



MINUTES
VAAL DAM RESERVOIR FORUM
Thursday, 27 February 2020
 DWS Offices, Deneysville
 10:00 – 13:00

No	Item	Responsible Person	Due Date
1.	Welcome <ul style="list-style-type: none"> • The chairperson welcomed everyone to the forum. 	M. Matseba	
2.	Introduction <ul style="list-style-type: none"> • All the attendees introduced themselves as the attendance register was circulated. 	All	
3.	Apologies <ul style="list-style-type: none"> • Martin Bambo - Department of Water and Sanitation • Jeff Zwane – DA • F. Mamabolo – Department of Water and Sanitation • N. Mofokeng - Metsimaholo Local Municipality • J. Van Wyk – Department of Water and Sanitation • L. Nqelenga – Department of Water and Sanitation • K. De Villiers – Department of Water and Sanitation • T. Metiso – Eskom Grootvlei power station • B. Ramong – Midvaal Local Municipality 		
4.	Minutes of the previous meeting Minutes of the previous meeting were adopted with the following corrections: <ul style="list-style-type: none"> • Pg 3, Bullet 4: M. Maphakela was replaced with P. Maphakela. • Pg 9, item 12.4; Bullet 4: K. Mantel was replaced with K. Manten and Piet Brier was also replaced with Piet Bredenhann. 	All	
5.	Matters arising from the previous meeting (28 November 2019). <ul style="list-style-type: none"> • Action 1: K. Riba was not present in the forum meeting therefore the action is deferred to the next meeting. E. Matseba requested K. Rapelang to send a formal email to K. Riba to ask him to provide feedback on the matter. • Action 2: K. Rapelang reported that the Dipaleseng WWTW is not operational because there is no Pump at the Plant. E. Matseba said that the Department had a meeting with Dipaleseng Municipality to discuss the state of the WWTW and the Municipality was requested to provide an action plan for fixing the Plant. E. Matseba further said 		

	<p>that the Department is assisting the Municipality through RBIG project to upgrade the WWTW. K. Rapelang mentioned that he send emails to the Municipal officials to find out if the plant has been upgraded but he was not responded to.</p> <ul style="list-style-type: none"> • Action 3: K Rapelang reported that the Department will be conducting an inspection at the Villiers WWTW in March to find if they are able to dislodge their oxidation ponds. K. Rapelang further said that there is a new Plant at Villiers and it is operational. J. Van Vuuren mentioned that there is no new Plant at Villiers but there have been major refurbishments at the Plant. • Action 4: E. Matseba said that the second phase of the program for AMD treatment is still on hold. The report has been finalized and it is still sitting with the executive authority to make a decision on what type of treatment can be used to treat the AMD. • Action 5: K. Rapelang mentioned that it is the mandate of Department of Environmental Affairs to deal with issues of illegal dumping into a water course. E. Matseba further said that it is indeed the mandate of DEA but the problem is that they are altering or diverting the flow of a stream through dumping of rubbles into a water course therefore DWS has to come into the picture and issue notices and directives. • Action 6: J. Zwane was not present in the meeting therefore the action is deferred to the next meeting. • Action 7: K. Manten reported that she liaised with Mr Bredenhann and he mentioned it does not fall under his job description to address the issue of removal of illegal structures • E. Matseba reported that he did send an email to DEA regarding their failure to respond to reported illegal dumping incidents but he provided contact details the relevant officials. K. Manten to liaise with the relevant officials and provide feedback in the next meeting. E. Matseba mentioned that Mr Kabedi Mashilo from DWS deals with matters relating to illegal structure in the watercourse and he should be invited to the forum. 		<p>27/08/2020</p> <p>27/08/2020</p> <p>27/08/2020</p> <p>27/08/2020</p>
<p>6. 6.1 6.2 6.3 6.4 6.5</p>	<p>Additions to the Agenda Selection of a chairperson Climate change Blue/ Green drop report Operational rules of the Vaal dam Sewage smell in Deneysville</p>		

