

REPUBLIC OF KENYA



PARLIAMENT OF KENYA THE SENATE

REPORT

OF

THE STANDING COMMITTEE ON HEALTH, LABOUR & SOCIAL WELFARE

ON

THE SITE VISIT TO THE COLLAPSED MWIKI-NJIRU
TRUNK SEWER LINE REPAIR WORKS.

NOVEMBER, 2013.

CLERK CHAMBERS THE SENATE PARLIAMENT OF KENYA K.I.C.C. BUILDING NAIROBI

November, 2013.

ABREVIATIONS

AWSB - Athi Water Services Board.

NCWSC - Nairobi City Water and Sewage Company.

MEWNR - Ministry of Environment, Water and Natural

Resources.

NARSIP - Nairobi Rivers Basin Rehabilitation And

Restoration Programme, Sewerage

Improvement Project.

WRMA - Water Resources Management Authority.

NEMA - National Environment Management Authority.

SPA - Service Provision Agreement.

TABLE OF CONTENTS

| PREFACE | .4 |
|---|----|
| EXECUTIVE SUMMARY | .5 |
| SITE VISIT, MWIKI- NJIRU SEWER TRUNK LINE | 8 |
| COMMITTEE OBSERVATIONS | 12 |
| COMMITTEE RECOMMENDATIONS | .2 |
| ANNEXES1 | 4 |

PREFACE

Mr. Speaker Sir,

The Standing Committee on Health, Labour and Social Welfare is a Standing Committee of the Senate which was established on Thursday April 25, 2013 during the First Session of the Eleventh (11th) Parliament pursuant to provisions of the Senate Standing Order 206.

1. The Committee executes its mandate in accordance with the provisions of Standing Order 206 and Second Schedule of the Senate Standing Order. The Committee draws its mandate to: –

"Consider all matters related to health; manpower and human resource planning; labour, trade union relations, gender, culture and social welfare, youth, National Youth Service, children's welfare; national heritage, betting, lotteries and sports, public entertainment, public amenities and recreation.

- 2 In executing its mandate, the Committee oversees the following Ministries:
 - i. Ministry of Health and Medical services
 - ii. Ministry of Labour, Social Security and Services,
 - iii. Ministry of Sports, Culture and Arts.
- 3 The Standing Committee on Health, Labour and Social welfare comprises the following Members: -

Senator. Mohammed Kuti - Chairperson

Senator. Zipporah Kittony - Vice-Chairperson

Senator. John Munyes Kiyonga

Senator. Hosea Onchwangi

Senator. Stephen Ole Ntutu

Senator. Abdirahman Hassan

Senator. Wilfred Machage

Senator. Stewart Mwachiru Shadrack Madzayo

EXECUTIVE SUMMARY

After the induction workshop on their role, functions and mandate by experts and consultants the Committee members were ready for the tasks ahead.

The Committee deliberations in reference to the Constitution of Kenya 2010, provisions in the Articles noted that its mandate is enshrined in;-

Article 43(1), "every person has the right to the highest attainable standard of health which includes the right to health care services, including reproductive health care"

The Committee on Health Labour and Social Welfare was seized of the matter of the collapsed Mwiki-Njiru Trunk Sewer Line on October 10, 2013 when Senator Paul Kimani Wamatangi of Kiambu County sought a Statement from the Chairperson of the Committee on Health, Labour and Social Welfare under Standing order 43 (2) (c) regarding an alert that was issued by the National Environment Management Authority (NEMA) cautioning the residents against the use of water from Athi, Galana and Sabaki rivers for domestic or other uses.

The Committee held its deliberations and resolved to summon the NEMA Officials who informed the Committee that NEMA regularly monitors the status of rivers to ensure adherence to Water Quality Regulations 2006.

That on September 24, 2013 the water pollution at fourteen falls in Thika was reported to NEMA county director of environment in Kiambu.

That NEMA realized the concerned authorities did not take any immediate action and had to issue the alert to all the users of Athi, Galana and Sabaki rivers.

The Chairperson after responding to the Statement in the House, it was deemed not satisfactory that the Nairobi River was still contaminated and polluted.

The Committee was directed by the Speaker to visit the site and give the correct current status of repairs. On November 05, 2013 the Committee thereon planned to visit the site on Wednesday November 06, 2013 AT 9.00 am.

The Committee visited the Site on Wednesday November 06, 2013 at 9.00 am and established that a contractor Shanxi Geei Company was awarded the tender by Athi Water Services Board (AWSB).

The contractor was on site and had been on site for the last ten days. The repair works was being done for 24 hours. The Committee established that the Trunk Sewer Pipe spillage had been diverted to pave way for the repair works with a four meters deep trench dug.

The area had been graded and a deep trench dug where some reinforced columns will be built to support the Square Reinforced Sewerage Trunk Concrete Pipe to stop it from being washed away by the rains in future.

The raw sewage was still spilling back to the river due to gravity flow. There was no other way to stop the spillage and no other way to divert the flow as it would still flow down the gradient to the river.

That the entire repair works will be completed within two and half months.

