



GREATER UMHLANGA AND SIBAYA SEWER INFRASTRUCTURE ASSESSMENT

Technical Team Meeting
held on 25 October 2022

Summary of Meeting Actions



BRIEF OVERVIEW

This technical meeting was agreed to by the eThekweni Municipal Manager and HOD Water and Sanitation Dept. following the KZN Growth Coalition meeting held on Friday 21st October. This meeting aligns with the Growth Coalition and Durban Chamber of Business Technical War Room.

Urgency of this meeting was necessitated by the high level of sewage contamination of the Ohlanga River primarily emanating from storm damaged infrastructure which has resulted in beach closures and significant reputational damage to the Greater uMhlanga node and eThekweni Metropole as a whole – this on the back of the Festive Season commencing in 7 weeks-time, being 15th December.

INSTITUTIONAL STRUCTURES IN ATTENDANCE

(SEE ATTENDANCE REGISTER FOR DETAILS)

- eThekweni Municipality
 - Water and Sanitation Dept
 - Economic Development Unit
 - Catalytic Projects
- uMhlanga Rocks UIP management
- Sibaya Coastal Precinct management
- Sibaya Conservation Trust
- Ridge Management
- Devmco and professional team
- Tongaat Hulett Properties

MUNICIPAL / PRIVATE SECTOR COLLABORATION

Private sector representation at the meeting acknowledges that the Municipality is the water services authority and is the mandated agency for all matters related to wastewater. The private sectors intention therefore is to support and augment Municipal efforts currently underway to repair damaged wastewater infrastructure in the Ohlanga / Greater uMhlanga / Sibaya catchment area.

The productive meeting was held in a collaborative spirit in agreeing on pragmatic and workable solutions with clear timelines. The primary focus being on an immediate term plan to achieve consistently safe water quality test results to allow for the opening of the beaches prior to the 15th December deadline.

STATUS QUO

AS ADVISED BY ETM:

1. Municipal repairs to the overall sewer infrastructure network are underway – both budget availability and supply chain timelines are problematic.
2. The Northern Wastewater Works is not operational and the Umgeni River pumpstation is damaged. Repairs of the pumpstation are underway and are expected to be completed by week ending 6 November 2022. This will enable the pumping of the sewerage to the Northern Wastewater Treatment Works - this would considerably improve the water quality in the Umgeni River which is currently highly contaminated. As the Umgeni River/Estuary system is tidal and due to prevalent south-north undercurrents, the current highly contaminated water is swept north exacerbating the problems with uMhlanga Rocks and Sibaya seawater quality. The repairs to the Umgeni River pumpstation which would see the sewerage being pumped to the Northern Treatment Works would therefore have a positive impact on the uMhlanga seawater quality.
3. Ohlanga Sewer Pumpstation - 30 megalitres of sewage is currently being discharged into the Ohlanga River daily as a result of the Ohlanga pumpstation being inoperable. Contractors have been appointed, repairs are underway with completion expected by mid to end November 2022- this includes:
 - 3.1. Replacing MV switch gear, fixing transformers and installing a temporary motor control centre which will operate 2 pumps in the short term.
 - 3.2. There would be 2 additional pumps stored at workshop to serve as replacement pumps should the two duty pumps become problematic. ETM have advised that the estimated costs is R3.5mil to get operational to process 28 - 30 Megalitres
 - 3.3. The short-term solution entails working with Tongaat Hulett to execute a major refurbishment and upgrade which would cost approx. R45 mil. planned for 2023.
 - 3.4. **FC expressed concern over screenings noting potential initial pump failures at the Ohlanga pumpstation once operable.**
4. Phoenix Wastewater Works is designed to treat 65 megalitres per day. It is currently treating a lot less due to functional inefficiencies and no flow coming from the Ohlanga sewer pumpstation. DW confirmed that the treatment works could handle the flow that would come from Ohlanga sewer pumpstation and no additional work is required in the immediate term.
 - 4.1. **FC confirmed that sludge treatment component is not working and this impacts result of treated water.** The effluent discharged from the works would not achieve green/blue dot status.
 - 4.2. **FC to confirm Green Drop threshold.**
5. THP and the Municipality have made considerable progress in agreeing on an upgrade programme for both the Ohlanga pumpstation and Phoenix Wastewater Works – once agreed and from time of contractor appointment, it is expected to take 6 months to complete, this however does not address the immediate term problems which is the focus of this meeting
6. It was noted that there have been ongoing sewage spills at beachfront pumpstations – the municipality has completed a number of repairs however there are still pumpstations requiring attention.
7. DW confirmed that not all beachfront pumpstations have standby electrical generators and during load shedding there is risk of sewerage spills.
8. DW also confirmed that the eMdloti pumpstation is in a stormwater watercourse and gets flooded during heavy rainfall. A bund wall is required to divert stormwater flows around the pumpstation.
9. Peace Park sewer pipe repairs alongside Armstrong Avenue will be repaired by end November 2022.

