Redacted Deliverable

The Engineering Support Program assembled this deliverable. It is an approved, official USAID document. Budget information contained herein is for illustrative purposes. All policy, personal, financial, and procurement sensitive information has been removed. Additional information on the report can be obtained from Firouz Rooyani, Tetra Tech Sr. VP International Operations, (703) 387-2151.



Engineering Support Program (ESP)

ACTIVITY 021 QUALITY ASSURANCE SERVICES FOR RECYCLING PLANT VALUE CHAIN IN NORTHERN AFGHANISTAN

MONTHLY REPORT NO. 6

APRIL 25, 2021 - MAY 24, 2021

SUBMITTED: MAY 31, 2021

DISCLAIMER

This publication was produced for review by the United States Agency for International Development. It was prepared by Tetra Tech. The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

This report was prepared for the United States Agency for International Development Engineering Support Program (ESP).
Principal Contacts:



May 31, 2021

Technical Point of Contact (POC)
Office of Infrastructure (OI)
U.S. Agency for International Development
Great Massoud Road
Kabul, Afghanistan

Re: Engineering Support Program Activity 021 Monthly Report No. 6

Dear

Please find below Activity 021 Monthly Report No. 6, prepared under the Engineering Support Program (ESP). This Monthly Report covers activities completed during the period of April 25, 2021, through May 24, 2021.

Please contact me at your convenience should you have any questions or comments regarding this submittal.

Very truly yours,



ENGINEERING SUPPORT PROGRAM (ESP)

A-021 MONTHLY REPORT NO. 6

May 31, 2021

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.



CERTIFICATION STATEMENT

This Certificate is rendered under a contract between the United States Agency for International Development (USAID) and Tetra Tech, Inc. This report was prepared by Tetra Tech, Inc. under the direct supervision of appropriate Tetra Tech, Inc. personnel who have the applicable knowledge, skills, experience, and abilities relevant to this subject matter. The report is in accordance with generally accepted standards of professional practice adapted to the locality of the Project. The undersigned certifies that to the best of his knowledge and belief, all of the information contained herein is correct.

CERTIFIED BY:



Date: May 31, 2021



TABLE OF CONTENTS

1.0	Project Overview	I
1.1	Background	I
1.2	Project Summary	I
1.3	ESP Activity Overview	I
1.4	Location	2
2.0	Program Progress	2
2.1	Progress Summary	2
2.2	Critical Issues and Constraints	3
3.0	Monthly Status Update	3
3.1	Activities	3
4.0	Engineering	3
4. I	Submittals	3
5.0	Procurement	4
6.0	Quality	4
6. I	Deficiencies	4
6.2	Test Results	4
7.0	Environmental Compliance	4
8.0	Health and Safety Oversight	5
9.0	Financial	5
9.1	Cost Forecast	5
9.2	Potential Overruns / Underruns	5
9.3	Payment Applications: History to Date	5
10.0	Security	5
11.0	Deliverable / Key Correspondence Log	5
12.0	Meetings	5
13.0	Photos	6
LIS.	T OF TABLES	
Table	I: Project Data	I
Table	2: Critical Issues, Constraints, and Recommended Actions	3
Table	3: Construction Activities	3
Table	4: Submittals Log	3
Table	5: Deficiencies	4
Table	6: Test Results	4
	7: Deliverables / Key Correspondence Submitted This Month	

Engineering Support Program (ESP) Activity 021 QA Services for Recycling Plant Value Chain

LIST OF FIGURES

E D D	II DI I	•
Figure 1: Plastic Rec	/cling Plant Location	

APPENDICES

Appendix A – Health and Safety Oversight Table



ACRONYMS AND ABBREVIATIONS

CMA Construction Manager as Owner's Advisor

EMMP Environmental Mitigation and Monitoring Plan

ESP Engineering Support Program

FDT Field Density Test

HSE Health, Safety, and Environmental

m Meter(s)

PCC Plain Cement Concrete

RCC Reinforced Cement Concrete

Tt Tetra Tech

USAID United States Agency for International Development



1.0 PROJECT OVERVIEW

I.I BACKGROUND

Under Activity 021, the Tetra Tech (Tt) Engineering Support Program (ESP) provides "Construction Manager as Owner's Advisor (CMA)" services to the United States Agency for International Development (USAID) to mitigate the risk of defective construction for the proposed Plastic Recycling Plant. The Plastic Recycling Plant, located in the Balkh Province of Afghanistan, approximately 22 kilometers east of Mazar-e-Sharif City in the Amir Alisher Nawai Industrial Park, is being developed through USAID Afghanistan. People in Need ("the recipient" henceforth referred to as "the contractor") will design and construct the Plastic Recycling Plant. On November 25, 2020, Tt ESP started conducting site visits to the project site. On January 5, 2021, all work was stopped due to inclement weather and on March 30, 2021, construction resumed.