Mr. Speaker Sir

I wish to express my appreciation to the Office of the Speaker, Office of the Clerk for facilitating the site visit at the collapsed Sewer Trunk Line site at Mwiki-Njiru. The Committee findings and recommendations in this Report are based on the spot check,

evidence and submissions received. I also thank the Committee members for their dedication and time.

It is my pleasant duty and privilege, on behalf of the Standing Committee on Health, Labour and Social Welfare and pursuant to the provisions of Senate Standing Orders 201,

It is my pleasant duty to present and commend this report to the House for adoption.

| Signed | Date |
|--------|------|
|--------|------|

SENATOR: Mohammed Kuti

Chairperson;

HEALTH, LABOUR AND SOCIAL WELFARE COMMITTEE

SITE VISIT AT THE BROKEN TRUNK SEWER LINE,.

1.1. Introduction

The Nairobi River Trunk Sewer Line at Mwiki - Njiru is a Box Reinforced Culvert Trunk Sewer and serves most City Centre parts of Nairobi and does not effluent to the Kariobangi Treatment Plant.

The Committee accompanied by Professor Geoffrey Wahungu Director General, National Environment Management Authority (NEMA),

Engineer Philip Gichuki Managing Director, Nairobi City Water and Sewage Company,

Eng Nahason Maingi Nairobi City Water and Sewage Company,

Eng B. Mugura, Nairobi Water Services.

Eng J. Gichuhi Athi Water Services Board (AWSB).

Eng John M. Muiruri, Chief Manager Infrastructure Development (AWSB).

Eng Joshua Weru, Civil Engineer (AWSB).

Mr Eric Akoisi, Director, Nairobi River Rehabilitation Programme

The Director, Kiambu Water Resources Management Authority and

Jacqueline Manta of NEMA,

Visited the site where the Trunk Sewer Line had broken down at the Mwiki - Njiru area.

The trunk pipeline had been washed away and the sewage effluent flowing directly into the Nairobi River.

The Committee was informed that;-

1.2. Floods

On April 10, 2013 the box culvert sewer line collapsed and was washed away by the heavy rains that had previously undermined the supporting ground on one side of support of the sewer trunk line of about 120 meters that runs from manhole to manhole.

That responsibility of maintenance is by the Nairobi City Water and Sewerage Company ltd (NCWSC)

The sewer trunk line was discharging the sewage waste directly to Nairobi River at Mwiki-Njiru area.

That on April 12, 2013 the Ministry of Environment, Water and Natural Resources (MEWNR) had requested for any information regarding any damages from floods and the required interventions.

1.3. Correspondence/Communication

That the Nairobi City Water and Sewage Company (NCWSC) wrote to Athi Water Services Board (AWSB) informing them of the collapse of the Mwiki –Njiru Sewer Trunk line and gave the estimate cost of the repairs works.

The Athi Water Services Board wrote to the Ministry of Environment, Water and Natural Resources (MEWNR) requesting for funding from the Emergency Fund for the commencement of works and sent the in built drawings of the original trunk line and the necessary designs.

1.4. The Service Provision Agreement (SPA) saga

That on May 02, 2013 the Ministry of Environment, Water and Natural Resources (MEWNR) responded and urged the Nairobi City Water and Sewage Company (NCWSC) to adhere to the signed Special Conditions of the Service Provision Agreement (SPA) and to

commence work on the required repair works to avoid further contamination of the Nairobi River.

Under SPA Athi Water Services Board (AWSB) is responsible for asset development including rehabilitation, renewal and extension. This responsibility does not apply to facilities which have failed due to improper lack of maintenance by the Nairobi City Water and Sewage Company (NCWSC). In the event of an emergency involving severe damage or structural failure to the fixed assets, the provider NCWSC shall undertake the necessary repairs including those which are the responsibility of the licensee.

That on May 02, 2013 Athi Water Services Board (AWSB) instructed and advised the Nairobi City Water and Sewage Company (NCWSC) to undertake the repair works and reinstate the damaged portion of the line to avert further pollution of the river.

In the SPA the Athi Water Services Board (AWSB) is to undertake asset rehabilitation and renewal, and its pegged on an annual payment by NCWSC of Ksh 250 million of which NCWSC has to date not complied with.

On September 27, 2013 the Athi Water Services Board (AWSB) established that Nairobi City Water and Sewage (NCWSC) Company was unable to mobilize a contractor and no repair works was being carried out.

1.5. Procurement delays

The Nairobi City Water and Sewage Company (NCWSC) advertised for bids which were being opened for evaluation in September 2013, five months after the Sewer Trunk collapsed The Nairobi City Water and Sewage Company (NCWSC) outlined to Athi Water Services Board (AWSB) the delayed procurement process.

The Nairobi City Water and Sewage Company (NCWSC) abandoned any repair works efforts stating that it is not within their mandate to carry out such works despite the process of emergency repair being outlined in Article 10.1(e)(vi) of the Special Conditions of the Service Provision Agreement (SPA)

1.6. Ministry interventions

On October 07, 2013 the Cabinet Secretary Ministry of Environment, Water and Natural Resources (MEWNR) called the Nairobi City Water and Sewage Company (NCWSC) and Athi Water Services Board (AWSB) for a management meeting on the collapsed Mwiki - Njiru Trunk Sewer Line.

