

APPENDIX 7

ENVIRONMENTAL APPROVAL

(132)



NATIONAL ENVIRONMENT AGENCY

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NEA/ADM112/01/IV (27)

25th August 2009

Director
Department of Water Resources
Banjul

**SUBJECT: TREK REPORT ON THE PROPOSED SITES FOR THE
CONSTRUCTION OF 19 BOREHOLES**

Following the receipt of an application for environmental impact assessment by Department of Water Resources (DWR) for the proposed nineteen (19) boreholes to be constructed under the Japan- Gambia Rural Water Supply Phase III project, a visit to the sites was made by the NEA and your department from the 8th to the 12th of July 2009.

Please find attached the report on the proposed sites for the construction of boreholes.

Thank you

Malick Bah
Malick Bah
For: Ag. Executive Director

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The Government of Japan is supporting the Gambia Government in providing safe water supply facilities through the Rural Water Supply Phase III project. The project includes solar powered pumping systems with boreholes, tanks and pipe distribution network. Two NEA officers and one officer from the Department of Water Resources conducted a trek to all the nineteen communities in Western, North Bank, Lower River and Central River Regions.

The team included: Malick Bah- PO-EIA, Mr. Ousman Dem- Lab Asst and Mr. Yaya Jobe- Department of Water Resources.


The table below shows the proposed sites visited during the trek.

No.	Village Name	District	Region
1	Gidda and Talokoto	Kombo East	Western Region
2	Kabocorr - Killing	Foni Bintang	WR
3	Madina Kiaf (Sancha)	Kiang East	LRR
4	Dongoroba	Jarra East	LRR
5	Jissadi	Niamina DKK	CRR
6	Sotokol	Niamina East	CRR South
7	Maka and Njie Kunda	Niamina East	CRR South
8	Kerewan Samba Sira	Fulladu West	CRR South
9	Fula bantang	Fulladu West	CRR South
10	Lamin Koto - Badala - Sotokol	Sami	CRR North
11	Kuntaur Fula Kunda & Jakada	Niari	CRR North
12	Fass	Upper Saloum	CRR North
13	Jimbala Complex	Lower Saloum	CRR North
14	Ballangharr Complex	Lower Saloum	CRR North
15	Kekuta Kunda	Central Baddibou	NBR
16	Kerr Katim Wolof & Fula	Central Baddibou	NBR
17	Kerr Chernon	Upper Nuimi	NBR
18	Kerr Marna	Upper Nuimi	NBR
19	Bantang Killing	Upper Nuimi	NBR

SUMMARY OF THE FINDINGS/OBSERVATIONS:

Most of the identified sites visited for the drilling of boreholes have similar biophysical features. The identification was done by the Engineers of the project and personnel of the Department of Water Resources. Some of the findings are based on the consultations with the communities.

- Most of the sites identified in the villages falls within residential areas and located at higher altitudes for easy water flow. These sites mainly belong to the Village Alkalos or community leaders.
- A good number of the identified sites are currently used for farming activity but some Alkalos informed the team that any of the sites needed are readily available for the construction of borehole if approved.

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- Some of these farms are already cultivated and drilling boreholes in the rainy season may lead to the destruction of some crops.
 - In Maka/ Njie Kunda, and Ballanghar Complex, the owners raised concerns of loosing their lands without compensation but accept to offer their lands for the construction of boreholes.
 - None of the identified sites fall within a forest park, wildlife habitat, and protected area or water bodies. All the sites fall within low ecological value devoid of environmentally sensitive areas.
 - Most of communities visited have access to shallow wells or hand pump for the supply of portable water.
 - The team was informed that the reasons for proposing residential areas for installation of the boreholes are to deter unscrupulous persons from stealing the solar panels. The sites are easily accessible and not far from main highways due to the nature of settlements within these communities.
 - In Medina Kiaf, drilling has commenced and according to the villagers the site has a low water table thus making it difficult for this community to access portable water. In Dongoroba, the borehole was already drilled and sealed awaiting treatment whereas in Jissadi drilling was in progress at the time of the visit.
 - At Kekuta Kunda Complex, the visiting team was informed that their hand pump water is not portable and if the borehole is drilled will benefit a population of approximately two thousand people. These according to a villager will relief them of the burden for trekking few kilometers in search of portable water. Residents lamented over the constraints for drawing water from wells where the water table is so low over 20metres deep.
 - In Kerr katim Wollof and Fula, the identified site is next to an old dump site which may affect the palatability of the water. According to the villagers the water table is over thirty five meters deep before reaching the aquifer but sources revealed that the water is also portable.
 - The Community of Kerr Cherno has a borehole which supplies them with water. In Kerr Mama, the sites identified are all under cultivation and located at the outskirts of the village.
 - In Bantang Killeng, one of the sites identified is close to two wells and both sites are under cultivation. The recommended site is found along the Albreda/ Barra highway.



POTENTIAL IMPACTS

The Rural Water Supply Phase III project will provide sufficient clean drinking water to the rural communities in a sustainable affordable manner. In addition, this project would have a substantial positive social impact in that it will improve the public health conditions in the rural communities. Furthermore, through improving living conditions, this project will also have secondary benefits in stimulating economic development. The improved Rural Water Supply Project will directly improve the enabling environment for the development of these rural communities.

