

South African Human Rights Commission

Report of the Gauteng Provincial Inquiry
into the Sewage Pollution
of the City of Tshwane's Rivers and the Roodeplaat Dam

26 October 2021

Acronyms and Abbreviations

Agriculture The Department of Environment and Agriculture for the

City of Tshwane Metropolitan Municipality

Baviaanspoort EA Exemption Permit 16/2/7/A230/D7/X3, issued in respect

of the Baviaanspoort Wastewater Treatment Works

CFU Colony Forming Units

City of Tshwane Metropolitan Municipality

COGTA The Department of Cooperative Governance and

Traditional Affairs

Constitution The Constitution of the Republic of South Africa Act 108

of 1996

Commission The South African Human Rights Commission, Gauteng

Provincial Office

DEFF The Department of Environment, Forestry and Fisheries

DWS The Department of Water and Sanitation

DMA The Disaster Management Act 57 of 2002

HOD Head of Department

Inquiry The one-day inquiry held by the South African Human

Rights Commission's Gauteng Provincial Office on

26 February 2021

MEC Member of the Executive Council

Ministers Members of Cabinet

MSA The Municipal Systems Act 32 of 2000

NEMA The National Environmental Management Act 107 of

1998

NWA The National Water Act 36 of 1998

NWRS The National Water Resource Strategy

SAHRC Act The South African Human Rights Commission Act 40 of

2013

SAPS The South African Police Service

WSA Water Services Act 108 of 1997

WWTW Wastewater Treatment Works

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1. Introduction

- 1.1. The South African Human Rights Commission's Gauteng Provincial Office ('the Commission') undertook an inquiry into the state of the wastewater treatment works in the jurisdiction of the City of Tshwane ('the Inquiry') on 26 February 2021. The Inquiry took place after the Commission received repeated complaints regarding malfunctioning waste water treatment works (WWTW) that was releasing untreated or partially treated sewage into the Apies and Pienaars Rivers and the Roodeplaat and Leeukraal Dams within the jurisdiction of the City of Tshwane Metropolitan Municipality ('the City of Tshwane' or 'the Municipality'). A number of ongoing engagements, and site visits with the City of Tshwane, and the Department of Water and Sanitation (DWS) preceded the Inquiry.
- 1.2. The Inquiry was held at Roodeplaat Dam. The City of Tshwane, the DWS, and the Department of Environment, Forestry and Fisheries (DEFF) were invited to engage with, and make submissions to the Commission regarding the condition, management/ mismanagement, and status of the WWTWs in the jurisdiction of the City of Tshwane. This was to assess the effects of water and waste treatment on the rivers and dams, and the steps that are being taken, or that will be taken, to correct the constitutional violation caused by the spillage of raw and untreated sewage into the rivers and dams that is polluting the freshwater sources within the City of Tshwane.
- 1.3. This document constitutes the Commission's final report ('the Report') which includes the assessment of the inquiry as well as the Commission's findings and directives.

2. Background

2.1. To better understand or make sense of the Report, it is useful to set out the following background information.

Wastewater and Sewage

- 2.2. Although commonly used interchangeably, wastewater and sewage are not the same. Sewage is a component of wastewater.
- 2.3. **Wastewater** is used water that has been affected by domestic, industrial and commercial use. More precisely, it is domestic effluent consisting of black water (excreta, urine and faecal sludge), greywater (kitchen and bathing wastewater); water from commercial establishments and institutions, including hospitals; industrial effluent, storm water and other urban run-off; and agricultural, horticultural and aquaculture effluent, either dissolved or as suspended matter.
- 2.4. Sewage is the wastewater containing only black water and grey water.4

Wastewater Treatment

- 2.5. Wastewater treatment is the removal of impurities from wastewater, or specifically sewage, before it reaches aquifers or natural bodies of water such as rivers, lakes, estuaries, and oceans.⁵
- 2.6. In broad terms, water is said to be polluted when it contains enough impurities to make it unfit for a particular use, such as drinking, swimming, or fishing.⁶
- 2.7. Although water quality is affected by natural conditions, the word pollution implies human activity as the source of contamination. Water pollution, therefore, is caused primarily

¹ Tuser, C "What is Wastewater?" Water and Waste Digest, 9 January 2020. Available at: https://www.wwdmag.com/wastewater-treatment/what-wastewater.

² Liquid waste (treated or untreated) discharged into a river. See the Compendium of Sanitation Systems and Technologies (2nd ed).

³ Corcoran E, Nellemann C, Baker E, Bos R, Osborn D, Savelli H, Sick Water? The central role of wastewater management in sustainable development. A Rapid Response Assessment. UNEP/UNHABITAT 2010.

⁴ Tuser (note 1 above) and Byrne, W, "Sewage versus Wastewater – What's the Difference?" Oxymem. Available at: https://www.oxymem.com/blog/sewage-versus-wastewater-whats-the-difference.