The Athi Water Services Board (AWSB) presented an updated status report and the way forward. It was agreed that Athi Water Services Board (AWSB) should commence on an accelerated procurement and mobilization of contractor for emergency works given the delays experienced and the pollution emitted.

1.7. Commencement of Repair Works

The Committee observed that the contractor was on site, and had put a perimeter fence along the repair area. A temporary building had been constructed. An earth moving excavator was working at the site.

The area had been dug and soil excavated where three concrete columns will be constructed to support the square reinforced sewer pipe which will be transported to the site for fitting after the columns are put in place.

2.0. THE COMMITTEE OBSERVED THAT;-

- The pollution caused by the damaged trunk sewer line has affected millions of Kenyans living downstream. That over 30,000 cubic centimeters of raw sewage is deposited into the river on a daily basis and flows downstream.
- The Nairobi City Water and Sewage Company (NCWSC) and the Athi Water Services Board (AWSB) continuous and consistent disagreements caused the delay in repairing the damaged trunk sewer line from April 2013.
- The Service Provision Agreement (SPA) is clear that Nairobi City Water and Sewage Company is responsible for minor sewerage repairs while major and emergency sewerage repairs, should be undertaken by the Athi Water Services board.

3.0. THE COMMITTEE'S RECOMMENDS THAT;-

- The Trunk Sewer line effluent is temporary connected to stop it from flowing directly into the Nairobi River.
- That the delay for the repair works by The Nairobi City Water and Sewage Company who had even advertised the tenders for the repair works and later found that they were not capable of undertaking such kind of repairs be reprimanded.
- The Service Provision Agreement (SPA) is clear that the Nairobi City Water and Sewage Company is responsible for only minor

sewerage repairs while the major and emergency sewerage repairs should be done by the Athi Water Services Board.

- The Athi Water Service Board should fast track the contractor on site to complete the repair works as per the contract agreement and time and to ensure that the sewerage spillage does not flow into the river.
- That in future Athi Water Services Board and the Nairobi City Water and Sewage Company should endeavor to seek arbitration with the Ministry of Environment, Water and Natural Resources (MEWNR) on any matter concerning water and sewerage issues to avoid unnecessary delays and disasters.
- That Athi Water Services Board should be held responsible for the Nairobi and Sabaki rivers water pollution.
- The Nairobi City Water and Sewage Company should ensure that the quarry works being done near the Sewer Trunk line is stopped with immediate effect.
- That an audit of Nairobi City Water and Sewage Company (NCWSC) be undertaken to establish the whereabouts of funds collected for asset development and replacement
- That should another delay to repair any trunk sewer spillage again the Ministry of Environment, Water and Natural Resources should be held accountable.
- The Ministry of Environment should initiate a Bill for compensation due to rivers pollution and any industry polluting the rivers should be surcharged.

ANNEXES

1.1. Correspondence

Letters on the Collapsed Trunk Sewer Line at Mwiki-Njiru between the: Athi Water Services Board, the Nairobi City Water and Sewage Company, the Water Resources Management Authority and the National Environment Management Authority and The Ministry of Environment, Water and Natural Resources.

- i. Letter Ref NCWSC/TECH/TD/2346/MM/MK dated April 12, 2013 to Athi Water Services Board.
- ii. Letter Ref MWI/PARAS/10/51/ Vol XIII/114 dated April 12, 2013 to the Chief Executive of Water Service Boards requesting information on flood emergency.
- iii. Letter Ref AWSB/MWI/2/Vol VI (18) dated April 15, 2013 to Ministry of Water and Irrigation
- iv. Letter Ref AWSB/NCWSC/Vol IX (39) dated April 17 to Nairobi City Water and Sewerage Co. Ltd.
- v. Letter Ref AWSB/NCWSC/Vol IX (15) dated April 17, 2013 to Nairobi City Water and Sewerage Co. Ltd requesting information on flood emergencies.
- vi. Letter Ref AWSB/NCWSC/Vol IX (38) dated April 17, 2013 to Nairobi City Water and Sewerage Co. Ltd inviting for a status of water supply meeting.
- vii. Letter Ref NCWSC/ TEC/ENG/Vol I/62/187/DMM/rwk dated April 26, 2013 to Athi Water Services Board.
- viii. Letter Ref MWI/PARAS/10/51 Vol XIII (128) dated May 2. 2013 to Athi Water Services Board
- ix. Letter Ref AWSB/NCWSC/Vol IX (46) dated May 02, 2013 to Nairobi City Water and Sewerage Co. Ltd.

