



Northern Gaza Emergency Sewage Treatment (NGEST) Project (P074595)

MIDDLE EAST AND NORTH AFRICA | West Bank and Gaza | Water Global Practice |
Special Financing | Emergency Recovery Loan | FY 2005 | Seq No: 24 | ARCHIVED on 22-Jun-2015 | ISR20018 |

Implementing Agencies:

Key Dates

Key Project Dates

Board Approval date:07-Sep-2004

Effectiveness Date:17-Nov-2004

Planned Mid Term Review Date:17-Nov-2006

Actual Mid-Term Review Date:29-Nov-2006

Original Closing Date:31-Dec-2017

Revised Closing Date:31-Dec-2017

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The project objectives are to: (i) mitigate the immediate gathering health and environmental safety threats to the communities surrounding the effluent lake at BLWTP; and (ii) Provide a satisfactory long-term solution to the treatment of wastewater for the Northern Government in Gaza.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

Components

Name

EFFLUENT TRANSFER:(Cost \$21.46 M)

TECHNICAL ASSISTANCE TO EFFLUENT TRANSFER COMPONENT:(Cost \$3.37 M)

CONSTRUCTION OF TREATMENT PLANT:(Cost \$45.98 M)

TECHNICAL ASSISTANCE TO CONSTRUCTION OF TREATMENT PLANT:(Cost \$3.71 M)

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	● Moderately Satisfactory	● Moderately Unsatisfactory
Overall Implementation Progress (IP)	● Moderately Satisfactory	● Moderately Unsatisfactory
Overall Risk Rating	● High	● High



Implementation Status and Key Decisions

Part A (Wastewater pipeline installed (8 km), terminal pump station and infiltration basins are constructed) of the Northern Gaza Emergency Sewage Treatment Project (NGEST) was completed in 2011 (managed by the Coastal Municipalities Water utility "CMWU") and the immediate objective to mitigate the health and environmental safety threats to communities surrounding the effluent lake at Beit Lahiya (with 52000 inhabitants of which are 26000 are females) has been largely achieved and the effluent lake is drained and most effluent is being pumped to new infiltration ponds at the site for Part B and no longer a threat to the surrounding communities at the BLWTP. (Currently partially treated wastewater is being infiltrated (total of 23.5 million m3 since Apr 2009) awaiting the completion and functioning of NGEST part B (NGWWTP) expected late 2015).

The construction of the wastewater treatment plant (Part B) should have been completed by March 2014, but completion of the works has been delayed. Pre-commissioning of the WWTP was expected to begin in April, 2014, with full commissioning commencing in June 2014. However, there were several obstacles that affected the pre-commissioning (aside from the political conflicts and the latest Israeli invasion to Gaza) among which are; (i) the insolvency of the international contractor (lead joint venture) which resulted on termination of the contract, (ii) the contentious relationship between the contractor and the client (PWA) which resulted in six disputes between them, (iii) the unavailability of needed electricity of 3.0 MW for the plant.

The stoppage of the works in the NGEST continued until the writing of this report. The PWA and the joint venture (JV) local contractor agreed amicably on all disputed issues and signed memorandum of understanding, where the local contractor (with new international joint venture) will continue the project implementation (new direct contracting was cleared by the Bank task team expected to commission early June 2015). Another MoU to be signed between the PWA and the International Lead Contractor in the coming two weeks.

In parallel, PWA agreed with the project Engineer (Supervisor) to amend their contract to do the technical audit (assessment) and prepared the ToR for new contractor to complete the Plant construction and prepare the bidding documents. The Engineer started the assessment.

The unavailability of 3.0MW to operate the plant remains an issue, The PWA, supported by the donor partners, continued its dialogue with the Israeli Authorities to supply the needed electricity for the plant operations but without positive answer until now. The team was working on alternatives to save the investment by having the plant operational and considered studying the solar energy supply next to the wastewater treatment plant, energy generation from the produced methane gas (approximately 50% of the needed electricity supply which can start producing after 6 months of operation), the supply from the Gaza grid and stand by diesel generators.