⁵ Nathanson A, and Ambulkar, A, "Wastewater treatment", Encyclopaedia Britannica, 22 January 2010. ⁶ Ibid.

by the drainage of contaminated, untreated wastewater into surface water or groundwater, and wastewater treatment is a major element of water pollution control.⁷

- 2.8. A wastewater or sewerage treatment plant or WWTW⁸ is a network of pipes, pumping stations,⁹ and attachments and appendages that convey sewage from its points of origin to a point of treatment and disposal.¹⁰
- 2.9. Most sewerage plants have separate collection facilities that carry domestic sewage and storm water sewage, respectively. Domestic wastewater is treated while storm water is carried to a river.¹¹ Systems that carry a mixture of both sewage and other wastewater are called combined plants. Combined plants are older. They carry large volumes of storm water during wet-weather periods. As a result of large volumes of storm water, sewage must bypass the treatment plants during wet weather and be discharged directly (untreated) into the receiving water. Combined plants are therefore troublesome sources of water pollution.¹²
- 2.10. Determining the amount, size and function of sewerage plants for an area is a gruelling task. The size and capacity of wastewater treatment systems are determined by the estimated volume of wastewater generated from residences, businesses, and industries connected to wastewater systems as well as the anticipated inflows and infiltration. The selection of specific treatment plant configurations depends upon factors such as the number of customers being served, the geography, site constraints, sewer connections, average and peak flows, influent wastewater characteristics, regulatory effluent limits,

⁷ Ibid.

⁸ Also known as a "plant", "wastewater works", a "sewerage system" and a "sewerage plant".

⁹ "Pumping stations are built when sewage must be raised from a low point to a point of higher elevation or where the topography prevents downhill gravity flow. Special non-clogging pumps are available to handle raw sewage. They are installed in structures called lift stations. There are two basic types of lift stations: dry well and wet well. A wet-well installation has only one chamber or tank to receive and hold the sewage until it is pumped out. Specially designed submersible pumps and motors can be located at the bottom of the chamber, completely below the water level. Dry-well installations have two separate chambers, one to receive the wastewater and one to enclose and protect the pumps and controls. The protective dry chamber allows easy access for inspection and maintenance. All sewage lift stations, whether of the wet-well or dry-well type, should include at least two pumps. One pump can operate while the other is removed for repair." See Nathanson et.al (note 5 above).

¹⁰ Ibid.

¹¹ Ibid.

¹² Ibid.

technological feasibility, energy consumption, and the operations and maintenance costs involved.¹³

Water Polluted with Sewage and Other Wastewater

- 2.11. Approximately, one-third of drinking water requirement of the world is obtained from freshwater surface sources like rivers, and dams.¹⁴ Many communities in South Africa rely on freshwater surface resources such as rivers and dams for their daily supply of water.¹⁵ The water from the rivers and dams is also used for irrigation purposes by farmers, and it is a source of freshwater fish for subsistence and commercial fisherman.¹⁶ It is used for swimming and also serves as a tourist attraction.¹⁷
- 2.12. Major point sources of freshwater pollution are raw and partially treated wastewater. Aged, unmaintained and failing WWTW has become a common problem for South African municipalities around the country. The release of domestic and industrial wastewater has led to the increase in freshwater pollution and depletion of clean water resources. Faecal pollution of water increases the risk of infection of various diseases

('the Vaal Report'); James de Villiers, "Raw sewage and no water: How citizens of 2 North West towns took charge of services", 18 February 2021, New24, accessed at: <a href="https://www.news24.com/news24/opinions/fridaybriefing/watch-raw-sewage-and-no-water-how-citizens-of-2-north-west-towns-took-charge-of-services-20210218", Sheree Bega, "Day and night we smell it: Sewage spills make life hell for Deneysville residents", 20 September 2020, IOL, accessed at: <a href="https://www.iol.co.za/saturday-star/news/day-and-night-we-smell-it-sewage-spills-make-life-hell-for-deneysville-residents-8e066221-2e91-4801-a2f0-a59d490c9c28", Simon Liedtke, "Mpumalnga remains under strain as water pollution continues", 4 December 2018, Engineering News, accessed at: https://www.engineeringnews.co.za/article/mpumalanga-remains-under-strain-as-water-pollution-continues-2018-12-04/rep_id:4136; and Prof. Leslie Petrik, "Sewage and contaminants in the Cape Town sea", 31 May 2019, Mail&Guardian, accessed at: https://mg.co.za/article/2019-05-31-00-sewage-and-contaminants-in-cape-town-sea/.

¹³ Ibid.

¹⁴ Jonnalagada SB, Mhere G. Water quality of Odzi River in the eastern highlands of Zimbabwe. Water Resources, 2001.

Joshua N. Edokpayi, John O. Odiyo and Olatunde S. Durowoju, "Impact of Wastewater on Surface Water Quality in Developing Countries: A Case Study of South Africa". Accessed at: https://www.intechopen.com/books/water-quality/impact-of-wastewater-on-surface-water-quality-in-developing-countries-a-case-study-of-south-africa

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ See the Commission's Final Report Into the Sewage Problem of the Vaal River 17 February 2021, accessed at: https://www.sahrc.org.za/home/21/files/The%20Vaal%20Inquiry%20Final%20Report 17022021.pdf

¹⁹ Avalon Global Research. Water and Waste Water Treatment Opportunity in India. An Overview. [Internet]. 2012. Available online: www.export.gov.il/uploadfiles/02_2012/indiawater.pdf?loaded=true [Assessed 2016/06/27].