- x. Letter Ref WRMA/CA/WPPC/3/9/1911) dated September 23, 2013 from Water Resources Management Authority requesting for assistance as the river was turning greenish and tests showed that the pH levels at 10.89 and Sabaki River at 10.52.
- xi. A press statement dated October 02, 2013 from NEMA on pollution from Nairobi River to River Galana.
- xii. Letter Ref NCWSC/TEC/TD/2678-1/Nmm/MK dated October 4, 2013 to Athi Water Services.
- xiii. Letter Ref NCWSC/TEC//TD/2678-1/NMM/MK dated October 4, 2013 to Athi Water Services Board
- xiv. Letter Ref CS/MEWNR/DP/2013 dated October 7, 2013 to Athi Water, Nairobi Water, and the Director NEMA on an urgent meeting concerning fourteen falls problems (Athi River).
- xv. Letter Ref MEMR/A6.13/Vol VII dated October 8, 2013 from MEMR to the Hon. Members of the affected County Assemblies who may be affected by the floods.
- xvi. Letter Ref NCWSC/Vol IX (5b) dated October 10, 2013 from ASBC to the Director, Nairobi City Water and Sewerage Company to Athi Water on the collapse of the trunk sewer at Mwiki-Njiru.
- xvii. Letter Ref AWSB/NCWSC/VOL.IX(86) Le Dated October 10. 2013 to Managing Director NCWSC On the collapse of the Trunk Sewer at Mwiki-Njiru acknowledging letter ref NCWSC/TECH/TD/2678-1/NCWSC/mk concerning misunderstanding of the providers obligations under the SPA.
- xviii. Letter Ref AWSB/WaSSEW/Vol I (24) dated October 24, 2013 to Chairman, Senate Committee on Land and Natural Resources on the ongoing repair works at the collapsed Dandora Trunk Sewer at Mwiki Njiru
- xix. Letter Ref AWSB/WRMA/Vol 3 9146) dated October 24, 2013 to Water Resources Management Authority on Nairobi River basin Rehabilitation and Restoration programme.

xx. Letter Ref AWSB/NEMA/Vol 3 (17) dated October 30, 2013 from Athi Water to NEMA

1.2. Reports

- A Summary Report No. 2013/lab/0923 Test Report from Polucin Services (Kenya) Ltd. Dated 12/09/2013 indicating the pollution levels of River Galana in Malindi.
- ii. A Report by the Ministry of Environment and Natural Resources to the Senate on measures stop pollution of rivers in the country and to compensate victims of pollution.
- iii. An updated progress report dated November 06, 2013by Athi Water Services Board on the collapsed Mwiki njiru and
- iv. Report by the Ministry of Environment, Water and Natural Resources to the Senate Committee on measures to stop pollution of rivers in the Country
- v. An updated progress report dated November 06, 2013 on the repair works at Mwiki-Njiru and Lucky Summer Trunk Lines.

1.3. Pictures

- i. Pictures of the broken Mwiki-Njiru trunk sewer line.
- ii. Pictures of the effects of illegal quarrying on the Mwiki-Njiru Sewer Trunk Line Mains.

NWSC/TEC/ENG/Vol.I/.62/187/DMM/rwk

26 April 2013

Chief Executive Officer Athi water Services Board P.0.Box 45283-00100 NAIROBI

Dear Sir,

Re: Collapsed Trunk Sewer on Nairobi River at Mwiki-Njiru

Your letter ref. AWSB/NCWSC/Vol.1x/(39) dated 17 April 2013 refers.

Forwarded herewith is a soft copy on CD of the as-built drawings of the trunk sewer comprising box culvert typical cross-section and reinforcement details, and the trunk sewer profile of the affected section.

We have found it unnecessary to undertake design for the repair works as the as-built drawings seem sufficient. During construction however, it will be necessary to properly anchor the foundations onto rock on the river bed.

Yours faithfully,

Eng. P.Gichuki

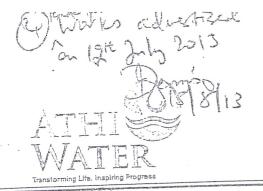
Managing Director

÷254 -020-2724292/3 +254-020-2724295 Fax:

Mobile: +254-715-688272 Email: info@awsboard.go.ke Website: www.awsboard.go.ke & SEWLPAGE CO. LTD.

Athi Water Services Boars Upper Hill

Africa ResCentre, Hospital Roads .o. Box 45283 - 00100, Najrobi 1254-020G+2429EMPECTOR



Stods according 123

When replying please quote:

AWSB/NCWSC/Vol. IX/(46)

02nd May 2013

Eng. Phillip Gichuki, Managing Director, Nairobi City Water & Sewerage Co. Ltd. P. O. Box 30656, NAIROBI

MANAGING DIMEU ... / R'S

REF: COLLAPSED TRUNK SEWER AT MWIKI-NJIRU

Reference is made to your earlier requests for assistance ref. NCWSC/TEC/ENG/2346/NMM/mk dated 12th April 2013 and NCWSC/ENG/Vol. 1x/(39) dated 26th April 2013 regarding the above collapsed main sewer culvert trunk main 1.4m x 1.0m that was washed away along the Nairobi River, about 500m upstream of the river from the intersection of the Nairobi River and the Njiru Road.

We hereby authorize you to proceed with the emergency repairs of the sewer line under delegated works.

We would strongly advise that you move expeditiously to reinstate the damaged portion of the line to avert further environmental pollution of the river with far reaching consequences downstream of the river as rightly identified by yourself.

