Partners for Water and Sanitation

Note on project reports

The following report has been prepared by Partners for Water and Sanitation in response to a project Terms of Reference.

The content of the report is based on the opinion of the author(s) and does not necessarily represent the opinions of the wider PfWS partnership, or the project funders.

Partners for Water and Sanitation

Review of Environmental Impact Assessment Reports for the Lagos Water Corporation Rehabilitation and Expansion Projects

Submitted by:

Dr I M Griffiths (Pillon Ltd)

21 July 2008

Contents amendment record

This report has been issued and amended as follows:			
Revision	Description	Date	Signed
1	First Draft	18 July 2008	
2	Second Draft	19 July 2008	
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Partners for Water and Sanitation (PAWS)

Review of Environmental Impact Assessment reports for the Lagos Water Corporation Rehabilitation and Expansion Projects

Contents

1 Executive Summary

1. There is an extreme problem threatening public health, downstream of the water works discharge. Stagnant water, mosquito and malaria risk, flood risk and risk of drowning in silt appear to be just some of the issues inflicted on the local population. Other aesthetic issues such as smell and poor environment make remediation of this problem important. There may be other benefits of improvement, such as quality of life, fisheries and ecological improvement.

2. The water works do not appear to be performing well and both WTWs appear to discharge greater volumes of poor quality wastewater than would be expected of similar plants around the world.

3. The treatment of the wastewater from the WTWs should be improved and the volumes reduced. If this is not done then any clean-up operation can only be a temporary measure, the receiving water will soon deteriorate again, the silt will accumulate and the public health risks will return.

4. An improvement programme for the operation of the WTW and improvement of the discharge should be developed and agreed. Monitoring against this plan should be rigorous and enforced. The plan could be undertaken in a number of phases, including short-term operational improvements, followed by more extensive repair, maintenance and engineering work.

5. I agree with the view that the sediment should be dredged and removed from the river downstream of the WTW. From the evidence provided the heavy metal concentrations in the sediment are not acutely toxic and I have no reason to expect heavy metal sources within the WTW. The aluminium levels are elevated and reflect the use of aluminium as a coagulant with the WTW.

6. The review document in 2007calculates the volume of sediment and suggests that the only option for disposal is to engineered landfill site. I agree with the view that this should not be used for food producing agricultural land, however a single application at measured levels to non food crops, or for land make up should not be excluded and could reduce costs significantly.

7. **In terms of priorities,** I would suggest that the remedial work in the river downstream of the WTW could be undertaken at the same time as the improvement to the Water Treatment works as they are not dependent in engineering terms. However if there is delay in the improvement of the discharge then the problems will return and work will be wasted.

8. Very little information is provided on the hydrology of the rivers at the intakes or downstream. Knowledge of this is essential to understand the effects on the river of the abstraction of water. A programme to gather and collate this information should be developed.

9. It is likely that the indigenous fishery in the river catchment is impacted by the low flows and pollution from the WTW, and the remedial works recommended could bring improvements. This may be of economic importance and I suggest assessment of baseline fish populations and an investigation into the scope for improvement and optimisation of the fishery to be investigated.

10. Establish a system of permits for abstraction and discharge quality and ensure that these are implemented and enforced

11. Insufficient information is provided on other uses of the river upstream or downstream of the WTW. There may be other contributory factors to the low flows, such as abstraction for industrial or irrigation water. Also there may be discharges of wastewater (industrial or municipal) that could impact on quality.

12. The report mentions the impact of land reclamation and unregulated rubbish disposal adversely impacting on the quality of the environment downstream of the discharge. If remedial work is to be undertaken, an initiative to prevent and improve this impact will be needed.

13. In the longer term I would recommend a river basin approach to the overall planning and optimisation of the aquatic systems. River basin planning methods are well advanced and have been applied to similar river basins around the world. Planning systems also allow public engagement at key points in the process.

14. I have restricted the EIA review to the scope of the current reports, focussing on the issues identified. I believe that the majority of the acute issues have been addressed. With the exception of the toxicity of the sludge and the consequential disposal options, I broadly agree with the findings

15. If this EIA was undertaken in Europe using current guidance, then it would consider a wider suite of factors, including energy use at the WTW, more extensive impacts on ecology, traffic, and other social and economic issues.

2 Introduction

As a PAWS Lead Partner I have been asked to provide an independent review of the two Environmental Impact Assessment documents made available to me in the UK.