7.	<p>Items for discussions</p> <p>Water Quality Monitoring and Assessment</p>		
7.1	<p>Rand Water</p> <p>N. Van der Walt presented the water quality status from October 2019 to December 2019 and the results reflect as follows:</p> <ul style="list-style-type: none"> • Point VSS: There was no flow during the month of October. COD, Fluoride and Nitrate levels were high during the months of November and December. • Points KB: There was no flow in October and November. All the other variables managed to comply with the required standards except for COD in December. • Point KW: COD, Conductivity, Fluoride and alkalinity were elevated particularly Conductivity in November but the other two months it was not that much elevated. • Point KSV: The sampling point seems to be problematic as almost all the variables did not comply with the required standards as compared to the previous quarter. • Point VDS: COD, Fluoride, Alkalinity and Nitrate were a bit high as compared to the previous quarter. • Point VGB: There was an improvement of ammonia as it went from unacceptable standard in the previous quarter to ideal level in the current quarter. There was also an improvement in the phosphate levels. Conductivity deteriorated from tolerable levels in the previous quarter to unacceptable. • Point VV: E.coli and nitrates deteriorated in the last quarter as compared to the previous quarter. • Point VD4I: COD, Fluoride and Nitrate levels were very high in the last quarter. • Point WF: COD and E.coli did not comply for the quarter under review although E.coli counts improved from the last quarter. • Point VD3I: COD did not for this quarter but there was an improvement in the Nitrate levels. • Point VD2I: Ammonia levels improved in the last quarter but COD and Nitrate levels deteriorated. • Point VD1I: Ammonia levels deteriorated in the last quarter and it was the highest as compared to the other 3 quarters. Ammonia was detected at the sampling point on the 08th of October and 05th of November 2019. • KLIPR_VDAM: COD did not comply with the required standards for the whole of last year. Fluoride, Alkalinity and Nitrates levels deteriorated in the last quarter. • Almost all the WWTW did not comply with the required standards in terms of Ammonia, COD and Faecal coliforms 	N. Van der Walt	

which mean that all this WWTW need to optimize their removal processes.

- K. Manten asked what happens after all these WWTWs and sampling points are found to be non-compliant because it seems like no action is being taken. E. Matseba mentioned that the problem lies with the Municipalities but one of the Municipalities (Lekwa Municipality) has already been taken to court and an interdict was issued for the arrest of the Municipal manager. There is an arbitration taking place to ensure that all Municipalities maintain their WWTWs and also stop illegal discharges into the streams.
- K. Rapelang mentioned that a contractor was appointed at Standerton WWTW to fix the Plant and they already fixed some of the reactors and blowers but the project was stopped because there were leakages of the pipes but at least something is being done and the security has been upgraded. S. Mporetjie added that Standerton WWTW is overloaded although if they can be able to fix all the reactors then the optimization process of the Plant can be better.
- E. Matseba encouraged the stakeholders and business forums to join hands and assist the Municipalities with the refurbishments and upgrading of WWTWs but they must avoid giving them money.
- L. Van Heerden asked what could be the cause of the non-compliances of WWTW particularly Oranjeville and Deneysville. E. Matseba mentioned most of the challenges may be due to under capacity of personnel resources, non-maintenance of infrastructure, overcapacity of the Plant, budget constraints and etc.

7.2 DWS –Gauteng

The water quality report was for the period October to December 2019 and the results are as follows:

- PH, Fluoride and Nitrates did not comply with the required standards at point 1 (Vaal river @ Villiers flood section) for the month of December. COD also failed to comply with the required standard for the whole quarter.
- Nitrate has improved from unacceptable range in November to acceptable levels in December at Point 2 (Vaal dam on Vaal River).
- Conductivity and Nitrates did not comply with the required standards in October but the results shown an improvement in December at point 3 (Vaal river downstream of Standerton WWTW). E.coli counts were high during the month of December. There was no flow during the month of October hence samples were not

K. Rapelang

collected.

- Ammonia, COD, Fluoride and Conductivity were non-compliant for the whole quarter at point 4 (Spruitsonderdrift D/S of Vrede). Chloride and Nitrate levels have improved in the in the month of December while E.coli count have deteriorated. There may be a manhole that was built within this channel hence this could be the reason for the non-compliances for these variables.
- COD was non-compliant for the whole quarter at point 4 (Standerton U/S of the sewage works) and E.coli also deteriorated in December and this was mainly due to the pump stations leaking effluent in to the river system.
- All the WWTWs are not doing in terms of compliance except for Vaal Marina WWTW.
- Standerton Sewage works did not comply with the required standards for the whole quarter in terms of ammonia, COD, orthophosphates and E.coli.
- Vrede Sewage works also did not comply with the standards in terms of ammonia and orthophosphate for the quarter. There was a slight deterioration of COD during the month of November. Samples were not collected in December because there was no access to the facility.
- Levels of ammonia and orthophosphate are inconsistent at the Villiers sewage works as the results failed to comply with the required standards in October and December the results were acceptable in November. Faecal coliforms and E.coli also exceeded the limits in November and December.
- Oranjeville WWTW had challenges of Ammonia, Orthophosphate and Faecal coliforms throughout the quarter. E.coli also exceeded the limits during the month of October. Samples were not collected in December because there was no flow at the Plant.
- No samples were collected at the Grootvlei Mine sewage works in November and December because there was no flow. Ammonia, nitrates, orthophosphate and the bacteriological determinants exceeded the limits in October.
- Cornelia sewage works is also problematic as most of the variables do not comply with the required standards especially Ammonia, COD, Orthophosphate and the microorganisms.
- Samples were not taken at the Dipaleseng Plant next to Eskom Grootvlei station for the whole quarter because the Plant is not operational.
- Vaal Marina sewage works complied with the required