Our technical team has prepared draft Bills of Quantities and typical river crossing designs for your perusal and possible use.

Kindly favour us with weekly progress reports for our records on the above.

ENG. MÀLAQUÉN MILGO

CHIEF EXECUTIVE OFFICER

Draft Bills of Quantities on Required Repair Works & Design Drawings

NCWSC/TEC/TD/2678-1/NMM/mk

The Chief Executive Officer Athi Water Services Board P.O. Box 45283-00100 NAIROBI

Dear Sir.

4 October 2013

RE: COLLAPSED TRUNK SEWER MWIKI- NJIRU

Refer to your letter REF:AWSB/NCWSC/Vol. IX/(46) dated 02 May 2013 in regard to collapsed trunk main sewer at Mwiki-Njiru washed away along Nairobi River on 10 April 2013, about 500m upstream of the intersection of the Nairobi River and the Niiru-Mwiki road

As you instructed, we invited bidders competitively for the reinstatement of the damaged section of the sewer and the same were opened on 6 September 2013. When evaluated, all the bidders were disqualified because none had the requisite technical expertise and equipments to handle such works. Therefore shall require re-advertisement of the tender with no guarantee we shall get the right contractor for the works. This will delay the reinstatement of the sewer leading to further environmental pollution downstream of the river with far reaching consequences.

Under the Water Act 2002, you are responsible of asset development and rehabilitation and the case under review should not be taken otherwise since it is beyond the mandate of the company. Currently you have numerous contractors on various sites that have the expertise and equipments to handle this kind of work under emergency e.g. The Kiu River trunk sewer and the Dandora Sewage Expansion Contractors.

You are requested to take up the work in accordance with your mandate please.

Yours faithfully,

Eng. Philip. G. Gichuki

Eng. Philip Gichuki Managing Director

Cc Governor - Nairobi City County
County Secretary - Nairobi City County
County Executive Committee Member for Water Energy Forestry Environment and
Natural Resources
Director General - NEEMA
EM
File copy





WATER RESOURCES WARREEMENT AUTHORITY

Telephane: 020 2152830

Email: mombasawrma@yahoo.com

Website: www.wrma.or.ke

When replying please quote

Coastal Athi Sub Region Athi Catchment Region P.O Box 41090-90100 MOMBASA.

Ref. No WRMA/CA/WQPC/3/9/1(11)

24th September 2013

County Director

National Environmental Management Authority

P. O. Box 247-80108

KILIFI - Email: gwafula@nema.go.ke

REQUEST FOR ASSISTANCE: POLLUTION IN GALANA RIVER

As you are aware, Galana river is polluted and is turning greenish. We have done preliminary investigations and we feel the problem is from upper catchment.

The Water Resources Management Authority offices in upper catchment have been alerted and they are trying to trace the sources of the pollution.

The purpose of this letter is to request you to alert your offices in upper catchment and try to contain the problem; of concern is, Aluminium, Nitrates, Sulphates and Potassium.

Meanwhile, I have attached test results and other investigated parameters, including newspaper cutting for your reference.

INSITU PARAMETERS

| | TOTAL OF LINE OF LETERO | | | | | | | |
|-------|-------------------------|-----------------|------------|---------------|--|--|--|--|
| S/No. | PARAMETER | SABAKI RIVER AT | GALANA | KENYA | | | | |
| | | BARICHO | RIVER AT | STANDARDS | | | | |
| | | W/SUPPLY | GALANA ADC | | | | | |
| | | | RANCH | | | | | |
| 1. | pH, (pH Scale) | 10.52 | 10.89 | 6.5 - 8.5 | | | | |
| 2. | Temperature (°C) | 25.7 | 27.7 | ±5 of Ambient | | | | |
| 3. | E.Conductivity | 380,7 | 428.4 | 2000 | | | | |
| | $(\mu \text{S/cm})$ | | | | | | | |
| 4. | TDS, (mg/l) | 355.6 | 434.9 | 1200 | | | | |
| 5. | Electrode potential | -206.6 | -232.3 | - | | | | |
| | (mV) | | | | | | | |

| | Salinity (mg/l) | 341.4 | 387.0 | 250 |
|----|------------------|-------|-------|-----|
| 7. | Turbidity, (NTU) | 173 | 102 | 25 |

Geoffrey Mworia

ASST. TECH. COORDINATION MANAGER

Encl.

Tth October 2013
Confact Person: Jacqueline Marita
0722725121
jmarita@nema.go.ke



National Environment Management Authority

Nairobi, 7th October, 2013

PRESS STATEMENT ON POLLUTION FROM NAIROBI RIVER TO RIVER GALANA

On the onset I wish to state that the National Environment Management Authority (NEMA) regularly monitors the status of rivers to ensure adherence to Water Quality Regulations, 2006. On 24th September 2013 pollution of Fourteen Falls in Thika was reported to the NEMA county director of environment Kiambu.

On Thursday 26th September 2013 a joint inspection comprising of officials from NEMA and Water Resources Management Authority (WRMA) was undertaken at Ruai Waste Water Treatment Works where it was established that the effluent treatment facility was not working to full capacity as the main sewer line had collapsed at Njiru. The team proceeded to Fourteen Falls in Thika, to further assess the situation where they confirmed that the falls were actually polluted.

