Progress Report

1. Report Summary

(1) **Title of the Project** : Construction of Sewage Treatment Plant and Main

Pressure Line in Khan Younis (PAL10-00047395)

(2) Date of the approval : Jan. 2006

(3) Project budget : US\$14,830,000
(4) Scheme of the Project : Emergency Grant

(5) Period covered by the report: 1 April – 30 June 12 (Progress Report No. 21)

(6) UNDP Officer in charge : Iman Al Husseini, Programme Specialist,

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2. Contents

(1) Summary of the project:

Background:

Khan Younis City is the second largest city in the Gaza Strip with a total administrative area of 59 km² and is currently inhabited with a population of around 195,000 persons. The City has a rapidly growing population with an annual growth rate of 3.5%. At present, nearly 40% of the population of Khan Younis City is served by public sewerage collection system. However, due to the absence of a wastewater treatment plant, the collected wastewater was pumped without treatment to the existing main storm water box culvert, which in turn flows by gravity to a storm water infiltration pond located in the north-western side of Khan Younis City. Recently, the wastewater is diverted to other four ad-hoc collection lagoons, established temporarily in the western side of Khan Younis city, and discharged to the Mediterranean sea. The wastewater generated from the un-served areas is still being evacuated by tanker trucks and is disposed off in the environment without any treatment.

This situation is posing serious risks on the Khan Younis residents' public health as well as contaminating the ground water aquifer. Nitrate concentration levels in few of Khan Younis water wells reaches around (458 mg/l) that far exceeds WHO level (50 mg/l). Recent researches have concluded that such high level of Nitrate is one of the factors

that cause the blue baby Syndrome. Therefore, this project comes as an emergency response that aims to improve the public health of Khan Younis residents and to safeguard the environment, in particular the limited water resources.

The primary beneficiaries of the project are the 195,000 residents of Khan Younis city. Other beneficiaries include:

- The Khan Younis Municipality, the Coastal Municipalities Water Utility and the Palestinian Authority as the project will contribute to enhancing the management of water and wastewater services.
- The families of the unemployed workers who will have the opportunity to work on the project.

Project Objective:

The project aims at protecting the public health of Khan Younis residents and improving their environmental health conditions through construction of an extendable Waste Water Treatment Plant. The project as well will control the pollution of the coastal aquifer.

Project execution modality:

The project is directly executed by UNDP/PAPP in coordination with the project counterparts: the Palestinian Water Authority as sector regulator; the Coastal Municipalities Water Utility as service provider and the Municipality of Khan Younis as the direct beneficiary.

(2) Project components:

Component	Budget US\$	Project site
a. Construction of the main pressure line to collect and convey the wastewater from Khan Younis city (pump station 8) to the treatment plant	1,000,000	Khan Younis / Eastern Side
b. Conduct the detailed design for an extendable WWTP for Khan Younis Governorate	1,100,000	Khan Younis WWTP sites (east of Khan Younis)
c. Construction of KY WWTP, Phase 1	11,450,000	Khan Younis WWTP sites

(3) Project timeframe, schedule status, progress of activities, and tasks & measures

Indicated	Indicated Activities		Timeframe							Schedule	Activities done	Remaining	Tasks & Measures					
output		2011		2011		2011		2011		2011		2011 2012			Status	in the reporting	Work	
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q		period							
Output 1: Main Pressure line supplied and installed.	1.1 Installation of 996.3 LM of steel pressure pipes of 24 inches diameter.									Completed as scheduled								
	1.2 Installation of 1070.4 LM of reinforced concrete pipes of 1000 mm diameter.									Completed as scheduled								
	1.3 Construction of 15 reinforced concrete Manholes of 1.5mX1.5 m and 2mX2m dimensions.									Completed as scheduled								
Output 2: Detailed Design for the	2.1 Issuing an Expression of Interest.									Completed as scheduled								
construction of KY WWTP conducted.	2.2 Drafting and posting Request For Proposal (RFP) to the pre qualified consultants.									Completed as Scheduled.								
	2.3 Bidders submitting their technical and financial proposals.									Completed as scheduled with one week extension.								
	2.4 Performing the technical and									Completed with 3 weeks	Technical clarification was		Consultants' response on					