	<p>standard for all the variables except for orthophosphate in October and December.</p> <ul style="list-style-type: none"> • E. Matseba mentioned that the last time he visited the Oranjeville sewage works was in 2018 and they were busy with upgrade and disludging of the Plant and he wanted to know if the project ended. K. Rapelang reported that the projected ended and the sludge was removed and stored on top of the liners at the Plant so it has not been disposed of yet. • E. Matseba requested K. Rapelang to contact Martin Bambo from DWS Free State to find out the status of the projects that has stopped at Oranjeville and Deneysville WWTW. • Mr. Francisco asked if there is no monitoring/follow up inspections and closure reports to be submitted to the relevant authorities after completing projects. E. Matseba mentioned that there should be a closure report available if the project is finished but K. Rapelang will liaise with M. Bambo to find out what happened. • J. Van Vuuren mentioned that about R50 million was spend at the Villiers Sewage Works to refurbish the Plant but there is no improvement and in fact the water quality if deteriorating further. • S. Mporetjie mentioned that the ammonia levels at the Cornelia WWTW have been very high the whole quarter and it is concerning and wanted to know what could be happening. K. Rapelang mentioned the Plant was not functioning previously but now they have fixed the Plant although the only problem is that they are not chlorinating but the Plant is running. <p>7.3 DWS – Free State</p> <ul style="list-style-type: none"> • Absent with apology <p>7.4 Solid Waste Management</p> <ul style="list-style-type: none"> • Absent without apology <p>7.5 CME</p> <ul style="list-style-type: none"> • D. Sibiyi reported that in terms of Compliance Monitoring, an audit was conducted at Wolwefontein trust farm and the report was send to the facility so the Department is still waiting for an action plan from the farm. • Another audit was conducted at the Oranjeville WWTW and the matter was transfer to Enforcement unit to conduct an investigation in March 2020. 	D. Sibiyi	27/08/2020
--	--	-----------	------------

8	<p>Catchment Activities (Feedback from Stakeholders)</p> <p>8.1 Phumelela Municipality</p> <ul style="list-style-type: none"> • Absent without apology <p>8.2 Lekwa Municipality</p> <ul style="list-style-type: none"> • Absent without apology <p>8.3 Metsimaholo Municipality</p> <ul style="list-style-type: none"> • Absent with apology <p>8.4 Mafube Municipality</p> <ul style="list-style-type: none"> • Absent without apology • J. Van Vuuren mentioned they held a meeting followed by a two-day workshop where COGTA Free State, Nation COGTA, Treasury, Fezile Dabe District Municipality and Mafube Local Municipality were present and the outcomes of the workshop was that a compact was drafted and ready for signed by all stakeholders on the 21st of January 2020 but sadly there was no communication from the Municipalities and Government Departments after that. • The compact made provision to allow memorandum of understanding to enable local businesses to help out and everything would have been in line all procurement policies and legislation but sadly the negotiations have fallen through. <p>8.5 VQA</p> <ul style="list-style-type: none"> • Ms A. Botha reported that the whole Villiers Township is drowning in sewer and the sewer ultimately finds its way to the river. • It was also reported that Frankfort and Namahadi also faces the same sewer problems and the refuse is not removed therefore when it rains the runoff goes into the river. • E. Matseba mentioned that is a great initiative the business forums want to assist the Municipality but it is sad that the Municipalities are not appreciative enough to realize the help offered to them. E. Matseba encouraged the forum members to write a brief report regarding the sewer problems they are faced with and email them to K. Rapelang so that the issues can be addressed to the executive authorities. 	<p>J. Van Vuuren</p> <p>A. Botha</p>	
---	--	--------------------------------------	--