NEMA contacted Athi Water Services Board (AWSB) who indicated that they had prioritised the matter as urgent and were already in the process of repairing the broken sewer.

In view of the negative health effects such as waterborne diseases and other negative impacts on aquatic environment such as fish, NEMA cautions members of the public not to use River Galana water for domestic or agricultural purposes. We also wish to inform members of the public that the discharge is free of industrial waste.

1

NEMA is required the quality of voter mean or looking Sabaki Estes year condish the status so that the Authority can luribured therm members of the product on the quality of the walks.

PROFESSOR GEOFFREY WAHUNGU DIRECTOR GENERAL

NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY.



NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY

Tel: (254-020)-6005522 / 3 / 6 / 7, 6001945, 6008767

Mobile line: 0724 253 398, 0723 363 010, 0735 013 046, 0735 010 237

Telkom Wireless: 020-2101370

Fax: (254-020)-6008997

Hotline: 020-8077233, 020-6006041

P. O. Box 67839 - 00200 Popo Road, Nairobi, Kenya E-mail: dgnema@nema.go.ke website: www.nema.go.ke

NEMA/7/17 VOL. III

23rd October, 2013

Hon. Senator Lenny Kivuti Chairman Agriculture, Land and Natural Resources Committee K.I.C.C P.O.Box 41842-00100 NAIROBI

RE: BRIEF ON POLLUTION OF ATHI, GALANA AND SABAKI RIVERS

As a follow up to our meeting held today 23^{rd} October, 2013, on the above subject matter, attached please find the report on the same.

B.M. LANGWEN

FOR: DIRECTOR GENERAL

Tek. 40 u4 k u3-0 704146 0 Fax +034-030-2704045 Mabble: 4254-745-668378 Enraid: info@awsbbardspowe

Website: www.kirsboard.gr.ke

Ath Mister Service / Board Upper Hit Africa Re Cantre, Hospite: Rosd, P.O. Box 45323 - 00100, Narrobi Ten -294 dod 172437273



When replying please quote: AWSB/WaSSEW/Vol.1 (24)

24th October 2013

Guiding Extracts of the Service Provision Agreement (SPA) Conditions of Contract between NCWSC and AWSB

Asset Maintenance, Management and Development

Cl. 10.1 (a) of the General Conditions of Contract states, in part that "the Provider shall at its own cost maintain the Assets in serviceable condition according to good utility practice. The maintenance shall include routine and preventative maintenance including maintaining all operating and non-operating assets required to provide the services and monitoring the proper functioning of all facilities..."

Cl. 10.1 (b) of the General Conditions of Contract states, that "the restrictions to the Provider's responsibilities for major repairs and replacements shall not apply when it can be shown that the major repairs are necessary due to the failure of the Provider to fulfill its obligations of maintenance or repair of those relevant assets..."

Emergency Works

Article 10.1 (e)(vi) of the Special Conditions of Contract states, in part that "in the event of an emergency involving severe damage or structural failure to the Fixed Assets which results in the disruption of services, the Provider shall, for purposes of minimizing inconvenience to customers, undertake the necessary repairs including those which are responsibility of the Licensee (AWSB). In such an event, the Provider shall notify the Licensee of the emergency within 24 hours, the nature of the damage, proposed mitigation measures and the approximate cost thereof. The Provider shall forward to the Licensee a detailed invoice of the direct costs incurred which are not within its responsibility for reimbursement. The Licensee shall within 45 days of Submission of the invoice reimburse the direct costs of all repairs which are within its responsibility plus a margin of 15%."





MINISTRY OF WATER AND ERRICATION

Telegrams:"MAJI" Nairobi

Telephone: Nairobi +254 20 2716103

Fax: Nairobi +254 20 2727622

Director Land Reclamation MAJI HOUSE NGONG ROAD P.O. Box 49720 - 00100

Date: 12th April, 2013

NAIROBI

Ref: MWI/PARAS/10/51 VOL.XIII/114

Eng. [4. Naivasha Chief Executive Officer Tana Water Services Board P.O. Box 1292-10100, WYERI

Eng. Malaquen Milgo Chief Executive Officer Athi Water Services Board P.O. 45283-00100, MAIROBI

Eng. Moses Agumba
Ag. Chief Executive Officer
Lake Victoria South Water Services Board
P.O. Box 3325-40100,
KISUMU

Mr. George Kwedho Ag. Chief Executive Officer
Lake Victoria North Water Services Board
P.O. Box 673-50100,
KAKAMEGA

Eng. James Wasi Thubu Chief Executive Officer Coast Water Services Board P.O. Box 90417-80100, MOMBASA

Mr. Abdikadir N. Osman Chief Executive Officer Northern Water Services Board P.O. Box 495-70100 GARISSA

MARINE MARINE

Eng. Nicholas Muthui Chief Executive Officer Tanathi Water Services Board P.O. Private Bag -90200. KITUI

Eng. Japheth K. Mutai Chief Executive Officer Rift Valley Water Services Board P.O. Box 2451-20100, MAKURU

(555 Dear

RE: FLOOD EMERGENCY

The damages to water systems occasioned by the on- going floods has intensified in terms of frequency and extent in the recent months. We have received unofficial reports of sunken boreholes, mudslides and washed pipelines in various areas of the country. It is with this in mind that you are supposed to inform the undersigned the extent to which these damages have occurred in your Board area.