to those using these sources as their life supporting water source.²⁰ Many South Africans have no or limited access to adequate sanitation facilities and are at a high risk for waterborne diseases.²¹ Since 2000, there has been a dramatic increase in the episodes of waterborne diseases in South Africa, ²² such as bilharzia, malaria and cholera.²³

2.13. In addition, human sewage contains germs that may spawn diseases, such as hepatitis and cholera.²⁴ Chemicals from soaps and washing detergents, both natural and manmade, can also cause a pollution problem similar to that caused by fertilisers.²⁵ The normal low phosphate level of PO4, inhibits the growth of plants, but a small increase of phosphates can result in the rapid increase in plant growth.²⁶ It can also cause, what is known as, the "bloom", a massive increase of phytoplankton in a water body as a response to increase levels of nutrients.²⁷ Negative environmental effects of the bloom include hypoxia, the depletion of oxygen in the water, which induces reductions in specific fish and other animal populations.²⁸ Human contact with these blooms can cause illness such as hay fever, skin rashes, eye irritations, vomiting, gastroenteritis, diarrhoea, fever and pains in muscles and joints, and in extreme cases, death.²⁹

The Pollution of the Four Rivers and the Roodeplaat Dam

2.14. The four rivers that fall under the jurisdiction of the City of Tshwane are the Apies, Hennops, Pienaars and Tolwane Rivers. The Pienaars River drains into the Roodeplaat

²⁰ Ibid.

²¹ DWAF. Water Quality Management Series Guideline Document U1.5. Guideline for the management of waterborne epidemics, with the emphasis on cholera, 1st ed. 2002.

²² Bessong PO, Odiyo JO, Musekene JN, Tessema A. Spatial distribution of diarrhea and microbial quality of domestic water during an outbreak of diarrhea in the Tshikuwi Community in Venda, South Africa. Journal of Health Population and Nutrition. 2009; 27(5):652–659. DWAF. Guideline for the Management of Waterborne Epidemics, with the Emphasis on Cholera–Co-ordination, Communication, Action, and Monitoring. 2002; pp. 1–3. Published by Department of Water Affairs and Forestry, Pretoria, South Africa.

²³ Ibid.

²⁴ Friedo Herbig, "Talking dirty - effluent and sewage irreverence in South Africa: A conservation crime perspective", Cogent Social Sciences (2019) at 10.

²⁵ Ibid.

²⁶ Chislock, M. F., Doster, E., Zitomer, R. A., & Wilson, A. E, "Eutrophication: causes, consequences, and controls in aquatic ecosystems. Nature Education Knowledge 4(4)" (2013) at 1–8.

²⁷ Herbig (note 24 above).

²⁸ Ibid.

²⁹ Ibid.

Dam. It is, by now, obvious that these water sources are important for the lives and livelihoods of those living in and around the areas of these freshwater bodies – they contain diverse fauna and flora, they are sources of potable drinking water, they contain sources of food for commercial and subsistence fishers, they are used for international water-sports, and are central to tourism in the area.

- 2.15. According to a statement issued by the DWS, in December 2018, it had "been seized with the matters of malfunctioning Waste Water Treatment Works within the [City of Tshwane] Metro <u>since 2010</u>. In particular the following Waste Water Treatment Works are identified: Rooiwal Waste Water Treatment Works, Klipgat Waste Water Treatment Works, Baviaanspoort Waste Water Treatment Works and Sunderland Ridge Waste Water Treatment Works."³⁰
- 2.16. Since 2016, the DWS issued the City of Tshwane with several pre-directives, directives and notices, in terms of section 19(3) and 20 of the National Water Act 36 of 1998, in respect of the pollution of the freshwater resources by the four WWTW, listed in the paragraph above. In a further effort to get the City of Tshwane to comply with the directives issued in terms of the NWA, and interdict the Municipality from further polluting the freshwater sources in its area, the DWS instituted litigation against the City of Tshwane.³¹

Complaints Received by the Commission

- 2.17. The Commission had been receiving complaints relating to the WWTW under the jurisdiction of the City of Tshwane since 2018. The complaints related in particular, to the Rooiwal, Temba and Baviaanspoort WWTW.
- 2.18. In respect of Rooiwal and Temba, the community members of Hammanskraal informed the Commission that they had been receiving dirty and foul smelling water and alleged that the water had been contaminated and polluted due to the malfunctioning of the WWTWs of the City of Tshwane. Between July 2018 and December 2020, the Commission undertook several site visits to the Rooiwal and Temba WWTW and to

³⁰ South African Government, "Water and Sanitation takes Tshwane Metropolitan Municipality to court for pollution of rivers" 21 December 2018. Accessed at: https://www.gov.za/speeches/pollution-rivers-21-dec-2018-0000. Own emphasis.

³¹ Ibid.

hospitals, clinics and schools in the Hammanskraal area to ascertain whether there had been reports related to the quality of the water in the area.