<ul style="list-style-type: none"> • S. Mporetjie mentioned that the reason why the refuse was not removed at the Frankfort and Namahadi Townships is because the workers did not receive their salaries. <p>8.6 Goldi</p> <ul style="list-style-type: none"> • The Plant at Goldi is currently operating at full capacity and the water quality results are within the limits. • Goldi is only receiving 2 mega liters of water from the municipality per day and their requirement is 4.5 Mega liters. • The Aro Plant will be up and running by the end of April 2020. <p>8.7 Eskom Grootvlei Power Station</p> <ul style="list-style-type: none"> • Absent with apology <p>8.8 Dipaleseng Municipality</p> <ul style="list-style-type: none"> • Absent without apology. <p>8.9 Midvaal LM</p> <ul style="list-style-type: none"> • Absent with apology <p>8.10 Fezile Dabi DM</p> <ul style="list-style-type: none"> • Absent without apology <p>8.11 Gert Sibande DM</p> <ul style="list-style-type: none"> • Absent without apology <p>8.12 SAVE the Vaal</p> <ul style="list-style-type: none"> • K. Manten reported that there is sewer spillage from Refengkgotso leading towards Sasolberg and the sewer turned into a wetland and she contacted K. Riba about the issue but he did not respond to her plea. • There is a new development called Moodraai near Sasolberg where over 1000 shacks have been built but there is neither water nor Sanitation around the area and pollution is getting out of control. • Cllr R. Meyer mentioned that there is a communal dam at Moodraai but it is far too little for the number of people living in the area. • K. Manten further mentioned that there is spillage coming down from Refengkgotso directly into the Vaal River and it seems like the Metsimaholo and Refengkgotso Municipalities are spilling in every direction. • There is an ongoing illegal fishing at the dam and there are no formal environmental inspections. J. Mthombeni mentioned that the perpetrators carry out their illegal 	<p>C. Eksteen</p>	
--	-------------------	--

	<p>fishing at night where they put the fishing net in the water overnight and collect it in the early hours of the morning and it is happening directly in the Vaal River.</p> <ul style="list-style-type: none"> • There is a horrific Blue-green alga in the Vaal dam and it does not smell nice and nothing is being done to suppress it. S. Mporetjie mentioned that the algae are called cyanobacteria and they may be caused by sewer upstream of the dam. • Mr Van Heerden mentioned that Metsimaholo Municipality has been partially placed under administration under section 139b but they are receiving assistance from the MEC from Free State. The MEC will be bringing in a team which consists of the administrator and Directors but the MEC is yet to announce when the team will come through. 		
9	<p>Water Use License Status</p> <ul style="list-style-type: none"> • Ms Mmakgang said that the president pronounced that the Licences will be issued in 90 days which means that the Department will be working very hard to ensure that those timeframes are adhered to. The Department is busy trying to come up with a plan in terms of the resources that are needed to make that possible. • The Water Use Licence status spreadsheet will be forwarded through to the forum group. 	E. Matseba	
10	<p>Pollution Incidents</p> <ul style="list-style-type: none"> • R. Meyer reported that members of the Community laid a complaint regarding a terrible smell at Van der Merwe street around Deneysville and it has been noted that people are dumping sewer in the wetland and the area usually start smelling around 17H00 in the afternoon onwards. 	R. Meyer	
11	<p>CMA Process</p> <ul style="list-style-type: none"> • E. Matseba reported that the status quo still remains the same 	E. Matseba	
12	<p>Discussion of Additions to the agenda</p>		
12.1	<p>Election of a Chair person</p> <ul style="list-style-type: none"> • J. Van Vuuren has been appointed as the new Chairperson of the Vaal dam Forum 		
12.2	<p>Climate Change</p> <ul style="list-style-type: none"> • A. Salagae reported that assessment for climate change is conducted for the Vaal as a whole and the reason for that is to understand the impact of water in the future as the climate shifts and changes. 		

- A study was conducted for the whole of the Vaal and the key observation is that non-climatic issues are causing even more stress on the water resources such as non-compliance of Municipalities and sewage because when it rains, all the pollutions come to the water resources.
- Issues such as reduction in rainfall and rain days, longer dry periods and short flood system result in erosion which impact on the water resource reducing the capacity in terms of sedimentation.
- One of the other issues noted is the increase in temperature causes evapotranspiration and some of the areas around developed Alien Invasive Species Plans which abstract and more water.
- In some of the areas there is sand mining along the system which is impacting on the river channels and exposing water to evaporation.
- Department of Environmental Affairs in Free State invited DWS to one their meetings where they were developing the climate change strategy and one of the issues raised was that the Municipalities are not attending the meetings.
- Climate change will magnify the challenges that the catchment is already having in terms of water quality therefore the key issue is to try to manage the water resource.
- S. Mporetjie asked how far is the Department in terms of developing an adaptation strategy with regards to water resources. Mr Salagae mentioned that Department has already developed the adaptation strategy and other local authorities were involved in developing the strategy.