For harmonization of the reporting the following template may be used :-

| County | District | Water Project/ Supply affected | Nature of damage | Intervention required for mitigation | Extent of damage (Ksh) | Affected Population (Human/ Livestock) | Remarks |
|--------|----------|---|------------------------|--------------------------------------|------------------------------|--|---------|
| | | | | | | | |

In addition, please identify and indicate in detail emergency intervention areas, including the nature and scope of the required interventions in each case, and what initial steps you have already taken if any, to remedy the situation.

Please treat this matter with urgency and your report should reach us by 17th May 2013.

Yours Sime of)

Eng. P. O. Mangiti

Director Land Reclamation, HDC & Ag. Director Water Services

MAINDEI CITY WATER & SEWERAGE COMPANY LYD.

KAMPALA RD, P. O. Box 30656-00100, Nairobi, Kenya Tel: +254 20 3988598/000 5013598/000 Fax: +254 20 552126

Email: info@nairobiwater.co.ke www.nairobiwater.co.ke



NCWSC/TEC/TD/2346/NMM/mk

12 April, 2013

The Chief Executive Officer Athi Water Services Board P. O. BOX 30655 - 00100 NAIROBI

Dear Sir,

F Real month



On 10 April 2013 the trunk sewer line 1.4m x 1m was washed away along Nairobi River 500m upstream of the river from the intersection of the Nairobi River and the Njiru Road. The sewer line is the one which drains and the sewage from the city centre and the Eastern part of the city. It is now draining the sewage into the river with very serious environmental degradation.

The work to reinstate the damaged sewer line is a capital project. You are requested to move fast to reinstate the damaged portion of the line to avert further environmental pollution of the river with far reaching consequences downstream of the river.

Attached find photographs of the situation on the ground.

Yours faithfully,

Erg. Philip Gichuki Managing Director iver 590m sewer line Tel: +254 -020-2724292/3 Fax: +254-020-2724295

Mobile: +254-715-688272 Smail: info@awsboard.go.ke Website: www.awsboard.go.ke Athi Water Services Board Upper Hill

Africa Re-Centre, Hospital Road, P.O. Box 45283 - 00100, Nairobi

Tel: +254 -020- 2724292/3



Transforming Life, Inspiring Progress

When replying please quote:

AWSB/MWI/2/Vol. VI/(18)

15th April 2013

The Permanent Secretary
Ministry of Water & Irrigation,
Maji House, off Ngong Road
P. O. Box 49720
NAIROBI

Attn. Eng. Peter Mangiti

Dear Sir,

REF: COLLAPSED TRUNK SEWER AT MWIKI-NJIRU

On the 10th April 2013, the main sewer culvert trunk main 1.4m x 1.0m was washed away along the Nairobi River, about 500m upstream of the river from the intersection of the Nairobi River and the Njiru Road.

The above sewer line drains waste from the City Centre and the Eastern Part of the Nairobi City, to the Dandora Wastewater Treatment Works.

The line was inspected jointly by both Nairobi City Water & Sewerage Co. Ltd. (NCWSC) and Athi Water Services Board (AWSB) engineers on 12th April 2013 and 13th April 2013 where options on emergency repair works were sought.

As it currently stands, the waste previously conveyed by the line is dangerously effluenting into the Nairobi River.

Given that the above mentioned emergency repair works are expected to be of capital expenditure, which was previously not budgeted for, we hereby request for Kshs. 25 Million towards the above repairs from the Emergency Fund so as to enable the required works commence as soon as possible.

We have attached a status brief of the collapsed trunk sewer as well as the accompanying photographs for your perusal. Video clips of the same have been included in the accompanying CD.

Further to your letter ref. MWI/PARAS/10/51 Vol. XIII/114 dated 12th April regarding flood emergency, we have commenced on the compilation of damages currently being experienced in our area of service and will be reporting this as advised shortly.

Yours faithfully,

ENG. MALAQUEN MILGO

CHIEF EXECUTIVE OFFICER

ret 4

Fax:

+254-020-2724295

Mobile: +254-715-688272

Email: info@awsboard.go.ke Website: www.awsboard.go.ke Athi Water Services Board

Upper Hill

Africa Re-Centre, Hospital Road P.O. Box 45283 - 00100, Nairobi

Tel: +254 -020- 2724292/3, 2727438/441/442/440



When replying please quote: AWSB/NCWSC/VOL. IX(38)

17th April 2013

Eng. Philip Gichuki, Managing Director, Nairobi Water and Sewerage company Ltd, P.O. Box 30656, NAIROBI.



RE: INVITATION FOR A MEETING ON STATUS OF WATER SUPPLY AND SEWERAGE/SANITATION SERVICES IN THE CITY

The above subject matter refers.