I have no direct operational knowledge of the Lagos Water Treatment Works (WTW) and have not been asked to visit the site. The overview is confined to a desk review of the following documents:

> Environmental Assessment Study for the Lagos Water Corporation Final Report July 2005, Prepared by a team of consultants led by Dr. M. I. Ogunbajo.
>
> Reviewed Report for the Environmental Impact Assessment Study for Iju/Adiyan Water Treatment Plants. Final Report December 2007, Prepared by Professor M. I. Ogunbajo.

My view has been restricted to the environmental impact of the Water Treatment Works, focussing on the impact of the discharge to the Adiyan River. I do not comment on the quality of the potable water supplied from the water works to the public. I do make some suggestions about the public health risks associated with the poor performance of this plant, based on observations made in the report.

For the purposes of this report I have taken the analytical results given in the report as correct and cannot comment further without details of sampling and analytical methods and quality assurance. I have not checked the calculations or numeric assumptions.

The report is a rapid assessment based on a few days notice and a short exposure to the documents. The deadlines set to meet the 21 July 2008 deadline have allowed only a high level overview. A more comprehensive review could be achieved if more time were made available.

3 Environmental Characteristics

The July 2005 report provides background information on the geography, topography and the surrounding area. I understand from this that the River Ogun and its tributary the River Adiyan are relatively short, lowland rivers, running from a line of hills, across the coastal plain and into the sea. They enter an area of mangroves which I assume is characterised by sand bars and permanent and seasonal lagoons.

3.1 Water and Environmental Quality

The rivers can be described as warm sub equatorial waters with temperatures between 25 and 35 degrees centigrade. The chemical makeup of the rivers reflects the geology of the area. They arise from sandstone and have low hardness and because of this there is little buffering capacity so pH variations will occur.

Under natural conditions the rivers would not support large phytoplankton populations and I would expect them to be relatively oligotrophic (nutrient poor) in nature. However, land use changes, water abstraction, nutrient inputs from agriculture and towns, plus natural and manmade impoundments will make the rivers vulnerable to eutophication and dissolved oxygen depletion. This will cause fish mortalities and septic conditions.

I have no information on the fish populations or the commercial/subsistence opportunities of any fishery, although I note a reference to ‘fishermen clearing the weed’. I would expect the indigenous fish stocks to be very susceptible to pollution and changes in flow. An assessment of baseline and the potential for development or economic use would be informative for future management.

The belt of mangrove swamps would be very susceptible to manmade damage and changes to flow regimes and quality. They will be a crucial part of the natural ecosystem that protects the coastline from erosion and will provide breeding grounds for fish and other animals. These should be protected and I would suggest a monitoring programme that assesses the impacts of the rivers on their health.

The report notes that under certain low flow conditions sea water infiltration up the rivers occurs. This has caused problems at the water intake and, I assume, in the quality of the potable water supplied to the public.

3.2 River Flows

Although the rivers would normally flow throughout the year, they will have a clear seasonality with peaks in flows during the periods of May-July and September-October. A dry period in December to January would naturally cause periods of low flow which need to be taken into account in the management of the river. Unsettled weather in recent years may have caused more extreme events of flood and drought. The expectations are that climate change will cause greater variability and more extreme events. This needs to be factored into planning assumptions for the catchment.

No data on river flows are provided in the reports and I therefore assume that there are no fixed flow or water level monitoring stations on the river. The lack of this information for planning and management of the river systems presents particular difficulties. I would expect information on long term actual flows, seasonal variations and modelled projections, upstream and downstream of the water treatment works. Without this information it is not possible to allocate water resources within the river system effectively. Consideration should also be given to the specification of minimum flows for the rivers at key points.

In order to understand the current and future water allocation and to optimise the systems it is important that this information is made available and/or monitoring facilities are put in place to assess this.

3.3 Environmental Overview

As a general overview, these rivers and the ecosystems that they support are particularly vulnerable to pollution and other manmade pressures. The impact of the waterworks will be significant and they must be designed and operated to minimise environmental degradation.

A number of the issues that are identified in the reports are a consequence of poor management of the river systems. I would suggest that the low flows, siltation, septic lagoons, nutrient impacts and saltwater intrusion, could all be improved if the systems were well managed.

4 Abstraction

Water is abstracted directly from the Rivers into the WTW. I assume that there is no bank side storage or impoundment. This makes the WTW and the public supply very vulnerable to pollution incidents, changes in water quality and loss of supply in periods of low flow.