A Consultancy Services for a Feasibility Study (Draft final report was submitted last week) for Grid Connected Solar Power Plant was signed with International Energy Consultants. The objective of the assignment is to assist Palestinian Energy Authority and PWA in identifying the optimal and most feasible power source option to supply NGEST throughout its life-cycle.

The discharge from Beit Lahia Wastewater Treatment Plant (BLWWTP) to the infiltration basins resumed after stoppage during the last conflict on July-August 2014. The bidding for the recovery scheme was launched. Phase 1 should be operational during 2016 and phase 2 later by 2018 to ensure the proposed modifications will still be effective of capturing the plume.

Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	--	● High	● High
Macroeconomic	--	● High	● High
Sector Strategies and Policies	--	● Moderate	● Moderate



Technical Design of Project or Program	--	● Moderate	● Moderate
Institutional Capacity for Implementation and Sustainability	--	● Substantial	● Substantial
Fiduciary	--	● Low	● Low
Environment and Social	--	● Moderate	● Moderate
Stakeholders	--	● Low	● Low
Other	--	--	--
Overall	--	● High	● High

Results

Project Development Objective Indicators

► Effluent lake is drained and no longer a threat to the surrounding communities at Beit-Lahia WWTP (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	N	Y	Y	Y
Date	29-Oct-2004	02-Apr-2015	02-Apr-2015	06-Nov-2008

► Wastewater collected and treated in accordance with Palestinian environmental standards suitable for groundwater infiltration and reuse (M3/day) (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	22000.00	22000.00	25000.00
Date	17-Mar-2014	02-Apr-2015	02-Apr-2015	--

► Less than 5% increase in salinity and nitrate levels at monitoring wells within project site compared to before commissioning the plant (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	N	Y	Y	Y
Date	17-Mar-2014	02-Apr-2015	02-Apr-2015	31-Dec-2017



► Maintenance and operational costs of the NGWTP fully financed by PWA, Ministry of Local Government and Municipalities (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	N	N	N	Y
Date	17-Mar-2014	02-Apr-2015	02-Apr-2015	31-Dec-2017

► CMWU manages plant so that effluent standards are met at all times (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	N	Y	Y	Y
Date	17-Mar-2014	02-Apr-2015	02-Apr-2015	31-Dec-2017

► Direct project beneficiaries (Number, Core)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	200000.00	520000.00	520000.00	550000.00
Date	17-Mar-2014	02-Apr-2015	02-Apr-2015	31-Dec-2017

▲ Female beneficiaries (Percentage, Core Supplement)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	50.00	50.00	50.00	50.00

Overall Comments

Intermediate Results Indicators



- EIA, EMP and supplementary ESIA and remedial works studies are completed and their implementation is monitored (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Y	Y	Y	Y
Date	29-Oct-2004	02-Apr-2015	02-Apr-2015	31-Dec-2017

- North Gaza WWTP with a capacity of 35,000 cubic meters per days is constructed and operational (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	N	N	N	Y
Date	29-Oct-2004	02-Apr-2015	02-Apr-2015	31-Dec-2016

- Risk Managemnet Facilities is constructed and operational (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	N	Y	Y	Y
Date	29-Oct-2004	02-Apr-2015	02-Apr-2015	31-Dec-2016

- Volume(mass) of BOD pollution load removed by treatment plant under the project (Tones/year, Core)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	1000.00	4000.00	4000.00	7000.00
Date	29-Oct-2004	02-Apr-2015	02-Apr-2015	31-Dec-2017



► One and a half million M3 of effluent drained from the lake to the proposed NGWTP site (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	N	Y	Y	Y
Date	29-Sep-2004	02-Apr-2015	02-Apr-2015	31-Dec-2017