1.2 PROJECT SUMMARY

Table I: Project Data

	•		
Cooperative Agreement Recycling Plant Value Chain in Northern Afghanistan for Sustainable Journal Creation Program			
Contractor People In Need			
Agreement No.	720-306-19-CA-00002		
Agreement Amendments	Not applicable.		
Construction Start Date	October 17, 2020 (actual)		
Period of Performance	October 17, 2020 – July 17, 2021 (274 days) Reference: Scope of work provided to Tt ESP by USAID and Amendment No. I (to the PIN-subcontractor contract) provided by the contractor.		
Period of Performance Days Remaining	54 of 274 days		
Percent of Period of Performance Days Remaining	19.7 percent		
Agreement Value			
	this award is to provide support for the implementation of a Recycling Plant Value Chain in Northern Afghanistan for Sustainable Jobs Creation Program. USAID awarded this program to under a cooperative agreement.		

1.3 ESP ACTIVITY OVERVIEW

Tt ESP, as approved by USAID, acts as USAID's Engineer and provides engineering support and oversight to ensure the contract objectives, as established by USAID, are fully met. This includes a thorough review of all technical submittals, design drawings, shop drawings, as-built drawings, specifications, material and equipment samples, and lab and field test reports under Activity 021. Tt ESP also provides on-site technical assurance services and, as directed by USAID, keeps all stakeholders fully informed of the progress of work and issues which are identified as impacting the project. Tt ESP provides support to mitigate the risk of defective construction and achieve the construction of a fully functioning Plastic Recycling Plant.



I.4 LOCATION

The Plastic Recycling Plant, located in the Balkh Province of Afghanistan, is approximately 22 kilometers east of Mazar-e-Sharif City in the Amir Alisher Nawai Industrial Park.



Figure I: Plastic Recycling Plant Location

Note: The area denoted within the red block denotes the Plastic Recycling Plant's project area.

2.0 PROGRAM PROGRESS

Once program progress data is made available, Tt ESP will include a figure for an estimate of weighted progress status.

2.1 PROGRESS SUMMARY

Once program progress data is made available, Tt ESP will include a figure summarizing project progress. On February 21, 2021, during the coordination meeting with the contractor, USAID, and Tt ESP, the contractor stated that although they had planned to resume construction on March 1, 2021, due to sustained winter conditions, work remained paused until the design concerns were resolved. Subsequently, on March 24, 2021, the contractor informed the subcontractor to resume construction on March 28, 2021. The construction activities resumed on March 30, 2021.

Based on the delays to date from weather, re-design of the stock hangar and office building, the project has been delayed beyond the planned July 21, 2021 completion date. Completion of the project will continue to be further delayed until the plastic recycling equipment is selected so re-design of the plant hangar can be finalized, and the contractor completes procurement of the plastic recycling equipment and can confirm site delivery to support installation and commissioning. Delay of the plant hangar is delaying overall project completion.



2.2 CRITICAL ISSUES AND CONSTRAINTS

Table 2: Critical Issues, Constraints, and Recommended Actions

Critical Issue / Constraint	Recommended Action
The project is behind schedule and continues to slip due to delays caused by the previous winter weather and design rework issues.	Tt ESP recommends USAID instruct the contractor to provide an updated schedule and to accelerate remaining work to mitigate delays.
The delay in the selection, procurement, and delivery of plastic recycling equipment is hindering the re-design of the plant hangar and the overall completion of the schedule.	Tt ESP recommends selecting and purchasing the equipment for the re-design of the plant hangar and to continue to evaluate expediting shipment of the equipment to minimize delays to construction, installation of equipment, and overall project completion.

3.0 MONTHLY STATUS UPDATE

During the reporting period, Tt ESP's site inspectors continued monitoring the quality of the work.

3.1 ACTIVITIES

Table 3: Construction Activities

Activity	Status		
Office	First floor slab and ring beam formwork is in progress.		
Cloakroom	15.75 meters (m) out of 46.6 m of outside plastering is complete.		
Hangar for Plant Machinery	No progress this period.		
Stock Hangar for Raw Material	No progress this period.		
Septic Tank	Backfilling and Field Density Testing (FDT) for the fifth layer is in progress.		
Water Reservoir	Backfilling and FDT for the sixth layer is in progress.		
Perimeter Wall	 422 m out of 432 m of the first layer of plaster and 100 m out of 432 m of the second layer of plaster is complete. 		

4.0 ENGINEERING

As of the end of this reporting period, Tt ESP has received a total of nine submittals; all submittals have been reviewed and returned to USAID for further action.

4.1 SUBMITTALS

Table 4: Submittals Log

No. Received	Total Processed and Returned	Reviewed and Returned This Reporting Period	Canceled	FIO	Under Tt ESP Review
9	9	1	0	0	0



5.0 PROCUREMENT

Nothing to report.

6.0 QUALITY

During this reporting period, Tt ESP's Quality Assurance Department focused on the identification and rectification of deficiencies.