ATTENDEES:

BR	Bruce Ross - Devmco
BW	Brian Wright - uMhlanga UIP/Sibaya MA
CI	Chris Ingram - Devmco
CT	Charles Thompson - Devmco
DG	Dewet Geldenhuys - uMhlanga UIP
DVDM	Dirk van der Merwe - Devmco
DW	Dave Wilson - ETM
FC	Faith Cebekhulu - ETM
GV	Greg Veerasamy - Tongaat Hulett Property
HW	Hannes Wagner - Devmco
JE	Jarred Evans - uMhlanga UIP
JNB	Justin Newcombe-Bond - uMhlanga Ridge Management
JVR	Justin van Rensburg - Sibaya MA/Sibaya Conservation Trust
KW	Kayle Whitehead - Devmco
SA	Steve Angelos - ETM Catalytic Projects
SIB	Sibongile Maqubela - ETM
SM	Stuart Meyer - Devmco
SMQ	Sibongile Maqubela -ETM
ST	Schalk Theunissen - Devmco
STU	Shunnon Tulsiram - ETM

SHORT-TERM SOLUTION:

	Meeting date:	Action:	By whom	Progress
1. OHLANGA PUMP STATION				
1.1	25/10/2022	R3.5m mil contract awarded to address pumpstation short comings for 3 months. Repairs to be complete by 30 November 2022.	FC	
1.2	25/10/2022	SB to arrange water quality testing every second day to determine trendline for safe opening of beaches. 1. SB to forward BW results. 2. Should have a good idea of progress in 3rd week of November following completion of repairs to Northern Treatment Works - thereafter to consider a joint press release	SB SB/BW	
1.3	25/10/2022	CT suggested opening estuary and purging the river to dilute the water. DW and team to investigate if possible.	DW	
1.4	25/10/2022	DW and SM reported they were to meet with a service provider on 26 October to discuss the option of using healthy probiotics to treat the sewer in the rivers to reduce the E. coli levels before discharging the effluent to sea. Justin Newcombe Bond to email Eco Tab details to DW	JNB	
1.5		FC to determine number of starts per day occurring at each pump station. 1. Determine which pump stations require generators and size thereof. 2. Determine which pump stations need desludging and if assistance can be provided 3. Implement plan to start pumps prior to loadshedding. 4. Seek approval from Ednick for UIP staff to start pumps and BW suggested the UIP assist with checking of diesel levels on an ongoing basis.	FC	
1.6		Ohlanga pumpstation 1. 500 kva generator to be replaced 2. Pump Station generator cooling system problematic. R132k repair R230k replace. 3. FC to request Ohlanga pumpstation be excluded from loadshedding 4. FC to advise if manual labour is required at Ohlanga pumpstation for screening and maintenance. 5. Private sector to fund temporary staff for festive period 6. FC to send details of Ohlanga Pump Station gate damages to CT and JvR. JvR to arrange for Fencerite to sort fence and gate at Ohlanga pump station. For DEVMCO's account. 7. DEVMCO to arrange for a bund wall to be built 8. Link onsite security with the uMhlanga UIP Control Room. Check panic buttons	FC FC JvR/JE/JNB DEVEMCO DEVEMCO DG	

SHORT-TERM SOLUTION:

	Meeting date:	Action:	By whom	Progress
2. UMHLANGA BEACHFRONT PUMP STATIONS				
2.1	25/10/2022	UIP to manually start pumps before loadshedding to clear sumps. FC to establish if this is possible	FC	
2.2	25/10/2022	Establish where it is required to hire generators for the festive season: 1. Marine Drive pump station one. (Marine two pumps to one); Eastmoor Crescent Pump Station doesn't have generator. Consideration be given to hiring a generator for the festive season period.	FC/DG BW/ DEVMCO	
2.3	25/10/2022	JBN to investigate progress of repairs to Rising Main which collapsed from Armstrong to Shelbourne. Currently being repaired.	JBM	
3. eMDLOTI PUMP STATION				
3.1	25/10/2022	eMdloti Central Pump Station 1. Designed for two pumps 2. Floods whenever it rains 3. Devmco engineer to meet with Faith and Shane for a site visit on Thursday 27th October. This to determine, 4. Installation of bund wall to protect pumps from water ingress. 5. Change location of entrance 6. Devmco to fund back-up generator and Marshall security to place guard on site	FC/ DEVMCO	
4. SIBAYA PUMP STATIONS				
4.1	25/10/2022	Node 1 & 5 pump station is not yet live – expected to be online shortly. Once commissioned the sewer flow will end up at Ohlanga sewer pumpstation.	-	
4.2	25/10/2022	Old Sibaya pump station – two months for this substation to be back online. Once commissioned the sewer flow will end up at Ohlanga Sewer pumpstation.	-	
5. GENERAL				
5.1	25/10/2022	To be established - a status upgraded flow chart on all infrastructure, showing age/status of equipment, back-up power in or not, maintenance programmes, etc for all pump stations and legs of pipework as well as treatment works, that could then form systematic projects for upgrade in a critical path order.	ALL	
5.2	25/10/2022	Compile total costing for all items above – smaller grouping to convene around establishing costing of interventions/assistance.	ALL	
5.3	25/10/2022	Follow up meeting scheduled for 15 November.	BW	

POST MEETING NOTE:

Bruce Ross has been appointed by Devmco to project manage the private sector efforts in collaborating with the municipality in executing the immediate Action Plan.

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This document was prepared by