► Wastewater pipeline installed (8 km), terminal pump station and infiltration basins are constructed (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	N	Y	Y	Y
Date	30-Sep-2010	02-Apr-2015	02-Apr-2015	31-Dec-2017

► Operation and maintenance of the infiltration basins are adequately supervised (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	N	Y	Y	Y
Date	17-Mar-2014	02-Apr-2015	02-Apr-2015	31-Dec-2016

► The NGWWTP is operated and maintained according to industry standards (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	N	N	N	Y
Date	17-Mar-2014	02-Apr-2015	02-Apr-2015	31-Dec-2016



► Remedial works are completed (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	N	Y	Y	Y
Date	17-Mar-2014	02-Apr-2015	02-Apr-2015	31-Dec-2016

► Identified packages are tendered and completed satisfactorily in accordance with the project plan (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Y	Y	Y	Y
Date	31-Dec-2013	02-Apr-2015	02-Apr-2015	31-Dec-2017

► A construction manager to supervise the NGWWTP civil works is hired and adequately supervises the work (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	N	Y	Y	Y
Date	17-Mar-2014	02-Apr-2015	02-Apr-2015	31-Dec-2017

► EA, EMP and supplementary ESIA implementation (for effluent recovery and reuse component) are adequately supervised (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Y	Y	Y	Y
Date	17-Mar-2014	02-Apr-2015	02-Apr-2015	31-Dec-2017



► Risk Management Facilities are constructed and operational (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	N	Y	Y	Y
Date	30-Sep-2004	02-Apr-2015	02-Apr-2015	31-Dec-2017

Overall Comments

Data on Financial Performance

Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	Disbursed
P074595	TF-16501	Effective	USD	5.00	5.00	0.00	0.60	4.40	12%
P146065	TF-16844	Effective	USD	3.00	3.00	0.00	0.50	2.50	17%
P074595	TF-54208	Closed	USD	7.80	7.80	0.00	7.80	0.00	100%
P074595	TF-56186	Closed	USD	6.85	6.85	0.00	6.42	0.00	94%
P074595	TF-57109	Effective	USD	5.35	5.35	0.00	5.17	0.00	97%
P074595	TF-57595	Effective	USD	6.56	6.56	0.00	6.99	0.68	106%
P074595	TF-92196	Effective	USD	12.00	12.00	0.00	4.37	7.63	36%
P074595	TF-97081	Effective	USD	7.00	7.00	0.00	6.55	0.45	94%