financial ev CAP report awarding recommen	with	delay.	sent to the first rank bidder	technical clarifications has been delayed by 3 weeks due to annual holidays in the consultant's home office in France
2.5 conductions contract negotiation the first ran and signing contract	ns with k bidder	Completed with 2 months delay	Contract was signed by UNDP on the 8 of Oct. 2008 and by the consultant on the 17 of October 2008. Commencing letter was issued by the 23 of October 2008	An online pre contract negotiation was conducted to overcome the difficulties of the physical attendance of the international consultant due to Gaza current security circumstances.
2.6 Preparir detailed de Inception R	sign	Completed with 1.5 months delay due to the last Israeli military operation in Gaza.	The Draft Inception Report was delivered by the consultant on the 17 of Dec. 2008. Comments were performed on 31 Jan. 2009. The final copy was approved on 25 Feb. 2009. Payment no.1 was disbursed on 30 March 2009.	A video conference meeting was conducted on 23 Jan. 2009 to evaluate the project situation after the last military operation in Gaza. The consultant contract was extended by 1.5 months. The consultant contract amendment was signed on 16 March 2009.

2.7 Preparing the Initial Design Report	Completed, with 1.5 months delay due to last military operation in Gaza.	Issuing the Draft Initial Design Report. Reviewing the Draft Initial Design Report mutually with the counterparts. Approving the Initial Design Report on 6 Sept. 2009. Payment No.2 was disbursed on 28 Sept. 2009.	Security coordination actions were mobilized with Israeli concerned authorities to grant permits to accomplish the required survey and geotechnical investigation works in KY WWTP eastern site. Different meetings were conducted between UNDP, counterparts and the JV consultant to mutually discuss,
2.8 Preparing the Environmental Impact Assessment Study Report	Completed, Rescheduled by 1.5 Months lag due to the last military operation in Gaza, and by 10.5 Months for the EQA's and the Palestinian national environmenta l assessment	The draft report of the EIA study performed. EIA main public hearing workshop conducted on 30 Dec. 2009. EIA draft report sent to EQA for approval on 26 Jan 2010. Comments received on 30	review and approve the Initial Design Report. Preparation and coordination actions were mobilized with all concerned authorities, officials, NGOs, civil society organizations, community and localities leaders and residents to conduct the EIA main public hearing workshop, which was performed

		committee's comments and approval.	May 2010 and rectified. Rectified final report re-sent to EQA for final approval on 2 June 2010. EIA Final Report approved by EQA on 6 July 2010. 13 copies of final approved report sent to EQA to present it to the national environmental assessment committee which approved it on	successfully. Coordination carried out with PWA and EQA to finalize the EQA's approval of EIA report.
2.9 Preparing the Geotechnical Investigation Reports		Completed, Rescheduled by 4 Months lag due to the last military operation in Gaza and the relevant delay resulted from the residents objections of Muraj and Al Fukhari infiltration areas to carry	27 Oct. 2010. Detailed geotechnical investigations in Al Fukhari infiltration site completed. Analysis of results and relevant hydraulic modeling completed. Geotechnical investigation of the effluent and	Security coordination actions had been mobilized with Israeli concerned authorities to grant access for the project's eastern site. Different community participation and public hearing meetings and workshops had been conducted with all concerned parties, Al

	out the onsite pressure line completed. Final stage and surface geotechnical investigations of Al Fukhari infiltration basins completed.	discuss residents' objection concerning the infiltration basins.
2.10 Preparing the Detailed Design Report	Completed, Rescheduled by 8.5 months lag due to the last military operation in Gaza, the relevant delay resulted from the residents' objections of Muraj and Al Fukhari infiltration areas and the client, the counterparts and the consultant requirements to revise and rectify the detailed design report and the related tender The draft detailed design report performed. Comments have been sent to the JV consultant on 18 April 2010 and have been rectified. Rectified report re-checked and remaining non done comments re-sent again to the JV consultant on 14 June 2010. The detailed design report rectified and final draft sent on 7 July 2010. The final hard copies of the detailed design report issued with	on-site work. Different meetings and discussions had been conducted with the JV consultant to evaluate the delay of on-site geotechnical investigations resulted from residents' objections,