The water abstracted from the Adiyan River into the Adiyan WTW, reduces the flow in the river and certainly exacerbates the problems seen at its wastewater discharge downstream. Estimates are provided of the amount abstracted, and I assume that this is calculated from the pumping capacity rather than measured on a routine basis. I note that there are issues with the maintenance of the pumps and difficulties with the abstraction site itself that may reduce the capacity of the WTW.

The abstraction from the River Ogun into the Iju WTW is also problematic and at times of low flow (and/or over abstraction) salt water is drawn from the sea into the intake causing operational and potable water quality problems. A weir has been built to reduce these problems, but may well cause other detrimental effects. The Iju water treatment works discharges into the Adiyan River near to the discharge from the Adiyan WTW, compounding the effects.

There is no information on other abstractions or water uses for irrigation, industrial or potable supply, but they may also be significant.

The overall effects of the abstraction of water from the rivers are not fully taken into account. The report focuses on the local and extreme problems downstream of the WTW discharges, but I would expect the effects of significantly low flows, caused by over abstraction, to be much more wide spread. Upstream activity, may well affect the availability and quality of water for abstraction. Downstream effects will include changes to the flow regime into the sea and on the health of the mangroves and the lagoon systems.

There is no apparent water resource model for the rivers. I would strongly recommend a full catchment water resource appraisal for the river basin, with proper allocation of water and estimation of environmental effects. With a seasonal pattern to the river flows there must be considerable scope for optimisation and possible water storage to cover the low flow periods and to provide greater security of supply.

Water allocation to individual users should be via licences, with the necessary monitoring and enforcement. (See regulation below).

5 Water Treatment Works

There are clear problems with the operation and maintenance of the two WTW. Some information is provided in the reports relating to non functioning pumps, lack of spare parts, and maintenance of the intake system. Clearly significant remedial work is necessary, both in terms of engineering improvements, repair and in their day to day running.

I make the following observations from the reports, most of which impact on the river environment.

5.1 Intake

There are issues relating to the intake which may be improved if there was better management of the river systems as a whole. They will also impact on the operation and effectiveness of the plant. These include weed growth, water quality, saline intrusion and silt loads. All will make the operation of the plant more difficult and impact on the quality of water supplied to the public.

5.2 Possibility of bank side storage

Bank side storage would improve the security of supply, the quality of raw water into the plant and, depending on the capacity, reduce the impact of the seasonal and flow characteristics of the river. A feasibility study may help in assessing the long term options and provide alternatives in terms of water resource optimisation for the catchment.

5.3 Treatment Process

Little information is given in the reports and detailed comment is beyond the scope of this report. However, a number of the clarifiers are not working properly. This would result in the inefficient running of the plant and probable health risks to the public receiving the water.

5.4 Coagulation

An aluminium coagulant is used to aid sedimentation of the particulate matter. It is also identified as causing problems downstream in the river. No information is given on the mode of application of the coagulant but I would recommend a review of this process. Firstly, it is an expensive consumable and should be optimised, and secondly it will be possible to reduce the amounts lost to the wastewater discharge.

In Europe iron is used increasingly for two reasons. Firstly there are human health concerns about the links between Alzheimer's disease and elevated concentrations of aluminium in drinking water (especially at low pH waters like these in the Adiyan River). Secondly there are environmental effects of high concentrations of aluminium, as noted in these reports. For these reasons in Europe there are strict aluminium standards on potable water quality and on discharge permits to the environment.

Consideration should be given to changing the coagulant used from aluminium to iron, especially if engineering and process improvement are being undertaken of the WTWs. The case for change will depend on the availability of iron sulphate, works processes, dosing rates and the cost in Nigeria.

5.5 Cryptosporidium

Comments made in the reports give me concern over the possibility of Cryptosporidium outbreaks. Cryptosporidium is almost certainly present in the raw water and may be concentrated in a sub standard WTW, with insufficient barriers between process elements. Also incorrect recycling of wash water can pose risks.

5.6 Wastewater volumes

The reports estimate that the Adiyan WTW loses about 5% of the inflow into the wastewater stream. Losses from the Iju plant are estimated at between 2% and 30% with a mean of about 13 %. These are excessive and wasteful. All the water is pumped, consuming expensive electricity and increasing the carbon footprint of the plants considerably. In addition, the water is removed from the river, thus increasing the environmental damage. Wash water is usually treated and recycled back into the plant, so improving efficiency considerably. This should be optimised as part of the operational and capital improvement to the WTW.