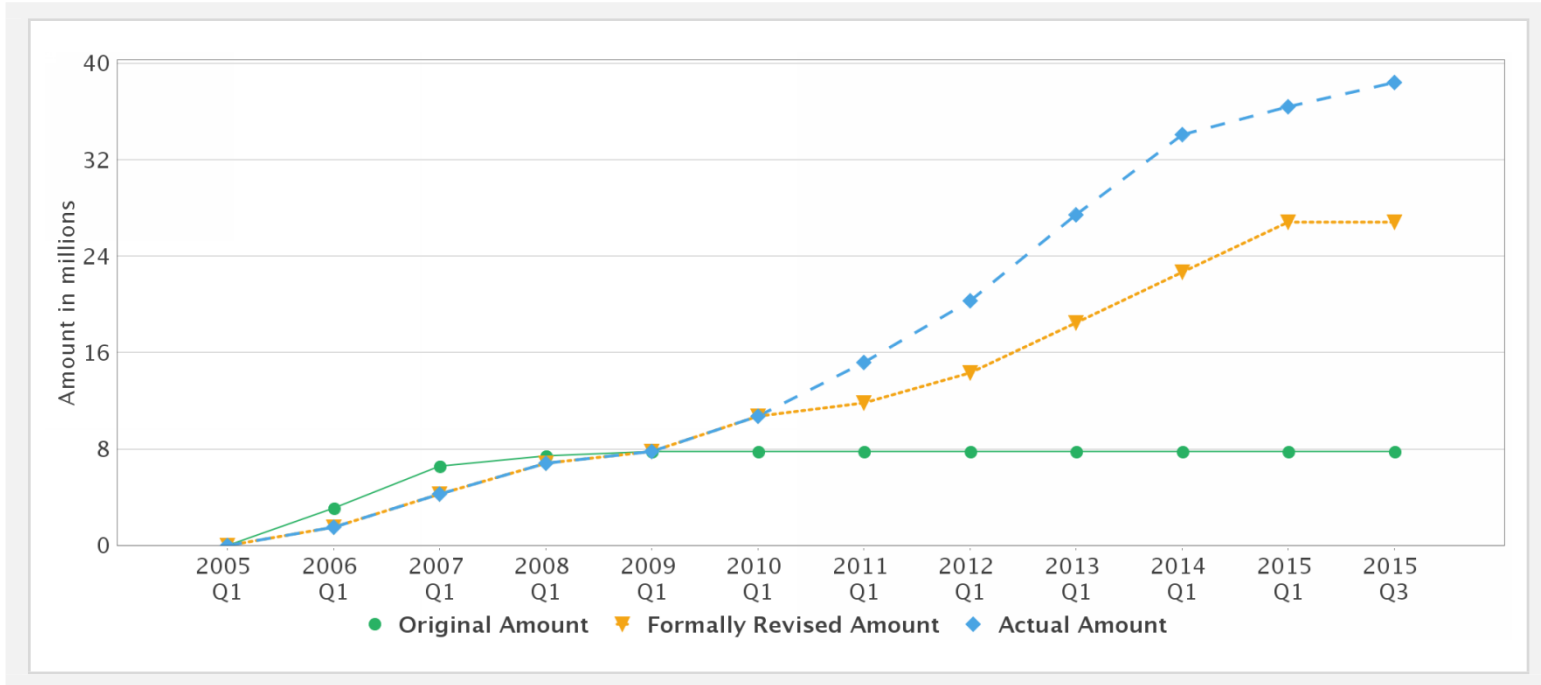
Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P074595	TF-16501	Effective	08-May-2014	08-May-2014	18-Nov-2014	31-Dec-2017	31-Dec-2017
P146065	TF-16844	Effective	17-Jun-2014	17-Jun-2014	01-Oct-2014	31-Dec-2017	31-Dec-2017
P074595	TF-54208	Closed	27-Oct-2004	27-Oct-2004	17-Nov-2004	30-Jun-2010	30-Jun-2014
P074595	TF-56186	Closed	18-Jan-2006	18-Jan-2006	18-Jan-2006	31-Dec-2009	31-Dec-2013
P074595	TF-57109	Effective	02-Oct-2006	02-Oct-2006	02-Oct-2006	31-Dec-2013	31-Dec-2015
P074595	TF-57595	Effective	07-Dec-2006	07-Dec-2006	07-Dec-2006	31-Dec-2009	31-Aug-2015
P074595	TF-92196	Effective	30-Jun-2008	30-Jun-2008	30-Jun-2008	30-Jun-2012	31-Dec-2017



P074595	TF-97081	Effective	25-Oct-2010	25-Oct-2010	10-Nov-2010	30-Jun-2013	31-Dec-2017
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Cumulative Disbursements



Restructuring History

Level 1 Approved on 29-Jun-2012 ,Level 2 Approved on 24-Dec-2013

Related Project(s)

P091314-GZ-NORTH GAZA SEWERAGE TREATMENT PLANT ADDITIONAL FINANCING ,P117446-GZ-North Gaza Emergency Sewage Treatment Project Additional Financing 2 ,P146037-North Gaza Emergency Sewage Treatment (NGEST) Project - Belgian Additional Financing ,P146065-North Gaza Emergency Sewage Treatment Project - Third Additional Financing