		documents.	issuing the final tender documents on Dec. 2010.	extended by extra 3.5 months. A contract amendment No.3 was issued on March 2010, discussed and signed by consultant on 19 May 2010.
2.11 Preparing the		Completed,	The draft tender	The consultant
Tender and		Rescheduled	documents were	contract was
Contract		by 13.5	performed and	extended by extra
Documents, per		months lag	submitted on 21	3.5 months. A
packages		due to the last	March 2010. The	contract amendment
		military	draft tender	No.3 was issued on
		operation in	documents sent	March 2010 and sent
		Gaza, the	to PSO/LSO in NY	to the consultant for
		relevant delay	for revision.	acceptance and
		resulted from	Comments	signature. It has been
		the residents'	received from NY	discussed and signed
		objections of	and sent o the JV	by consultant on 19
		Muraj and Al	consultant on 9	May 2010. A VC
		Fukhari	June 2010. The	meeting conducted
		infiltration	rectified tender	with JV consultant
		areas and the	documents re-	on 10 August 2010 to
		client and the	submitted by JV	discuss comments to
		consultant	consultant on 23	finalize the tender
		requirements	June 2010. The	documents. A
		to revise and	rectified tender	mission to Gaza is
		rectify the	documents	planned for the
		detailed	revised by client	international
		design report	and answers on	consultant to have a
		and the	comments sent	meeting on 7 Oct.
		related tender	to consultant on	2010 to finalize the
		documents.	1 Sept. 2010.	tender documents
			Comments	for approval. The

				rectified and final tender documents of the four agreed upon packages issued on Dec. 2010.	contract was extended by extra 6 months. A contract amendment No.4 was signed to finalize the detailed design assignment on Dec. 2010.
2.12 Preparing the Assignments Final Report			Completed, the detailed design assignment rescheduled by 13.5 months lag due to delay of the above mentioned reasons. The	Draft report issued, comments sent to consultant and rectified the Assignment Final Report issued on Dec. 2010.	The contract was extended by extra 6 months. A contract amendment No.4 was signed to finalize the detailed design assignment on Dec. 2010.

						detailed design assignment accomplished and closed on Dec. 2010.		
Output 3: KY WWTP, Phase 1 constructed.	3.1 Carrying out the construction supervision for KY WWTP.			Х	X	Planned Not started yet	Pending due to unavailability of required additional fund	Intensive resource mobilization undertaken with IDB to secure the total required additional fund from Kuwait Fund.
	3.2 Construction of KY WWTP, Phase I				X	Planned Not started yet	Not launched yet due to deficit of total budget required for construction works	Intensive resource mobilization undertaken with IDB to secure the total required additional fund from Kuwait Fund.

Project Completion Date: Dec. 2014 (25.5 months to finalize the detailed design (output 2, Nov 2008 – Dec. 2010), and 30 months for the construction phase (output 3, 2012 – 2015)

3. Financial report

Budget items (according to the proposal)	A. Original budget (according to the proposal) US\$	B. Revised budget (if the original budget is revised) US\$ *	C. Disbursement US\$	D. Balance (B-C) US\$	E. Rate of disbursemen t (%) (C/B*100)
Construction of KY WWTP	12,550,000	11,450,000	0	11,450,000.00	0.0%
Supplying and installation of 24 inch main pressure line	1,000,000	1,000,000	527,303.15	472,696.85	52.7%
Carrying out the Detailed Design of KY WWTP.	0	1,100,000	946,804.00	153,196.00	86.1%
Project Engineers	150,000	150,000	150,629.19	-629.19	100.4%
Contingencie s and Miscellaneou s	31,481	31,481	18,600.15 **	12,880.85	59.1%
Sub-total	13,731,481	13,731,481	1,643,336.49	12,088,144.51	12.0%
GMS (8%)	1,098,519	1,098,519	131,465.48	967,053.52	12.0%
Total	14,830,000	14,830,000	1,774,801.97	13,055,198.03	12.0%

^{*} Project Budget was revised based on letter of clearance from the Government of Japan dated 24 July 2007

^{*} It is important to highlight that the financial figures in this report are temporary figures, and may be corrected at a later stage due to exchange rate fluctuations, realized gain/loss or any other possible corrections. UNDP/PAPP's financial system operates in such a manner that the financial system closes in early December of each year and that final expenditure reports reflecting the disbursements and GMS of the previous year are only published in March of the following year.

^{**} Total USD 18.01 added as realized loss/gain to contingencies, but relevant GMS for this amount is not included.