- 2.19. In 2018, the Commission observed that the freshwater sources were being polluted, causing serious health risks. The Commission found that urgent work was needed at the Rooiwal WWTW, as parts of it were non-functional, and it was unable to handle the recurring overflow of sludge from the lagoons (maturation ponds), and as a result poor quality, polluted effluent was being discharged into the Apies River. The Temba WTW was being upgraded by the City of Tshwane, in 2018.
- 2.20. Following the 2018 site visits in Hammanskraal, the Commission commenced with a number of meetings to try to resolve the water crisis in Hammanskraal. The Commission hosted several meetings with the City of Tshwane, DHSWS and DEFF to try to map out an action plan, and to try to resolve the water crisis in Hammanskraal. The Commission also held follow-up meetings with the residents of Hammanskraal.
- 2.21. In early 2019, it was agreed that DWS would undertake compliance monitoring of the Rooiwal WWTW, while the Magalies Water Board was appointed to conduct water analysis of the Temba WTW supply areas. At different times in 2019, challenges with the water quality were noted for none compliance with the South African National Drinking Water Standard, SANS 241: 2015.³² The Commission noted that, although some improvements had been made to the Rooiwal WWTW, a lot more needed to be done.
- 2.22. On 30 August 2019, a joint inspection of the Rooiwal WWTW was carried out by the Portfolio Committee on Human Settlements, Water and Sanitation, the DWS, the City of Tshwane, and the Commission. The Portfolio Committee found that Rooiwal WWTW did not have the capacity to function optimally, and the water discharged into the Apies River had not been chlorinated, which posed a risk of contamination of water flowing into the Leeukraal Dam. The Portfolio Committee on Human Settlements, Water and Sanitation was of the view that the National and Provincial governments must work together to resolve the contamination, pollution and the discharge of sludge from the WWTW in the City of Tshwane.

³² Accessed at:

- 2.23. In November 2020, the Commission visited the Rooiwal WWTW and Temba WTW to ascertain the progress on the repairs. On 26 February 2021, the City of Tshwane advised the Commission that a contractor had been appointed at Rooiwal WWTW, and that phase 1 on the upgrade and refurbishment of the Rooiwal WWTW had commenced. The refurbishment and upgrade entailed an upgrade to the following: the inlet works at the Rooiwal North Plant, biological reactors mixing and aeration system, the anaerobic digester on the Rooiwal East Plant, the top sludge dewatering facility, and the Rooiwal North Plant flow balancing tank control systems.
- 2.24. They further advised that they needed approximately R9.2 billion to upgrade all the four waste water treatment plants, namely, the Rooiwal Waste Water Treatment Works, the Klipgat Waste Water Treatment Works, the Baviaanspoort Waste Water Treatment Works, and the Sunderland Ridge Waste Water Treatment Works.
- 2.25. In respect of Baviaanspoort, the Commission was informed by complainants that, due to the malfunctioning of the Baviaanspoort WWTW, raw sewage was being discharged into the Pienaars River, and from the Pienaars River, into the Roodeplaat Dam. According to the complainants, the raw sewerage was polluting the drinking water being supplied to the communities and negatively impacting on the animals and aquatic life around Tshwane and surrounding areas.
- 2.26. Following renewed complaints about the Baviaanspoort WWTW, and ongoing complaints received by the people living in Hammanskraal, the Commission took a decision to hold a one-day inquiry into all WWTWs in the City of Tshwane.

3. The One-Day Inquiry

- 3.1. The Commission decided, in accordance with its legislative mandate, to investigate all WWTWs under the jurisdiction of the City of Tshwane which were affecting the four rivers, and the Roodeplaat Dam. To this end, the Commission invited members of the Municipality, the DWS and the DEFF to a one-day inquiry, held on 26 February 2021, at the Roodeplaat Dam.
- 3.2. On 12 August 2021, an interim report of the inquiry was distributed to the organs of state/respondents, to which the interim report referred to, either in terms of findings, recommendations and/or directives, for response and/or comment. No comments were received.
- 3.3. As set out in the Inquiry invitation letter, the purpose of the Inquiry was to investigate:
 - 3.3.1. Whether there were violations of the rights contained in the Bill of Rights, specifically, sections 10, 24 and 27 of the Constitution as they related to:
 - 3.3.1.1. persons consuming water drawn from the Pienaars River and water treatment plants in the City of Tshwane; and
 - 3.3.1.2. persons conducting business and residing along the Pienaars River and three other rivers in the City of Tshwane;
 - 3.3.2. Whether the City of Tshwane has treated, with urgency, the complaints about the continuous flow of raw or partially untreated sewage in the Apies River, Tolwane River, Pienaars River and Hennops River and the Roodeplaat Dam;
 - 3.3.3. The impact of raw or partially treated sewage discharged through the four treatment plants into the following rivers, namely, the Apies, Tolwane, Pienaars and Hennops Rivers, and their respective dams, on their ecosystems, water supply to communities and animals, and the use of the rivers and dams for sports and tourism;
 - 3.3.4. Whether the City of Tshwane and the DWS have engaged meaningfully, and in good faith, with the affected communities with a view to finding pragmatic solutions to their complaints related to river pollution, provision of clean and drinkable water, in accordance with the Constitution and the Municipal Systems Act;

- 3.3.5. Whether the DWS has effectively performed its monitoring function and/or intervention by ensuring that the City of Tshwane complies with the prescribed standards and regulations;
- 3.3.6. Whether the DWS and the DEFF has taken any legal steps, issued any notices, directives and convened meetings with the City of Tshwane with a view to rectify or ameliorate the state of affairs;
- 3.3.7. Whether the City of Tshwane has complied with any compliance notices and directives issued by the DWS;
- 3.3.8. Whether there has been structured, consistent engagement between the three spheres of government regarding the deteriorating water quality in some parts of the City of Tshwane;
- 3.3.9. The adequacy of the budget allocated by the City of Tshwane to ensure maintenance of wastewater treatment works in Tshwane.

