and wall deterioration could endanger students and staff. Photos 1 and 2 shows damaged roofing at the facility.

<sup>&</sup>lt;sup>1</sup> From FY 2002 through FY 2014, USAID had 31 ongoing or completed programs that supported primary and secondary education in Afghanistan, for which it spent approximately \$614 million to implement. In addition to the construction and rehabilitation of educational facilities, USAID has implemented programs to fund various other activities including ministerial capacity development, teacher training, child literacy, community-based education, and textbook printing and distribution (see SIGAR, *Primary and Secondary Education in Afghanistan: Comprehensive Assessments Needed to Determine the Progress and Effectiveness of Over \$759 Million in DOD, State, and USAID Programs*, SIGAR 16-32-AR, April 26, 2016).

<sup>&</sup>lt;sup>2</sup> SIGAR is using the unique USAID facility reference number, rather than specific names for schools, to protect identifying information.

<sup>&</sup>lt;sup>3</sup> IOM served as an implementing partner under a cooperative agreement with USAID on the Schools and Clinics Construction and Refurbishments Program in 2004.

<sup>&</sup>lt;sup>4</sup> This site visit was conducted by SIGAR's Afghan partners. Our Afghan partners conducted initial field work, including taking GPS, time, and date stamped photographs, and administering survey instruments developed by SIGAR. SIGAR analysts and engineers then analyzed the information collected in order to develop this alert letter.

<sup>&</sup>lt;sup>5</sup> CMUs are brick or cinder block walls that could result in structural failure or collapse if improperly installed.

Photo 1 - Failed Roof Structure at Educational Facility S145A



Source: SIGAR, November 26, 2015

Photo 2 – Deteriorating Roof Structure at Education Facility S145A



Source: SIGAR, November 26, 2015 Note: Sagging wood planks supporting mud roof and plastic sheeting.

SIGAR engineers also observed that the CMU installations do not follow general engineering standards and that the CMUs had improper mortar bedding, jointing, masonry reinforcing, and control and expansion joints. The particular construction methods employed at this facility, combined with poor workmanship, could cause walls to fail and lead to additional structural damage at the facility. The conditions at this facility are now so poor that, in some places, bricks are crumbling and falling out of the walls of the classroom building. A seismic event or continued deterioration over time will likely cause the structure to fail. Failing to address this issue and a persistent lack of maintenance will further weaken the classroom's structural integrity and may speed collapse. Photos 3 and 4 show improper CMU installations at the facility.

Photo 3 – Cracked and Crumbling Exterior Wall at Educational Facility S145A



Source: SIGAR, November 26, 2015 Note: Exposed brick deteriorating.

Photo 4 – Crumbling Interior Wall at Educational Facility S145A



Source: SIGAR, November 26, 2015

Furthermore, missing downspouts across the facility result in concentrated water flow on the walls and foundation. Exposure to rain and other weather effects will continue to damage plaster and erode mud walls at the facility. If left unattended, erosion will further deteriorate the strength of the facility's walls, as seen in Photos 5 and 6.

Photo 5 - Missing Downspouts at Educational Facility S145A



Source: SIGAR, November 26, 2015 Note: Missing downspouts cause erosion of the wall.

Photo 6 – Plaster Failure at Educational Facility S145A



Source: SIGAR, November 26, 2015 Note: Plaster failure causes further structural deterioration.

Electrical deficiencies at the facility also pose serious hazards that could endanger occupants. Improper wiring connections and installations and exposed circuit breakers and wiring are a potential shock and fire hazard, as seen in Photos 7 and 8.

Photo 7 – Exposed Circuit Breakers at Educational Facility S145A



Source: SIGAR, November 26, 2015

Photo 8 – Exposed Wiring in an Electrical Box at Educational Facility S145A



Source: SIGAR, November 26, 2015

Photo 9 - Indications of Previous Electrical Fire at Educational Facility S145A



Source: SIGAR, November 26, 2015

Structural failures at facility S145A may also be impacting the delivery of educational services in the classroom facilities. Photo 10 shows students receiving educational instruction outside of the facility's building while sitting on the ground. During an interview, the school's general manager stated that, "The building constructed by the USAID is in the very poor physical condition and unusable. If this building is not repaired, it would completely collapse."

Photo 10 - Students Taking Exam Outdoors on School Grounds



Source: SIGAR, November 26, 2015

<sup>&</sup>lt;sup>6</sup> SIGAR Survey S145A, November 26, 2015.

In 2006, the Afghan Ministry of Education (MoE) provided standard designs for schools including details for foundation stability, durability, and structural construction requirements. Although USAID renovated S145A before the ministry standards were put in place, we found that plans used in its construction do not meet current MoE standards, and we are concerned with the quality of the renovation funded by USAID and the extent to which the agency ensured that International Organization for Migration adhered to acceptable construction standards. SIGAR urges USAID to contact partners at MoE regarding the damage at facility S145A, so that corrective actions and repairs may occur.

SIGAR provided a draft of this alert to USAID for comment. In response, USAID informed SIGAR that it will ensure that the Afghan Ministry of Education is made aware of the issues raised in this alert letter. USAID's comments are reproduced in Enclosure I.

We conducted this special project in Washington, D.C.; Herat, Afghanistan; and Kabul, Afghanistan from November 2015 to May 2016, in accordance with SIGAR's quality control standards. These standards require that we carry out work with integrity, objectivity, and independence, and provide information that is factually accurate and reliable. For more information on the policies and procedures and quality control standards for conducting special project work, please see SIGAR's website (www.SIGAR.mil). SIGAR performed this special project under the authority of Public Law No. 110-181, as amended, and the Inspector General Act of 1978, as amended. Should you or your staff have any questions about this project, please contact Mr. Matthew Dove, Director of Special Projects, at

Sincerely,

John F. Sopko

Special Inspector General for Afghanistan Reconstruction

CC:

Donald L. "Larry" Sampler Assistant Administrator for Afghanistan and Pakistan Affairs U.S. Agency for International Development

Mr. Herbert B. Smith USAID Mission Director for Afghanistan

Encl: I – USAID Response Letter to SIGAR

 $<sup>^{7}</sup>$  At the time of the renovation in 2004, funding organizations independently developed the school designs and submitted them to the MoE for approval. The 2004 design for S145A does not comply with current MoE standards.



May 17, 2016

## MEMORANDUM

TO: John F. Sopko

Special Inspector General for

Afghanistan Reconstruction (SIGAR)

FROM: Herbert Smith

Mission Director USAID/Afghanistan

SUBJECT: Mission Response to Draft SIGAR Alert Letter titled

"Structural Damage at Educational Facility \$145A"

(SIGAR-SP-124)

**REF:** SIGAR Transmittal email dated 5/4/2016

USAID thanks SIGAR for the opportunity to comment on this Alert Letter. USAID did not build this facility, but rather refurbished an existing building in 2004 and turned it over to the Afghanistan Ministry of Education on November 1<sup>st</sup> of that year. Following the expiration of the warranty period on October 31, 2005, maintenance of the school became the responsibility of the Ministry of Education. USAID Afghanistan will ensure that the Ministry of Education is aware of the issues SIGAR addresses in their Alert Letter.

cc: U.S. Embassy/Kabul Coordination Directorate

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