The sites identified for the drilling of these boreholes will have minimal negative impacts on the environment. The impacts of air, water, noise pollutions, soil erosion, safety of the public, occupational health and safety are expected to be low. There are no negative potential impacts on forest and wildlife habitat, monuments and sites of cultural and historic significance since the sites fall within residential areas on farmlands.

The negative potential impact expected is desiccation of wells closed to the proposed sites for the drilling of boreholes in some communities. Generally pipeline lying and distribution networks may not affect the topography, drainage of the area. The significance impacts of land use conflict are low since most of the sites identified are own by the Village heads or community leaders.

Most of the sites are under cultivation and thus this project will have to claim some portions of farmlands.

SOURCE OF ELECTRICITY

All the communities visited are neither connected to NAWEC electricity grid nor water network. If boreholes are drilled in all these communities, source of power will be from solar energy.

WASTE MANAGEMENT

Waste which will be generated during drilling and construction should be managed properly, as well as waste generated after the extraction of the water from the ground.

RECOMMENDATIONS

- The DWR should ensure that adequate health and safety equipment including all necessary protective gears are used by their staff during drilling, construction and operation. To ensure safety, the workers must also be well trained on the safe use of all.

A write-up should be sent to the NEA stating the following:

- types of pumps to be used,



- method of operating them,
 - types of overhead tanks,
 - modes of training or sensitization for the community,
 - Accessibility to spare parts in cases of breakdown and expertise
 - Method of water treatment
 - Management of the boreholes
- Pipes/conduits to be used for the conveyance of water from the source for distribution should not be corrosive, neither brittle nor leach able so as to avoid contamination through infiltration.
- NEA will monitor all phases of the project.
- This Project must conform to the water quality standards and tested in a laboratory before used by the communities.
- The communities must be sensitized about sanitary and health problems related to this project. The population in the project areas needs to be made aware of the new sanitation threats and encouraged to adopt improved rural sanitary practices and facilities.
- The communities should also be sensitized on the judicious use of water and management of waste water.
- The communities must not dumped waste around the facilities to avoid underground water contamination.

This Rural Water Supply Phase III Project can be classed C* in the EIA classification since there is little negative potential environmental impacts.

Class C: No Full Environment Impact Assessment Required

A project may be categorised as Class C if it is determined that the proposed projects will have no significant or adverse impact on the environment, the Executive Director may grant environmental approval to the project without further analysis.

The Republic of The Gambia(1999) 『EIA Guidelines』



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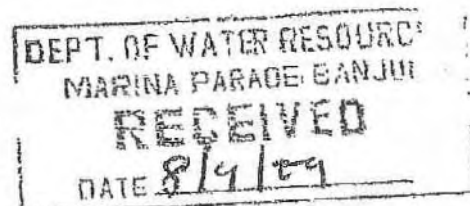
8th September, 2009

Director
Department of Water Resources
Banjul

ENVIRONMENTAL APPROVAL FOR THE JICA - GAMBIA RURAL WATER SUPPLY PHASE III PROJECT.

Further to your application for environmental approval to construct 19 boreholes, please be informed that this Agency has completed assessing your proposal and in accordance with the National Environment Management Act 1994, hereby grants you Environmental Approval on the following conditions:

- a) This approval is only for the 19 identified sites in Western, Lower River, Central River and North Bank Regions.
- b) The premises shall only be used for the purpose of borehole operations. Any change in use shall require another environmental assessment.
- c) Every person managing, employed, or in connection with the licensed premises shall abstain from any activity whatsoever which tends to cause under ground water pollution.
- d) All gazetted inspectors of the National Environment Agency must be allowed free access to the premises and information relating to the site construction and operation at any requested time for ascertaining that the conditions of this approval are met.
- e) The JICA- Gambia Rural Water Supply Phase III Project must ensure that adequate health and safety equipment including all necessary protective gears are used by their staff during drilling, construction and operation. To ensure safety the workers must also be well trained on the safe use of all equipment.



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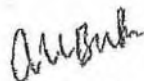
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- f) Pipes/conduits to be used for the conveyance of water from the source for distribution should not be corrosive, neither brittle nor leachable so as to avoid contamination through infiltration.
- g) The JICA- Gambia Rural Water Supply Phase III Project must sensitize the communities about sanitary and health problems related to this project. The population in the project areas needs to be made aware of the new sanitation threats and encouraged to adopt improved rural sanitary practices and facilities.

The communities must **not** dump waste around the facilities to avoid potential underground water contamination.

- h) This approval does **not** exempt JICA - Gambia Rural Water Supply Phase III Project from obtaining other necessary licenses and permits from the relevant authorities. Conditions set out in their approvals, licenses or certificates must be duly adhered to.
- i) This Environmental Approval will be cancelled:
 - I. If in the view of NEA, there is substantial modification of the project implementation which may lead to adverse environmental impacts.
 - II. Whenever there is non-compliance with the conditions set out in this environmental approval

Thank you.



Malick Bah

For: Ag. Executive Director

CC:

Permanent Secretary, Ministry of Forestry and the Environment
Permanent Secretary, Ministry of Fisheries, Water Resources and NAM
Director, Department of Physical Planning and Housing
Director, Department of Lands and Surveys