4. The Mandate and Powers of the Commission

The Constitution

- 4.1. The Commission is an independent institution established in terms of Section 181 of the Constitution to strengthen constitutional democracy. Section 184(1) provides that the Commission must:
 - "(a) promote respect for human rights and a culture of human rights;
 - (b) promote the protection, development and attainment of human rights; and
 - (c) monitor and assess the observance of human rights in the Republic."
- 4.2. Section 184(2) of the Constitution empowers the Commission to monitor, investigate, research, educate, lobby, advice and report, on matters where human rights may have been violated.

The SAHRC Act

- 4.3. In addition to the broad powers and functions conferred on the Commission by the Constitution, the Commission's power and obligations, are fleshed out, more specifically, in the South African Human Rights Commission Act 40 of 2013 ('SAHRC Act'). The sections set out below make up the empowering provisions which have enabled the Commission to independently investigate the Sewage Problem, establish the Inquiry as a form investigation, engage organs of state and civil society, and which empower the Commission to make the recommendations as set out at the end of this Report.
- 4.4. In terms of section 13 of the SAHRC Act, the Commission is empowered to:
 - "(i) make recommendations to organs of state at all levels of government where it considers such action advisable for the adoption of progressive measures for the promotion of human rights within the framework of the Constitution and the law, as well as appropriate measures for the further observance of such rights;
 - (ii) undertake such studies for reporting on or relating to human rights as it considers advisable in the performance of its functions or to further the objects of the Commission; and
 - (iii) request any organ of state to supply it with information on any legislative or executive measures adopted by it relating to human rights". 33

In terms of the SAHRC Act, the Commission:

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³³ Section 13(1)(a).

- "(iii) must liaise and interact with any organisation which actively promotes respect for human rights and other sectors of civil society to further the objects of the Commission;
- (iv) may consider such recommendations, suggestions and requests concerning the promotion of respect for human rights as it may receive from any source;
- (v) must review government policies relating to human rights and may make recommendations;
- (vi) must monitor the implementation of, and compliance with, international and regional conventions and treaties, international and regional covenants and international and regional charters relating to the objects of the Commission".34

The Commission is also competent—

- "(a) to investigate on its own initiative or on receipt of a complaint, any alleged violation of human rights, and if, after due investigation, the Commission is of the opinion that there is substance in any complaint made to it, it must, in so far as it is able to do so, assist the complainant and other persons adversely affected thereby, to secure redress, and where it is necessary for that purpose to do so, it may arrange for or provide financial assistance to enable proceedings to be taken to a competent court for the necessary relief or may direct a complainant to an appropriate forum; and
- (b) to bring proceedings in a competent court or tribunal in its own name, or on behalf of a person or a group or class of persons."³⁵

In addition the SAHRC Act requires that "[a]II organs of state must afford the Commission such assistance as may be reasonably required for the effective exercising of its powers and performance of its functions." ³⁶

- 4.5. In order to give effect to the powers and obligations set out in section 13 of the SAHRC Act, the Commission may
 - "(a) conduct or cause to be conducted any investigation that is necessary for that purpose;
 - (b) through a commissioner, or any member of staff duly authorised by a commissioner, require from any person such particulars and information as may be reasonably necessary in connection with any investigation;
 - (c) require any person by notice in writing under the hand of a commissioner ... in relation to an investigation, to appear before it at a time and place specified in such notice and to produce to

³⁴ Section 13(1)(b).

³⁵ Section 13(3).

³⁶ Section 13(4).

it all articles or documents in the possession or custody or under the control of any such person and which may be necessary in connection with that investigation: Provided that such notice must contain the reasons why such person's presence is needed and why any such article or document should be produced".³⁷

- 4.6. The Commission may also, in order to give effect to its powers and obligations set out in section 13,
 - "(1) ... search any person or enter and search any premises on or in which anything connected with an investigation is or is suspected to be.
 - (2) The entry and search of any person or premises under this section must be conducted with strict regard to decency and order, including the protection of a person's right to—
 - (a) respect for and protection of his or her dignity;
 - (b) Freedom and security; and
 - (c) his or her personal privacy."38
- 4.7. As regards reports by the Commission and any findings therein, in terms of the SAHRC Act:
 - "(3) The Commission may ... in the manner it deems fit, in writing, make known to any person, the head of the organisation or institution, or the executive authority of any national or provincial department, any finding, point of view or recommendation in respect of a matter investigated by it.
 - (4) If the Commission makes any finding or recommendation in respect of a matter investigated by it known to the head of the organisation or institution or the executive authority of any national or provincial department concerned, the head of the organisation or institution or the executive authority of any national or provincial department concerned must within 60 days after becoming aware of such finding or recommendation respond in writing to the Commission, indicating whether his or her organisation, institution or department intends taking any steps to give effect to such finding or recommendation, if any such steps are required."³⁹

³⁷ Section 15(1)(a)-(c).