12.3 Blue/Green Drop report

- M. Morokane reported that the last report released in 2014 but it was not publicized, it was only released to the Municipalities but it is not a confidential document.
- It is not yet known when the next report will be released and the program has not been active since 2014 but the Department is been focusing on doing the Green drop tests but only looking at the desktop information. The Minister announced last year that this programs needs to be revised so the Department is in the process of drafting the plan.
- S. Mporetjie asked how the Department is able to use the finding of the program in the absence of the technical assessments. Ms Morokane mentioned that inspections are done through the regional personnel at the Proto-CMAs although current resources at the regional level are very limited that not all the Municipalities are covered. Currently the Municipalities are monitored through the

	<p>integrated regulatory information system (Blue/Green drop system) where the Municipalities upload their information on the system but the sadly not all the Municipalities are loading their data on the system.</p> <ul style="list-style-type: none"> • J. Van Vuuren mentioned that it is great that something is being done to get the Blue/ Green Drop system running and it has been one of the objectives as the business forum are have the system up and running. • M. Morokane mentioned that the Municipalities should see the Blue/ Green Drop system as the one system that they can use to upload their data so that even in the absence of real BDS/GDS assessments, they will still be able to evaluate themselves and have their information up to date. M. Morokane to update the forum in the next meeting which Municipalities are uploading their data on the Blue/Green Drop System. 		27/08/2020
12.4	<p>Operational rules of the dam</p> <ul style="list-style-type: none"> • J. Mthombeni reported that the operation of the dam is run by Mr Piet Bredenhann therefore there is nothing much that can be reported on that regard. E. Matseba requested J. Mthombeni to invite P. Bredenhann to provide update on the operational rules of the dam. • K. Manten wanted to know what stage is the Katse dam because she is worried about the future water sources. E. Matseba to obtain information from the Planning and Infrastructure Directorate in the Head office and provide feedback in the next meeting. • Mr Fransisco mentioned that there are more than 30 pipe bursts in and around Villiers and the pipes are on the Municipality side but nothing is being done to fix the problem. Mr Fransisco further asked if it is possible to impose fines on the Municipality for their non-compliances. E. Matseba mentioned that it is possible to have fines imposed on them but one would need to have bylaws to impose such fines and there are certain procedures to be followed. 		27/08/2020 27/08/2020
13.	<p>Date of next meeting 28 May 2020</p>		
14	<p>Closure</p> <ul style="list-style-type: none"> • Chairperson thanked everyone for participating and the meeting was adjourned. 	E. Matseba	

VAAL DAM ACTION LIST

27 February 2020

No	Action	RESPONSIBLE PERSON	Action identified	DUE DATE
1.	K. Riba to make follow up with Metsimaholo PMU Department to gather information regarding the stopping of the refurbishment for Denysville WWTW	K. Riba	August 2019	August 2020
2.	K. Rapelang to liaise with the Dipaleseng Municipality to obtain the action plan for fixing their next to the Eskom Grootvlei power station	K. Rapelang	February 2020	August 2020
3.	E. Matseba to make follow up to find out what is the latest status with regards to phase two of the AMD treatment.	E. Matseba	February 2020	August 2020
4.	K. Rapelang to provide feedback in the next meeting with regards to issuing of a notice to the Municipality for dumping rubbles into a water course	K. Rapelang	February 2020	August 2020
5.	K. Manten to invite relevant officials who deals with illegal building of infrastructure in the watercourse to the forum	K. Manten	February 2020	August 2020
6.	K. Rapelang to liaise with Mr Martin Bambo from DWS Free state to find out what happened with the refurbishment projects that were taking place at the Oranjeville and Deneysville WWTW	K. Rapelang	February 2020	August 2020
7.	Ms Mpho Morokane to update the forum in the next meeting regarding which Municipalities are uploading their data on the Blue/Green Drop System	M. Morokane	February 2020	August 2020
8.	J. Mthombeni to invite P. Bredenhann to provide update on the operational rules of the dam.	J. Mthombeni	February 2020	August 2020
9.	E. Matseba to obtain information from the Planning and Infrastructure Directorate in the Head office regarding the state of Katse dam and provide feedback in the next meeting.	E. Matseba	February 2020	August 2020