6.1 DEFICIENCIES

Table 5: Deficiencies

Туре	New	Total	Under USAID Review	Total Closed	Closed this Month	Open
Construction	6	27	0	22	3	5
Engineering	0	0	0	0	0	0
Health, Safety, and Environmental	0	0	0	0	0	0
Quality Assurance	0	0	0	0	0	0
Security	0	0	0	0	0	0
Total	6	27	0	22	0	5

6.2 TEST RESULTS

Table 6: Test Results

Туре	Date	Result (Passed / Failed)			
I 4-day Compressive Strength Test for Reinforced Cement Concrete (RCC)	May 4, 2021	Passed			
14-day Compressive Strength Test for Plain Cement Concrete (PCC)	May 4, 2021	Passed			
28-day Compressive Strength Test for RCC	May 8, 2021	Passed			
28-day Compressive Strength Test for RCC	May 17, 2021	Passed			
28-day Compressive Strength Test for RCC	May 18, 2021	Passed			

7.0 ENVIRONMENTAL COMPLIANCE

During this reporting period, Tt ESP's Health, Safety, and Environmental (HSE) inspector observed no deficient environmental issues at the project site.

Tt ESP will review the contractor's revised Environmental Mitigation and Monitoring Plan (EMMP) once it is received.



8.0 HEALTH AND SAFETY OVERSIGHT

During this reporting period, Tt ESP's HSE inspector observed no major safety incidents, injuries, or near misses at the project site during the inspection. For more information, please refer to Appendix A – Health and Safety Oversight Table.

9.0 FINANCIAL

Nothing to report.

9.1 COST FORECAST

Nothing to report.

9.2 POTENTIAL OVERRUNS / UNDERRUNS

Nothing to report.

9.3 PAYMENT APPLICATIONS: HISTORY TO DATE

Nothing to report

10.0 SECURITY

Nothing to report.

11.0 DELIVERABLE / KEY CORRESPONDENCE LOG

Table 7: Deliverables / Key Correspondence Submitted This Month

Deliverable / Correspondence	Date
Weekly Report No. 22	April 29, 2021
Monthly Report No. 5	April 29, 2021
Weekly Report No. 23	May 6, 2021
Weekly Report No. 24	May 12, 2021
Weekly Report No. 25	May 20, 2021

12.0 MEETINGS

No meetings were conducted during this reporting period.



13.0 PHOTOS



Photo #1: Plastering of perimeter wall, Mazar-e-Sharif, Balkh Province. ZA, 2021-05-18.



Photo #2: Installing foundation formwork, Mazar-e-Sharif, Balkh Province. JB, 2021-05-19.



Photo #3: Installing foundation formwork, Mazar-e-Sharif, Balkh Province. ZA, 2021-05-19.



Photo #4: Backfilling of water reservoir, Mazar-e-Sharif, Balkh Province. ZA, 2021-05-20.



Photo #5: First floor slab formwork of the office building, Mazar-e-Sharif, Balkh Province. ZA, 2021-05-22.



Photo #6: Excavation of roadside ditches, Mazar-e-Sharif, Balkh Province. ZA, 2021-05-22.



APPENDIX A – HEALTH AND SAFETY OVERSIGHT TABLE



The following table provides an overview of health and safety positive observations and concerns that were observed this reporting period.

Health and Safety Oversight Table

Health and Safety Observations and Concerns

Health and Safety Positive Observations

- Health and safety sign boards were installed on site at required locations.
- · Space between workers while using hand tools was being maintained well.
- Traffic stopper and instruments were placed at site to prevent accidents related to heavy equipment.
- Stored materials on-site were stocked neatly and a means of caution tape was installed around it.
- A toolbox talk meeting was held on-site with the workers related First Aid Kits.
- Personal protective equipment (PPE) was provided to the workers on site.
- Back-up alarms for the heavy equipment was in the process of being installed.
- New fire extinguishers were installed on-site site in required areas.

Health and Safety Concerns

- Disposable water drinking cups were not available on-site.
- There were no protective systems, such as sloping, benching, shoring, shielding (trench boxes), or
 other equivalent means provided for excavation where the depth is greater than five feet.
- Proper access and egress, such as ladders, ramps, or other safe means of accessibility, were not
 provided for the foundations.
- Emergency eyewash facilities were not available for site workers involved in concrete, stone masonry, and steel fixing activities.
- The contractor has not provided standard scaffolding, platforms, or personal fall arrest systems to
 workers to mitigate the hazards involved with falling from height during formwork, steel fixing,
 stone masonry, and concrete work while working at heights greater than six feet.
- Portable ladders used as temporary access by the contractor were observed to be substandard and
 of insufficient length to extend at least three feet above the upper landing surface.
- There were loose and unprotected power cables. The power cables need to be protected from water and rain.
- There were no ground-fault circuit interrupter (GFCI) devices, ground rods, or fire extinguishers provided for the site's portable generator.

USAID AFGHANISTAN

U.S. Embassy Great Massoud Road Kabul. Afghanistan

http://afghanistan.usaid.gov