³⁸ Section 16(1)-(2).

³⁹ Section 18(3)-(4).

4.8.	In addition, the findings of an investigation by the Commission must, when it deems it fit but as soon as possible, be made available to any person implicated thereby. ⁴⁰
⁴⁰ Section 18(5).	

5. Submissions Made During the Inquiry

- 5.1. As stated above, the Commission invited the complainants and members of the City of Tshwane, the DWS and the DEFF to the Inquiry.
- 5.2. Submissions were made during and subsequent to the Inquiry.
- 5.3. The Commission notes, with grave concern, that the Executive Mayor and the Acting Municipal Manager of the City of Tshwane were not in attendance at the Inquiry, despite being invited. The Commission was, thus, unable to receive responses to pertinent questions that required the response of the Executive Mayor and/or Municipal Manager.

Department of Environment, Forestry and Fisheries

- 5.4. Submissions from the DEFF appeared to focus on the overlapping mandates between it, DWS and the Department of Mineral Resources and Energy, in respect of the environment, and the difficulty compartmentalising the protection and management of environmental issues.
- 5.5. As with its submissions in terms of the Vaal Report and the sewage pollution in the Emfuleni Local Municipality, DEFF informed the Commission that, it is necessary to look at all pieces of legislation dealing with the pollution of the environment, and, that the provisions of a general statute, the National Environment Management Act 107 of 1998 ('NEMA'), had to yield to that of more specific legislation such as the NWA, which speaks to pollution of water resources specifically.
- 5.6. DEFF also made submissions with regard to the co-operative governance duties, set out in Chapter 3 of the Constitution, and the obligation to respect institutional integrity and collaborate and support one another. DEFF has, therefore, taken the initiative to include in its Standing Operational Protocol with the South African Police Service (SAPS), contraventions of the NWA, as DEFF recognised that DWS is still in the process of developing its own criminal investigation capacity for "environmental crimes", including environmental pollution, criminal activities relating to damaging of natural resources and habitats and the illegal disposal, handling and management of waste (including hazardous waste).
- 5.7. DEFF concluded, in response to the questions in the Inquiry relating to steps it has taken against the City of Tshwane, that it had not taken any legal steps, issued any notices, directives or convened or attended any meetings in respect of the City of Tshwane.

Department of Water and Sanitation

- 5.8. The DWS explained to the Commission, in detail, how it has over the past few years, tried to deal with issues of constitutional and other legislative compliance in respect of the four wastewater treatment works in the City of Tshwane that it viewed as being in a critical state. The four treatment works and their corresponding affected freshwater sources are:
 - 5.8.1. The Rooiwal WWTW and the Apies River;
 - 5.8.2. The Klipgat WWTW and the Tolwane River;
 - 5.8.3. The Baviaanspoort WWTW and the Pienaars River; and
 - 5.8.4. The Sunderland Ridge WWTW and the Hennops River.
- 5.9. On 8 March 2011, DHSWS issued a directive, in terms of section 19 of the NWA, to the City of Tshwane. The directive stated:
 - "...in my capacity as a Regional Head: North West, and duly authorised in terms of the powers delegated to me by the Minister of Water Affairs, hereby direct City of Tshwane...to stop polluting the Apies River with partially treated effluent emanating from the Rooiwal WWTW within (24) hours from receipt thereof and do the following:

...

4. Ensure compliance with all the requirements of the National Environmental Management Act 107 of 1998 and its regulations.

I would also like to bring to your attention that contravention of this Directive constitutes an offence in terms of Section 151 of the NWA.

Should City of Tshwane fail to comply with this Directive or comply inadequately with it, the Department may take any measures it considers necessary to remedy the situation, including but not limited to:

- 1. Criminal proceedings against any of the parties in terms of Section 151 of the NWA, and;
- 2. Taking the measures itself and recovering the costs thereof from City of Tshwane Rooiwal WWTW in terms of Section 19(4) of the NWA;
- 3. Apply to the competent court for appropriate relief;

..

Please note that even though the City of Tshwane may appeal against this Directive to the Water Tribunal in terms of section 148(1) of the NWA, such appeal does not suspend the Directive pending the outcome of the Tribunal regarding the Directive.

Non-compliance to the conditions of this Directive should immediately be reported to the Regional Director: Gauteng in writing. Such a report

should include measures to be instituted towards correcting non-compliance."

