

# MAP FORUM MEETING

MORELETA / APIES / PIENAARS RIVER SUB-CATCHMENT

Date : 17 OCTOBER 2023 (TUESDAY)

Time : 10:00 - 12:00

Venue : DWS TRAINING CENTRE, ROODEPLAAT DAM

Chair: Erica Bergman

Scribe: Yola Geldenhuys



ITEM	ACTIVITY	DESCRIPTION	ACTION
1.	<b>WELCOME</b>	The chair Erica Bergman welcomed attendees.	
2.	<b>ATTENDANCE AND APOLOGIES</b>	An attendance register was circulated. The meeting was attended by Chair Erica Bergman, GDARD - Nhklakanipho Mngomezulu, Mathabo Phoka, Tshemo Mogale, Mpho Kadi, ArcelorMittal - Simon Mojapelo, Isaac Lisene, Green scorpions - Ilze Kotze, COT - Basiliki Gericke, Ntombizedwa MHLali, Stephen van der Merwe, CJ Erasmus (Bon Accord IB), Esmay Madumo (DWS/IE), Balwin - Thomas Xaba, Mmabatho Mahwai, Inba Pillay, Magalies Water - Kefilwe Nduli, NWM - Kobus Fell, ROWSA - Selwyn Jackson, Helene Pretorius, Yola Geldenhuys.  Apologies were received from Kerneels Esterhuysen, Stephens Notoane, David Ntsove, Rachel Mpe, Keith Mcivor and Susan Lottering.	
3.	<b>PREVIOUS MINUTES</b>	Errata Page 3 under 5.4 - Spelling of Mathabo Phoka's name was corrected.	
4.	<b>RATIFICATION OF AGENDA</b>		
5.	<b>ITEMS FOR DISCUSSION</b>		
5.1	<b>GREEN SCORPIONS</b>	Ilze Kotze of the Green Scorpions (GS) presented on Environmental Management Inspectors and Bioremediation.  <b>OVERSIGHT</b> She indicated that there are currently 12 GS inspectors, but this will reduce to 5 by January 2024. They are responsible for monitoring in 7 Tshwane Regions. There are 9 health inspectors.  The GS are trained by the Department of Environment, Forestry and Fisheries (DEFF) and designated by the provincial government to have certain powers. Implementation protocols have been in place since 2013 to employ officers in COT. Their powers entail compliance and enforcement in terms of the National Environmental Management Act 1998 (NEMA) and Specific Environmental Management Acts (SEMA), various sectorial Acts, the Water Act, Air Quality Act and Waste Management.  The difference between the GS and the Health Department was briefly explained. The Health Department is responsible for ensuring that everybody has access to an environment that is not harmful to health and wellbeing. 9 Health inspectors also having GS powers. The GS's focus is on the environmental impact and the protection of the constitution.  The key legislation of the NEMA principle comprises of the duty and indemnity of water pollution, which also includes the Air Quality Act and Water Act. Competent authorities issue the relevant licenses required by the Air Quality Act and Waste Management Act. Environmental incidents throughout the city are also attended by the GS. Activities and emergencies that	