4. Any special notes or remarks:

4.1 The cost estimate for the construction of waste water treatment plant "WWTP", phase1, dramatically increased due to the following reasons:

- The design capacity of WWTP, Phase I, increased by 10,000 cubic meters per day (cm/d), based on the recommendations of the preliminary design carried out by Palestinian Water Authority "PWA". The scope of work was identified to design an extendable waste water treatment plant to be implemented in two phases; with inflow capacity of 16,100 cm/d and load estimates for the year 2018. In parallel, temporary treatment lagoons plant were proposed to be constructed before the construction of the permanent waste water treatment plant, to handle 10,000 cm/d of the collected waste water during the emergency situation. However, this temporary treatment plant has not been constructed and accordingly the project was modified to design and construct an extendable WWTP to treat and dispose of the generated load of 26,100 cubic meters per day.
- The scope of work of the project was modified to ensure environmentally sound disposal of wastewater: The TOR of the detailed design was developed and approved by the projects counterparts. The infiltration scheme (that includes the infiltration basins and emergency outflow) was added to the project components to ensure the optimum utilization of the treated wastewater as alternative water resources to recharge the aquifer and contribute to restore its capacity and to use the treated waste water for irrigation purposes to release the pressure on the fresh water. Thus the detailed design's assignment included performing the design of the related components of ultimate disposal facilities (the infiltration basins and the effluent and emergency pressure pipelines); where no budget lines were allocated in the Project Document for the construction costs of these additional components.
- The cost for the construction supervision by international consulting company as well as the cost for the first year operation and maintenance during the commissioning period (one year) of the treatment plant was also not included in the original project document.

4.2 Revised cost estimate for the construction of WWTP, phase I, and budget shortfall

According to the detailed design cost estimates, it is clear that the available fund of USD 11.45 millions is neither sufficient to construct phase I of KY WWTP itself; nor to construct the additional necessary and vital components of the project (infiltration basins and effluent and emergency pressure pipelines). Based on the above, and to ensure successful implementation of the project, the following activities and their additional corresponding budget lines; are urgently needed over the forthcoming four years:

Constructing KY WWTP, Phase I;

- Constructing the effluent and emergency main pressure pipelines to the infiltration basins and to the sea shore outfall with a total length of 18.6 Km;
- Constructing infiltration basins to recharge the treated waste water effluent to enhance the ground water to ultimately be used for irrigation purposes;
- Constructing the main electrical power supply line to KY WWTP;
- Carrying out the required pre-contract services and construction supervision for the construction of KY WWTP, Phase I;
- Carry out the required one year operation after commissioning of KY WWTP, Phase I, to build the capacity of the CMWU and to transfer knowledge and proper codes of practice.

According to the final detailed design report; USD 60.23 Millions, are needed to construct and effectively implement and operate KY WWTP, Phase I, and its effluent and infiltration scheme.

Based on last agreement reached between UNDP, PWA and CMWU on 15 Dec. 2011, attached, concerning the project implementation arrangements, and their request to include capacity development component for the CMWU to exchange knowledge and proper codes of practice during the construction and operation stages, the whole project budget was revised considering the CMWU's capacity development needs and the direct implementation costs that deem necessary for the successful implementation of all project components through the 4.5 years duration of construction and operation stages; including 10% contingency budget.

Therefore, additional USD 45.4 Millions matching fund are needed to construct and effectively implement and operate the treatment plant and its effluent and infiltration scheme.

4.3 Update on mobilizing USD 45.4 million budget shortfall

Through a meeting conducted between UNDP/PAPP, PWA and CMWU on 15 December 2011, the project implementation arrangements re-discussed thoroughly among parties, and PWA endorsed the CMWU's request to implement the infiltration basin component aiming at developing their capacity for sustainable operation of the plant. A relevant Minutes of Meetings signed by UNDP, PWA and CMWU, where it was agreed that UNDP will implement all components of the project, however, CMWU will implement the construction of the infiltration basins.

The cost estimate including the capacity development needs for the CMWU was revised and shared with PWA on 15 December 2011. The Project Document was modified and updated to reflect all the project activities with detailed description and a new cost estimates and to accommodate changes in scope of work and budget. The draft PD was shared with PWA on 15 December 2011.

It is worth to mention that there will be no change on what the GoJ is originally committed for.

UNDP sent the signed MOM to IDB on 18 January 2012 as it was conditional for IDB to proceed with signing the agreement with UNDP. IDB sent another request for

UNDP regarding the land acquisition of the infiltration basins and a time schedule for the implementation of the Project.