5.7 Wastewater treatment

There is a need to discharge wastewater to the river, however this should be treated and meet strict quality objectives. It would be normal to settle the wastewater in lagoons before discharging. These do not appear to be in place or are in disrepair. I note that alternative by-pass channels have been dug to allow this wastewater to discharge into the river. It is the lack of treatment of the wastewater, combined with the high volumes and low flows in the receiving water, that is causing most of the environmental problems downstream.

5.8 Wastewater quality

The wastewater quality reflects the nature of the process and the quality of the raw water entering the WTW. There are the expected suspended solids and enhanced organic material in the effluent stream. These will contribute to the degradation of the river downstream.

The high volumes of the wastewater mean that although pollutant concentrations may be low, the overall loads of pollutants discharged are high.

The initial broad spectrum analysis of heavy metals is useful in excluding any extraneous or unexpected contamination in the river basin, or from the WTW processes. However a risk assessment could have focussed the analysis of key parameters. With the exception of aluminium, the quality of the effluent should not lead to long term accumulations or toxicity.

Aluminium is used in the process and can cause problems under certain conditions, in the water column and in the sediment. This should be limited and the process optimised. aluminium is expensive and unnecessary amounts should not be wasted. As noted in 5.4 above, consideration should be given to changing to a less toxic iron coagulant – for public health and environmental reasons.

Chlorine from the disinfection process is often a risk and can be extremely toxic in the water environment. I would expect high operational standards to prevent wastewater contamination with chlorine and regulatory standards for this should be set.

I am concerned about the use of WHO Drinking Water Standards to assess the quality of effluent and river water. In most cases these are much too stringent and not appropriate to set effluent or river quality standards.

It would be normal to set the quality of the wastewater using a permit system that reflects the needs of the receiving environment. This allows the waste water treatment plant to be designed and optimised to meet the standards. This would be monitored by the WTW operators and records kept. An independent inspector would check this and investigate non compliance.

6 Silt Deposition downstream of the WTW

There is an extreme problem threatening public health, downstream of the water works discharge. Stagnant water, mosquito and malaria risk, flood risk and risk of drowning in silt appear to be just some of the issues inflicted on the local population. Other aesthetic issues such as smell, poor environment also make remediation of this problem important. This has been caused by the build up of silt from the WTW discharges, and probably made worse by reduction in flow in the river due to over abstraction.

The silt needs to be removed to allow for the free flow of the river and to prevent the collection of septic water in the static water. The report estimates the volume of this silt and considers the cost and options for disposal. I have not checked these calculations, but have no reason to doubt their validity.

The analysis of contaminants in silt and the determination of standards are always difficult and few definitive standards are available. Without detailed information on the sampling techniques, analytical methods and quality assurance, I can only use the values in the reports as a guide. In general they reflect the expected effects of the water treatment process where aluminium is the predominant chemical used to enhance the treatment processes. With the exception of elevated aluminium concentrations, the silt does not contain toxic or persistent chemicals. The amount of silt and its physical presence in blocking the channel is causing the detrimental effect on the river and the people living nearby.

The silt should be dredged from the river. Consideration could be made to re-profiling the channel into as natural a watercourse a possible. There are good practice guides to assist with this and construction of multi-stage channels where velocity is maintained at periods of low flows would be recommended.

7 Silt Disposal

Due to the presence of elevated aluminium concentrations in the silt a precautionary approach to its disposal should be taken. Whilst not being acutely toxic, it can become so under certain circumstances that are not well understood. However, I do not think that there is enough evidence in the report to justify an engineered waste disposal site as the only option.

Waste disposal remains an expensive option. I believe that the silt could be spread on non food crops or used as land make up, to re profile road verges or similar. Contaminated land remediation guidance, safe sludge matrixes and approved application rates could be used to ensure that this is done with minimal environmental impact.

8 Other issues in the catchment

A number of other miscellaneous issues need to be considered. These include:

The report mentions the impact of unregulated rubbish disposal adversely impacting on the quality of the environment downstream of the discharge. If remedial work is to be undertaken, an initiative to prevent and improve this impact will be needed.

The water is abstracted and supplied to the public in nearby towns. There is no reference to any municipal sewage treatment works discharging to the river, upstream or downstream. The urban wastewater must go somewhere, possibly into the sea. It may be an important factor and an integrated approach to water management would be useful.

The report also refers to building and land reclamation in the vicinity of the WTW. Clearly town and country planning must be integrated with the supply of water, the disposal of sewage and the environment. This must be taken into account.

An integrated approach to catchment management would assist in minimising the effects of these additional issues

9 Environmental Regulation and Planning

I understand that permits for abstraction or to regulate discharge quality are not in place at present, although moves are being made to establish a system of environmental regulation.