		<p>require EIAs need to be approved by GDARD before the GS can attend to them.</p> <p>GS are proactive with the NEMA compliance inspections throughout the city and their tasks consist of monitoring, taking samples, reacting to complaints, and specializing in integrated operations. In case of non-compliance, they issue notices to both the private and industrial sectors. If non-compliance continues, they can initiate criminal action with the assistance of other governmental departments. They cannot institute criminal actions against the City Manager, thus cannot enforce recommendations against the city.</p> <p>They help other departments to be environmentally compliant. They promote education, awareness, environmental incident management, manage tenders for medical waste management with the Health Department, bioremediation and management of hazardous materials. They cannot repair sewage leaks, remove informal recyclers, rehabilitate the environment, clear illegal dumping, close businesses, extinguish fires and respond to incoming non-compliances for the city. They are not an operational section, but are there for compliance, enforcement, monitoring and in an advisory capacity to the operational departments in the 7 regions, the MPD and the COO cluster.</p> <p>After Section 48 of NEMA (preventing criminal action against different spheres of government) was repealed in 2012, administrative and criminal action can be taken against the city by DFFE and other national departments. The cost of non-compliance can be severe for the city. Since 2013, approximately 50 administrative actions were issued to city from other spheres of government. Once they are classified as repeat offenders, the city receives maximum fines, which can be up to R10 million and/or 10 years prison time. Fines paid by the government are classified as wasteful expenditure. There are several criminal cases pending against the city for non-compliance.</p> <p><b>BIOREMEDIATION</b> GS offers advisory services for bioremediation.</p> <p>With physical clean-ups of rivers or areas, a lot of waste is generated. Hazardous waste must be disposed of at hazardous landfills. Physical cleanups are time-consuming and costly. GS have done research on using bioremediation for pollution control. It is a water and soil treatment technique and can remediate sewerage in soil and water. Bioremediation can be used in water and vegetation. Bioremediation uses microbes to restore ecological processes (the principle of nature fixes itself). Bioremediation generates no waste products and is thus a more cost-effective way of waste management. It is harmless to living animals, plants and humans, has no odour and can be applied by in-house city staff. Bioremediation does not require an EIA because no physical work is done. National and provincial departments must be kept informed as organisms are introduced.</p> <p>GS have put out tenders for bioremediation for the past few years. These have been unsuccessful as the products used have to be registered with the Department of Agriculture and proof of compliance with a SABS code is required. This is a necessary requirement to protect both the GS and environment. Funding is currently the biggest constraint.</p> <p>Erica suggested that the compliance requirements be made available so that companies can register their products and obtain the necessary documents. Ilze Kotze to provide a draft tender to Erica.</p> <p>Queries and complaints can be sent to <a href="mailto:greenscorpions@tshwane.gov.za">greenscorpions@tshwane.gov.za</a>. GS do not deal with illegal dumping complaints.</p>	Ilze Kotze
5.2	<b>WASTEWATER TREATMENT</b>	<p>Erica has sent letters to the Sanitation Department and the MMC, including a summary of outstanding items from the last year. To date, no response has been received from the City. Erica pointed out that changes are made behind the scenes and take time.</p> <p>Erica gave feedback on the Hennops Catchment Meeting which took place on 14 October 2023, chaired by Deputy Director-General CX Zwane of the Department of Water and Sanitation (DWS). Catchment challenges and actions were discussed, including</p>	COT

		<p>Hartebeespoortdam. The Cities of Tshwane, Johannesburg and Ekurhuleni were to present their Action Plans for the catchment. Ekurhuleni and Tshwane presented the challenges they face, and measures implemented. Stephen van der Merwe presented on behalf of COT. Johannesburg did not present an Action Plan. Erica indicated that although the presentations were well done, none of them were action plans. It requires a lot of money to fix sanitation. All the councils have limited budgets and problems have been ongoing for years. Erica stated that the Sanitation Departments cannot resolve the problems without the support of the city management and finances departments.</p> <p>Erica compared the sanitation incomes and expenditures from 2016 to 2022 and 2023 budget years for the City of Tshwane. She indicated that income from sanitation had increased by 12% per year but expenditure has decreased by 3% annually. Less money is being spent on sanitation in 2023/2024 than in 2016. She indicated that similar problems are probably experienced in the other metropolitan areas. She asked DDG Zwane to take this matter up with the various cities.</p> <p>It was reported that some of the Wastewater Treatment Works are in terrible condition, with trees growing out of structures, tall grass creating a high fire risk, and processes not working. It was also noted that the water quality from Rooiwal outflow is worse. An electrical substation supplying electricity to the Plant was damaged in a storm. The City is attending to the matter, but the WWTW is not operational yet.</p>	
5.3	<b>SWAWELPOORT SPRUIT</b>	<p>Swawelpoort flows into the Moreletaspruit on the upstream side of Mooikloof. Sewerage is flowing into the spruit. An investigation proved that a package plant wasn't working, and it was escalated.</p> <p>Inba Pillay reported that the plant is historic with no correct authorizations. Electricity supply, loadshedding and build-up of sludge were major challenges. Balwin is in process to refurbish and upgrade the Works. Recent upgrades included the installation of generators, and an extra tank for emergency overflow. They are investigating the use of nano-bubble technology. Water quality test results are being sent out bi-weekly and long-term plans are being put into place.</p>	Inba Pillay
5.4	<b>OLIFANTSPRUIT</b>	<p>Some private funders have indicated their willingness to contribute to rehabilitation of the Olifantspruit in the Hennops Catchment. It is expected that the project will entail identifying the sources of pollution upstream and dealing with both sewerage and solid waste. Hennops Revival and CoT have confirmed that they have water quality test results.</p> <p>Nano-bubble technology tried at Roodeplaat Dam has proved to work effectively in open bodies of water. Wetlands can be used as alternative solutions, including dealing with sludge. Work is underway to investigate how to combine wetland technology with existing WWTWs to enhance operations at Treatment Plants. This may be a cost-effective way to replace belt presses, which have proved costly to maintain.</p>	
5.5	<b>EDENDALE SPRUIT</b>	<p>A sewerage leak in Mamelodi was reported in June 2024 and had had not been attended to date. It was previously reported that the pipe had collapsed.</p> <p>Erica and Kobus went to site to investigate. There was no evidence that the line had been opened. A 450 dia concrete pipe was laid to divert the sewage flow into the Edendale Spruit.</p>	COT
5.6	<b>MEMO OF UNDERSTANDING</b>	<p>Kobus Fell indicated that a request was submitted for a MOU between National Water Monitor and the City, so that NWM can assist with timeous reporting of problems at WWTWs.</p>	COT / Kobus Fell
5.7	<b>REGATTA</b>	<p>Selwyn Jackson reported that the 1st International Masters rowing event in SA was a huge success, with 308 races held over 4 days. Para-rowers participated for the first time. Standard PR3 boats were used, and 3 international boat builders were given</p>	