- 5.10. Following the issuance of the directive, quoted above, various site meetings and inspections have been held and conducted, but no improvement was evident. Most actions agreed upon between DWS and the City of Tshwane were not fully implemented or not implemented at all.
- 5.11. In summary, the DWS observed during inspections of Rooiwal WWTW the following areas of non-compliance:
 - 5.11.1. Poor sludge management;
 - 5.11.2. Partially treated, substandard, effluent discharged into Apies River;
 - 5.11.3. Significant decline in the operations and maintenance of the plant.
- 5.12. In a letter dated 13 October 2015, DWS informed the City of Tshwane that failure to provide a comprehensive plan to eradicate the pollution will result in the DWS escalating the matter to the Minister of Cooperative Governance and Traditional Affairs (COGTA) and/or instituting criminal charges against the Municipal Manager of the City of Tshwane.
- 5.13. DWS stated that the fact that the City of Tshwane did not implement its planned upgrade of the Rooiwal WWTW is a contributing factor to the problems. The planned upgrades were to have been completed in 2018 or to be in the final stages of completion.
- 5.14. According to DWS, the water pollution challenges were, at the time of holding the Inquiry, at the point where it was affecting the drinking water supply systems at the Temba WTW which is downstream of the Rooiwal WWTW. DWS informed the Commission that members of the affected communities, including farmers and residents of Hammanskraal have been contacting DWS to voice their concerns.
- 5.15. According to DWS, irrigation of the surrounding land with the sludge may have a very negative impact on the groundwater resources and users of the resources. During the analysis of sample results taken on 30 June 2020, it was found that final discharge effluent in Rooiwal WWTW exceeds the discharge permitted limits.
- 5.16. In respect of Baviaanspoort WWTW, in February 2018 the DWS sent the City of Tshwane a directive, in terms of section 19 and 20 of the NWA. The directive read:

"The Department received a complaint by some members of public regarding the raw sewage that is being discharged into Pienaars River as a result of effluent discharged by the Baviaanspoort Waste Water Treatment Works, whilst overflowing over into Roodeplaat Dam. A site inspection was conducted by DHSWS officials on 06 October 2016, and follow-up inspection was held on 25 November 2016. Based on the explanation by the plant manager and observation made on site, theft of cables is a major contributor to the ineffective operation of the plant. Mechanical screens 1 & 2 were non-functional, and PSTs 1 and 2 were also not working.

Subsequent to the site visit, Pre-directive, dated 06 December 2016, was issued to City of Tshwane Metropolitan Municipality. The City responded by submitting Baviaanspoort WWTWs Action plan dated 12 December 2016.

Based on the action plan submitted, DHSWS was made to believe that the situation is under control since electricity was restored, and the plant will be monitored and assisted to return to its normal operating conditions, although on the 25 November 2016 it was recorded that the plant received 69 474 m3 per day and this is 29 474 m3 more than the capacity of Module 3 and 4 which is 40 000 m3 per day.

Due to changes of government administration, the Department's Provincial Operations: North West, had a meeting with new MMC of City of Tshwane on 07 April 2017 for intervention, and to discuss pollution problems coming from the City WWTWs. Furthermore, a follow-up meeting was held with the Executive Director for Water and Sanitation of City of Tshwane on 15 May 2017 to assess the progress in addressing the issue in question. During the meeting, the City Executive Manager mentioned that there was a plan to upgrade the plant, and consultant was to be appointed to help with the supervision and operation of plant.

The Department took cognisance of the project plan to place back module 2 into operation which would add an additional 16 Ml/d treatment capacity and eliminate the current overloading of the WWTWs as this would have a positive effect on the effluent quality. The tertiary polishing of the effluent with the DAF back in operation would improve effluent quality. However, DHSWS' concern was that Module 3 and 4 were not operating well.

Further complaints were received on 7 October 2017 regarding the impact of the deteriorating Roodeplaat water quality on the final water produced by Magalies Water Plant. Other complaints were from Roodeplaat Dam residents in an email dated 07 November 2017 regarding the raw sewage spillage into Roodeplaat dam. Upon receipt of the complaints, the Department's Provincial Office: North West, conducted an investigation on 19 January 2018 to investigate the above complaints, and to assess the progress of the implementation of maintenance action plan, and to assess the operational status of the plant.

. . .

DHSWS now started to realize that the situation was not under control, since there was no improvement in both primary and secondary treatment at the works. The City had been given enough time to deal with the challenges associated with raw sewage coming from Baviaanspoort

WWTWs. There was no sense of urgency in addressing this problem as some of the tasks on the action plan were lagging behind, and raw sewage was still being discharged into Pienaars River. Furthermore, Col is reluctant to make provision for a lasting solution to ensure that the current Module 3 and 4 are operating well, as most of challenges observed during the site visit of 25 November 2016 are still the same.

I, Dr Tseliso Ntili, in my capacity as Acting Provincial Head of the Department of Water and Sanitation (DHSWS)'s Provincial Operations: North West, and duly authorised in terms of the powers delegated to me by the minister of Water and Sanitation, hereby give you Mr. Moeketsi Mosola in your capacity as the City Manager of the City of Tshwane Metropolitan Municipality and the owner of the Baviaanspoort Wastewater Treatment Works a directive in terms of section 19(3) and 20 of the [NWA].

. . .

I have reasonable grounds for believing that you have contravened ... [section 19 and 20] of the NWA. The Department of Water and Sanitation conducted an investigation and follow-up inspection on 19 January 2018 at Baviaanspoort Wastewater Treatment Works ... The Directive directs you to:

- Implement pre-directive dated 06 December 2016 issued to the City of Tshwane Metropolitan Municipality within 7 days of the date of this Directive.
 - (a) cease, modify or control any act or process causing the pollution;
 - (b) comply with any prescribed waste standard or management practice;
 - (c) contain or prevent the movement of pollutants;
 - (d) eliminate any source of the pollution;
 - (e) remedy the effects of the pollution; and
 - (f) remedy the effects of any disturbance to the bed and banks of a watercourse.
- Submit the revised progress report regarding the implementation of the Action Plan submitted, indicate those activities lagging behind as

per the submitted Action Plan and provide project schedule with regard to the complete refurbishment of the works within 7 days of the date of this Directive.