Permits that protect the needs of the water environment would be the preferred way of setting standards to share water resource and maintain the quality of the discharge. Normally these would be linked to an appraisal of the river catchment and an equitable sharing of the available resource.

The permitted amounts would also set the design criteria for the WTW and impact on the way that they are managed.

I would recommend a river catchment plan to review all the uses of the river basin and to draw up an improvement plan. It would also be a useful method to engage the public and stakeholders.

10 Future Actions

1. The treatment of the wastewater should be improved and the volumes reduced. If this is not done then any clean-up operation can only be a temporary measure and the receiving water will soon deteriorate again, the silt will accumulate and the public health risks will return.

2. An improvement programme for the operation of the WTW and improvement of the discharge should be developed and agreed. Monitoring against this plan should be rigorous and enforced. The plan could be undertaken in a number of phases, including short-term operational improvements, followed by more extensive repair, maintenance and engineering work.

3. Consideration should be given to changing the coagulant used from aluminium to iron, especially if engineering and process improvement are being undertaken of the WTWs.

4. The sediment should be dredged and removed from the river downstream of the WTW. The dredged material should not be used on food producing agricultural land. However a single application at measured levels to non food crops, or for land make up, should not be excluded and could reduce costs significantly.

5. **In terms of priorities,** I would suggest that the remedial work in the river downstream of the WTW could be undertaken at the same time as the improvement to the Water Treatment works as they are not dependent in engineering terms. However if there is delay in the improvement of the discharge then the problems will return and work will be wasted.

6. Information should be collected on the hydrology of the rivers in the catchment and specifically at the intakes or downstream. Knowledge of this is essential to understand and optimise a water resource plan for the river and to set abstraction permits.

7. Insufficient information is provided on other uses of the river upstream or downstream of the WTW. There may be other contributory factors to the low flows, such as abstraction for industrial or irrigation water. Also there may be discharges of wastewater (industrial or municipal) that could impact on quality.

8. I suggest assessment of baseline fish populations and an investigation into scope for improvement and optimisation of the fishery to be investigated.

9. Establish a system of permits for abstraction and discharge quality and ensure that these are implemented and enforced.

10. The report mentions the impact of land reclamation and unregulated rubbish disposal adversely impacting on the quality of the environment downstream of the discharge. If remedial work is to be undertaken, an initiative to prevent and improve this impact will be needed.

11. In the longer term I would recommend a river basin approach to the overall planning and optimisation of the aquatic systems. Systems are well advanced and have been applied to similar river basins around the world. Planning systems also allow public engagement at key points in the process.

Annex 1 Qualifications to undertake the Review

Dr Martin Griffiths is a senior environmental consultant who has developed water policy and good regulatory practice at national and international level. He is a Director of his own company, Pillon Ltd and is acting as a Lead Partner for PAWS.

Until July 2007, Martin was the Deputy Director of Regulation in the Department for Environment, Food and Rural Affairs (Defra). In this role he provided expertise in regulation and led on the development and delivery of regulatory simplification plans. He took the lead for Defra with the Cabinet Office, Better Regulation Executive and promoted regulatory best practice within Defra and its Executive Agencies.

For the ten years prior to this, Martin was Head of Water Quality for the Environment Agency. In this role he was a key figure in developing and implementing the Water Framework Directive in England and Wales. He had a major input into the five yearly UK water industry investment programmes, ensuring compliance with European Union (EU) Directives. During this period significant improvements were made to the UK freshwater and marine environments.

Martin joined the National Rivers Authority Head Office in 1993 to project manage the water industry investment process and the introduction of the EU Urban Waste Water Treatment Directive. Before this he held an operational role as Pollution Control Manager for the NRA-Thames Region. He previously worked for Thames Water.

He is a Visiting Professor in the Department of Geography at Kings College, London University. He graduated from London University as a biologist. His PhD was gained at Brunel University with a thesis on the real time monitoring of water quality.