		<p>the opportunity to rent out their boats. SA won 8 medals. 90 clubs raised R700 000. The total revenue generated by the Regatta is estimated to be R35 million.</p> <p>Selwyn reported that 29 tons of concrete anchors were placed during the preparation. Recycled tires were used to stabilize embankments. Rejected cement fencing posts were used as anchors were. Boards that cannot be recycled were used for starting pontoons, barges and the starting tower. Indigenous trees and plants were marked, and alien species were removed. Checklists on fauna and flora were made available at the event for education and awareness. Borehole water was used during the event and filtered water was available. Reusable water bottles were provided, which dramatically saved on waste. Waste was organized into separate bins for wet and dry waste.</p> <p>There was a storm during the regatta, and the camping village was evacuated because of lightning. The storm triggered power outages, which resulted in an increase of sludge and E.coli in the dam. Blue Planet assisted by treating the dam twice daily.</p> <p>Selwyn stated that the environmental achievements were great. The rowing club received compliments from the international community for doing a professional job.</p> <p>Great support was received from the Gauteng Government, as well as Balwin Properties and Getaway Magazine. Kobus thanked Lutske Newton for playing an instrumental role in making the regatta possible. Erica congratulated Selwyn and the Rowing Club for the financial impact the regatta had on the country, and a job well done.</p>	
<b>6.</b>	<b>FEEDBACK</b>		
<b>6.1</b>	<b>GDARD</b>	__ from GDARD reported that they are currently in the process of reviewing the State of the Environment and the Outlook Approach. Feedback is requested at the next meeting.	GDARD
<b>6.2</b>	<b>ROODEPLAAT</b>	The control of hyacinth weed was discussed. Kobus Fell to do a presentation on the control of hyacinth at the next meeting.	Kobus Fell
<b>6.3</b>	<b>DWS</b>	<p>Esme Madumo confirmed that DWS are in the process of monitoring the water laws.</p> <p>It was pointed out that compliance and education remained an issue. It was proposed that DWS also focus on practical documents and pamphlets to raise awareness and understanding. These should be focused on reaching the public and could be translated into several languages. Pamphlets should be easy to read and understand and the use of pictures will enhance understanding.</p>	DWS
<b>6.4</b>	<b>TSHWANE</b>	Susan Lottering of COT Effluent Control provided a presentation on water quality in the Moreletaspruit. Erica showed the results achieved from January to June 2023.	
<b>7.</b>	<b>OUTSTANDING ITEMS</b>	No feedback received.	COT
<b>8.</b>	<b>MEETINGS</b>	Dates of 2024 meetings - 20 February, 16 April, 11 June, 20 August, 15 October.	
<b>9.</b>	<b>CLOSURE</b>	Erica declared the meeting closed and thanked the members for their attendance and participation.	