The Ministry has requested for an urgent meeting to discuss and review the status of water supply and sewerage/sanitation services within the City. A meeting has therefore been scheduled on Monday 22nd April 2013 09.00am in our board room where you shall present the status, challenges and way forward. You may attend with your Technical Director.

This is to invite you for the said meeting, kindly acknowledge receipt and be punctual.

Kind regards.

eng. Malaquen milgo Chief executive officer

Permanent Secretary,
Ministry of Water & Irrigation,
P. O. Box 49720-00100,
NAIROBI

Att: Eng. Peter Mangiti

Chairman: Hon. Reuben Ndolo, Directors: Mr. Joseph Kinyua, Prof. Karega Mutahi, Eng. Peter Mangiti, Mrs. Mary Mathew Malinda, Mr. Peter Githinji Kung'u, Mr. Mbuvi Kathenge, Mr. Aden Ali, Mr. Charles Giathi, Mr Gerishom Lujitio Majanja, Mrs Josephine Kabura Gichuhi Tel: +254 -020-2724292/3 Fax: +254-020-2724295

Mobile: +254-715-688272 Email: info@awsboard.go.ke

Email: info@awsboard.go.ke Website: www.awsboard.go.ke Athi Water Services Board

Upper Hill

Africa Re-Centre, Hospital Road, \ P.O. Box 45283 - 00100, Nairobi

Tel: +254 -020- 2724292/3



When replying please quote: AWSB/NCWSC/Vol. IX/(45)

17th April 2013

The Managing Director
Nairobi City Water and Sewerage Company,
P. O. Box
NAIROBI

The Managing Director
Thika Water and Sewerage Company,
P. O. Box 6103-0100
THIKA

The Managing Director, Kiambu Water & Sewerage Company, P. O. Box 409-00900, KIAMBU

The Managing Director, Ruiru-Juja Water & Sewerage Company, P. O. Box 1165-00232, RUIRU.

The Managing Director, Gatundu South Water & Sewerage Company, P. O. Box 140, GATUNDU.

The Managing Director, Karimenu Water & Sewerage Company, P. O. Box 170 GATUKUYU.

The Managing Director, Gatanga Community Water Trust, P. O. Box 6133-01000 THIKA.

The Managing Director, Kikuyu Water Company Limited. P. O. Box 313-00902 KIKUYU.

The Managing Director, Limuru Water & Sewerage Company, P. O. Box 1286-00217, LIMURU. Description of Description of Description of

The Managing Director,
Githunguri Water & Sewerage Company,
P. O. Box 823-00216,
GITHUNGURI.

The Managing Director, Karuri Water & Sewerage Company, P. O. Box 818-00219 KARURI.

REF: FLOOD EMERGENCY

The damage to water systems occasioned by the on-going floods has intensified in terms of frequency and extent in the recent months. There have been unofficial reports of sunken boreholes, mudslides and washed pipelines in various areas of the country.

As such we are currently gathering information on the extent to which these damages have occurred in our area of coverage.

For harmonization of the reporting, the following template may be used:-

| County | District | Water Project/Supply affected | of | Intervention required for mitigation | Damage | Remarks |
|--------|----------|-------------------------------------|----|--------------------------------------|--------|---------|
| | | | | | | |

In addition, please identify and indicate in detail emergency intervention areas, including the nature and scope of the required interventions in each case, and what initial steps you have already taken if any, to remedy the situation.

Please treat this matter with urgency and your report should reach us by 03rd May 2013.

ENG. MALAQUEN MILGO
CHIEF EXECUTIVE OFFICER

+254 -020-2724292/3 Tel: +254-020-2724295

Mobile: +254-715-688272 Email: info@awsboard.go.ke

Website: www.awsboard.go.ke

Athi Water Services Board

Upper Hill

Africa Re-Centre, Hospital Road, P.O. Box 45283 - 00100, Nairobi

Tel: +254 -020- 2724292/3



When replying please quote:

17th April 2013

AWSB/NCWSC/Vol. IX

Eng. Phillip Gichuki, Managing Director, Nairobi City Water & Sewerage Co. Ltd. P. O. Box 30656,

NAIROBI

REF: FLOOD EMERGENCY

The damage to water systems occasioned by the on-going floods has intensified in terms of frequency and extent in the recent months. There have been unofficial reports of sunken boreholes, mudslides and washed pipelines in various areas of the country.

As such we are currently gathering information on the extent to which these damages have occurred in our area of coverage.

For harmonization of the reporting, the following template may be used:-

| County | District | Water Project/Supply affected | Intervention required for mitigation | Damage | Remarks |
|--------|----------|-------------------------------|--------------------------------------|--------|---------|
| | | | | | |

In addition, please identify and indicate in detail emergency intervention areas, including the nature and scope of the required interventions in each case, and what initial steps you have already taken if any, to remedy the situation.

Please treat this matter with urgency and your report should reach us by 03rd May 2013.

ENG. MALAQUEN MILGO

CHIEF EXECUTIVE OFFICER

Received by

January 2012