Annex 2 - PROJECT TERMS OF REFERENCE

PROJECT NO:	**WaterAid urban – EIA**
Project Title and Reference	**Environmental Impact Assessment reports for the Lagos Water Corporation Rehabilitation and Expansion Projects: information and comments** The Federal and State laws of Nigeria makes it mandatory for proponents of all new major development activities to carry out an Environmental Impact Assessment (EIA). This ToR is for information and comments on the EIA reports carried out for the World Bank assisted Second National Urban Water Sector Reform Programme (NUWSRP) in Lagos State, Nigeria.
Justification	The second NUWSRP launched in 2005 and scheduled to run till 2011, is aimed at improving water governance, encouraging private sector financing of water supply projects, and improving the delivery of water supply services to urban residents in Cross river and Lagos States. The Lagos State Environmental Protection Agency announced a public notice for information and comments on the EIA reports as submitted by the Lagos State Water Corporation Project Implementation, which should help in decision making in the projects, and also ensure that the proposed project activities are environmentally and socially sound and sustainable. WaterAid Nigeria and the National Sector Reform Coordination office of the Federal Ministry of Agriculture and Water Resources (FMAWR) are supporting the implementation of the NUWSRP, and have requested for PAWS support in this phase of the programme in Lagos. PAWS is committed to providing the necessary support to the Sector Reform programmes in Nigeria, to help improve human and institutional capacity in water and sanitation service delivery.
Objectives	To provide information and comments on the Lagos (Iju and Adiyan Waterworks) EIA reports, which will help the project actors take significant decisions on the implementation of the projects.
Deliverables	Printed copies of the EIA reports (the July 2005 and the December 2007 reviewed versions) have been made available to the PAWS Secretariat. A separate document containing information and comments on the two versions of the EIA reports are the expected deliverables from the PAWS UK partner. Comparison may also be made to the UK environment, with respect to EIA procedures and processes, if this is felt appropriate to enhance the knowledge sharing.
Impact	Environmental impact of projects has become a key area of concern in recent years. PAWS support will help the project actors to make decisions that will take into account the necessary sustainability factors for the project. It will also help to ensure that future EIA's are in line with environmental, social, and economical requirements of the present time.
Scope	A final EIA report for the Lagos projects was completed in July 2005. In December 2007, the 2005 EIA report was reviewed. The two documents have been put out to the public for information and comments. PAWS support is on the two EIA documents. The PAWS lead partner will prepare a separate document, which will outline all comments on the EIA reports, and other useful information and recommendations on EIA for water and waste water related

	projects. The PAWS lead partner will not be required to visit the project location. Therefore, wherever necessary, recommendations for further study can be made to take care of the remote nature of this support.
Organisation and methodology	**This project does not require travel to Nigeria.** PAWS support will be delivered remotely. The Secretariat will provide necessary logistics required for timely completion. Hard copies of the EIA reports will be posted to the PAWS UK lead partner. The PAWS Country Manager will work with the in country reform office of the FMAWR to respond to all enquiries and clarifications that may be needed. The lead partner will be a UK partner with experience in Environmental Impact Assessment for water and wastewater projects. Comments and recommendations from the lead partner will be submitted to in country actors via the PAWS Country Manager. Further clarifications on the comments, information and recommendations made by the lead partner will be channelled through the Country Manager.
Milestone plan	**Fri 18th July 2008**: Draft comments and recommendations forwarded to the PAWS Nigeria Country Manager. **Mon 21st July 2008**: Final information, comments and recommendations submitted to the Lagos State Environmental Protection Agency, the National sector reform coordination office, and WaterAid Nigeria.
Resource estimate	Up to 3 days of lead partner input to provide information, comments and recommendations on the EIA reports Follow-up support may be identified after this initial activity.
Dependencies	There is no in country activity required for this support. Other stakeholders will send in their comments and contribution on the EIA reports. However, these will not have any effect on PAWS' contribution.
Issues/Risks	There are no risks identified. However, the lead partner must be willing and available to provide detailed clarification as may be necessary.
Other Active Donors	The 2nd NUWSRP is a World Bank assisted project. The urban water supply unit of the FMAWR is the coordinator of the project at the national level.
Communications Strategy	After the appointment of a lead consultant, communication will be between the lead partner, the PAWS Country Manager, and the PAWS Secretariat. This will be achieved with the use of e-mails, and phone calls where necessary.
Review Mechanism	Before comments and recommendations from the lead partner are forwarded to in country actors, the Country Manager will carry out a review. This will ensure that expectations are adequately met. Reviewed comments will be forwarded to the lead partner and the Secretariat for final comments, before forwarding to appropriate in country actors. The lead partner will be updated on further activities relating to the EIA of the Lagos projects.
Compiled by	Nyananso Gabriel Ekanem Ifeoma Charles Monwuba, Head of Policy and Partnerships, WaterAid Nigeria

Approvals (as appropriate)	*Rebecca Scott, Project Manager*
Date	7th July 2008