The time schedule for the implementation and construction of KY WWTP and its effluent and infiltration scheme and update concerning the land acquisition were shared with IDB on 2 March 2012. The time schedule and the revised cost estimates was shared with both PWA and CMWU on 12 March 2012, and UNDP continued following up with the concerned authorities the land acquisition issues; mainly with PWA, CMWU and the MoLG.

The last follow up meeting concerning the land acquisition of the infiltration basins was conducted with PWA in Gaza on 23 February 2012, which was succeeded two weeks later by a follow up meeting with the MoLG. The following update was communicated with IDB on 2 March 2012, hoping that this will be satisfactory for the IDB to proceed with the signature of the agreement:

- The land was officially allocated for the project through successive legal procedures;
- The decision of acquiring land was taken through official correspondences between Ministry of Local Government, land Authority and Cabinet of Gaza Government;
- The Land Authority in Gaza evaluated the cost of land on 22 December 2011 at Jordanian Dinars 20,000/dunum, which equals USD 28,000/dunum. As the area of land is 98 dunums, the total cost will be around USD 2.75 millions;
- The land owners are ready and willing to sell the land to the government;
- The CMWU sent a letter to Mr. Jawad Naji (focal point of IDB in the President's office) to address the land acquisition issue and to push the purchase of land with the Prime Minister Salam Fayyad;
- It was agreed both with both PWA and CMWU, that if the PA/ Ministry of Finance cannot afford to buy the land because of their financial crisis, then the Prime Minister himself will send a letter to the President of IDB to request them to allocate additional budget to purchase the land as part of the project components.
- UNDP has not heard anything from IDB concerning the funding status of the Kuwait fund until 28 March 2012, the date the Commissioner General of UNRWA visited the Special Representative of UNDP/PAPP to inform him that IDB approached them to see if they are interested to implement the project.
- On 9 May 2012, the Deputy Special Representative, Chief Engineer and Programme Analyst of UNDP/PAPP met with the Deputy Representative of the Japanese Mission in Ramallah. The meeting concluded with a shared understanding that the delays were beyond UNDP's control. It was agreed to establish a dialogue between the two donor stakeholders: Japan and Kuwait. In this regard, it was agreed that a follow up be made with Kuwait by the UN Deputy Special Coordinator for Middle East Peace Process/UN Humanitarian Coordinator for oPt, Mr. Max Gaylard, and possibly the Japanese Embassy in

Kuwait.

- A meeting was conducted on 7 June 2012 between the Japanese Mission in Ramallah, Mr. Max Gaylard and the Special Representative and Deputy Special Representative of UNDP/PAPP to discuss the additional funding status, well in advance of Mr. Gaylard's mission to Kuwait on 17 June 2012.
- On 17 June 2012, Mr. Max Gaylard visited Kuwait and met with Mr. Fawzi Al-Hunaif (Director of Operations, Kuwait Fund for Arab Economic Development) and the following points were clarified:
- The Kuwait Fund for Economic Development confirms that UNDP is the executing/implementing agency of this project;
- Mr. Al-Hunaif will send UNSCO a letter, by end of June, to re-confirm and clarify this issue to IDB;
- Mr. Al-Hunaif will call for a video conference meeting between UNSCO, UNDP, and IDB to clarify any issues and to agree on the way forward to start the project implementation immediately (the video conference is anticipated in the beginnings of July).

4.4 Completion of the detailed design

In accordance with the project updated work-plan, the detailed design planned to be completed by the end of December 2010. The final draft report submitted and reviewed by the project counterparts and approved. Due to the complexity and the size of the construction activities, the UNDP general conditions of contract modified and the draft tender documents sent to UNDP HQ; which needed a clearance from the UNDP legal office in NY. The final detailed design report and final tender documents delivered and the detailed design assignment accomplished and closed on December 2010, and the project is currently ready to launching the construction stage upon availability of the required additional fund.

4.5 COGAT "Israeli Authorities" approval to facilitate entry of construction materials into Gaza

The list and quantities of needed construction materials has been prepared and submitted to the Israeli authorities. An Israeli Approval regarding facilitating entry of materials for this project was granted on July 11, 2010.

4.6 Impacts of absence of KY WWTP

The absence of a functional WWTP in Khan Younis Governorate for long years has adversely affected the public health of Khan Younis residents and lead to the deterioration of their environmental health conditions. It has also polluted the coastal aquifer which is the only source of water for the Gaza Strip. The following statistics illustrate and summarize the existing conditions that will exacerbate further if the pollution caused by the wastewater is not controlled or managed.

• The existing cesspits (30,000) are considered a serious source of pollution that poses a health risk to residents of the city. The cesspits frequent flooding in the

streets pollutes the populated residential areas and is a source of nuisance and bad smell. They also accelerate the breeding of flies and mosquitoes and rodents.

- According to a water analysis conducted in July 2009, it was found that nitrate concentration in all the 24th municipal water wells in Khan Younis are generally very high. It recorded as high as 458 Mg/l in one of the wells and 200 mg/liter in average. It is worth to note that the recommended WHO standard is 50 mg/l. The high concentration of nitrate in drinking water is one of the leading causes for methemoglobinaemia (blue baby phenomena) among babies. The UNEP report of 2009 mentioned that some cases of methemoglobinaemia were documented in the Gaza Strip.
- The existing western waste water lagoons become a serious source of pollution for the western shallow coastal aquifer. Lab results of water analysis of agricultural water wells located close to the waste water lagoons in Al Mawasi area in western side of Khan Younis; which are used for drinking purposes by local residents, showed high and serious biological contamination. Some samples showed that the Fecal coli-form and Total coli-form (indicators of biological contamination) are too numerous to count, while it should be 0.00 No/100 ml as per the WHO guidelines. The Ammonia concentration was very high as well at a value of 3.4 mg/l.
- The prevalence of waterborn diseases such as, diarrheas, dysenteries, salmoellosis, hepatitis A, typhoid, guardian and amoeba histolytic in Khan Younis city is considered to be one of the highest among the Gaza Strip.
- In 2009, 4800 persons; the majority of them are children, were admitted to UNRWA clinics in Khan Younis due to infection caused by water born diseases such as watery diarrhea, acute bloody diarrhea, viral hepatitis and typhoid fevers.

Discharge of partially treated waste water to the sea is causing its pollution and rendering it harmful to marine life. Moreover, it is posing public health risks to the residents of Khan Younis especially during summer vacation when the sea is the only recreational spot in the area.

4.7 Utilizing the saved amount of fund allocated for providing the detailed design to cover the current deficit of budget lines to secure salaries of the Project Manager.

Since 2006 and up to date, the UNDP/PAPP's Project Manager has being effectively managing and following up the project's different tasks and activities, and the total amount of USD 150,000, allocated as per project budget lines to cover the salaries of project engineers for 24 months, has been totally disbursed as due salaries for project staff by the end of December 2011, as seen in the financial report in clause 3.

Meanwhile negotiations are currently proceeding with the Kuwait Fund and Islamic Development Bank to secure the total additional fund, and aiming at maintaining the cumulative expertise of the Project Manager to continue following up the project's different tasks and activities, UNDP/PAPP is seeking the generous approval

of the Government of Japan to utilizing part of the saved amount of fund allocated for providing the detailed design, amounting USD 153,196, to cover the current deficit of budget lines to secure salaries for the Project Manager for the next six months.

5. Pictures of project indicating before the project and progress of the project:

Photos of Installing the Main Pressure Line. (Completed)



Photos of KY WWTP Eastern Site





Photos of Temporary Waste Water Disposal Lagoon (Storm Water Lagoon)
 West of Khan Younis











 Photos of Geotechnical Investigations & International Consultant Mission (KY WWTP Eastern Site & Infiltration Areas), (Completed)













 Photos of Geotechnical Investigations in Al Fukhari Infiltration Areas, EIA On-Site Baseline Data Collection. (Completed)









Photos of Public Hearing Meetings & EIA Public Hearing Workshop. (EIA Study Completed)













 Photos of Site Visit of Mr. Hitoshi Nakamura; Representative Office of Japan to the PA, to KY WWTP Eastern Site on 20 Dec. 2011





6. Report authorization by UNDP/PAPP

Reporting person, his/her title and belongings: Ashraf Abu Shamala, Project Manager	
Reviewed by: Iman Al Husseini, Programme Specialist, Infrastructure Unit (Gaza Office)	Di X
Date of submission: 24 June 2012	
Supervisor's name and his/her signature: Rima Abu Middain, Natural Capital Team Leader	