• Ensure that staff components assigned for the operations and maintenance of the works meets the requirements of the regulation as per the classification of the works.

..

Further note that continuing with activities which are in contravention of the NWA and failure to comply with this directive may result in the Department carrying out any works and taking any necessary action to rectify the contravention in terms of section 19(4) of the NWA, and recover all reasonable costs incurred in doing so from you, or it may apply to the relevant court or National Treasury for appropriate relief.

Your attention is also drawn to the fact that polluting water resources constitutes an offence in terms of section 151(1) of the NWA. Any person who contravenes any provision of subsection (1) of section 151 of the NWA is guilty of an offence and liable, on first conviction, to a fine or imprisonment for period not exceeding five years, or both a fine and such imprisonment and in the case of second conviction or subsequent conviction, to a fine or imprisonment for a period not exceeding ten years or to both a fine and such imprisonment in terms of section 151 (2).

"

- 5.17. It appears from DWS's submission that the City of Tshwane had failed to comply with its directives, issued in terms of the NWA, and the DWS has had to institute court action against the City of Tshwane.
- 5.18. The first case was instituted by DWS in the Gauteng Division of the High Court, in 2018, under case number 8904/2018. This was the case against the City of Tshwane regarding the Rooiwal, Klipgat, Baviaanspoort and Sunderland Ridge WWTW that were in a critical state affecting drinking water quality and affecting agricultural production activities including livestock.
- 5.19. Following the institution of litigation, the City of Tshwane engaged with the DWS in terms of steps to be taken to repair the WWTWs, and in trying to comply with the co-operative governance obligations set out in the Constitution, the DWS withdrew the 2018 court action. Pollution of the freshwater sources by WWTWs in the City of Tshwane continued and in 2019, the DWS instituted court action against the City of Tshwane again, this time under case number 16076/2019. The 2019 matter was set down, in the Gauteng Division of the High Court for 8 March 2021 and then postponed to 26 April 2021.
- 5.20. DWS informed the Commission that it had decided to approach the courts once again as no other measures seem to have succeeded in persuading the City of Tshwane to comply with its legal obligations with a view to improve the disastrous situation with regards to the WWTW.
- 5.21. DWS stated at the Inquiry that the Pienaars River and consequently the Roodeplaat Dam, which is a major source of drinking water for Northern Gauteng and parts of the North West and Limpopo provinces, had become a dumping area of waste sludge. DWS added that a June 2020 water sample analysis undertaken by Magalies Water Board found that the faecal coliforms being discharged into the Pienaars River exceeded

- 380 000 colony forming units (**cfu**)/100ml, far exceeding the permitted limit of 10 cfu/100ml, and *E. coli* levels were 280 000 cfu/100ml when the level should be 0.
- 5.22. According to DWS, there is poor planning by the City of Tshwane because there is no correlation between the rate of development from Mamelodi and Pretoria East with the design capacity of the Baviaanspoort WWTW. The approval of the development and service delivery is being achieved at the expense of precious water resources, of which there is no substitute, while discharge of only partially treated effluent takes place on a daily basis.
- 5.23. The DWS ascribes the deterioration to:
 - 5.23.1. Delays in upgrading the wastewater treatment works as part of implementation of the action plan submitted;
 - 5.23.2. Delays in refurbishment of non-operational modules;
 - 5.23.3. Theft and vandalism of infrastructure of the WWTW components; and
 - 5.23.4. Lack of operation maintenance of the City's WWTW.
- 5.24. DWS informed the Commission that it was using all enforcement measures at its disposal to compel the City of Tshwane to comply with the regulatory requirements. DWS understands that its duty is to ensure that the nation's water resources are protected, smartly used, developed, conserved, managed and controlled in ways which take into account, amongst other factors:
 - 5.24.1. Protecting aquatic and associated ecosystems and their biological diversity; and;
 - 5.24.2. Reducing and preventing pollution and degradation of water resources.
- 5.25. The only long term intervention at the City of Tshwane's disposal, according to DWS, is to construct an additional treatment works of reasonable capacity, which will alleviate the problem. This is, provided that sewer-line assessment to prevent stormwater ingress in the sewer line is implemented.

The City of Tshwane Metropolitan Municipality

5.26. The City of Tshwane acknowledged that the Sunderland Ridge, Baviaanspoort, Rooiwal and Klipgat WWTW discharge untreated and partially treated, substandard effluent into the Hennops, Piernaars, Apies and Tolwane Rivers, respectively. The Municipality noted that the effluent quality from these WWTW has been non-compliant for a period of time due to, according to the City of Tshwane, maintenance and capacity constraints. This impacted negatively on the receiving water bodies which serve as sources for downstream users.

- 5.27. In response to the Commission's invitation to the Inquiry the former member of the mayoral committee for Utility Services, Abel Tau admitted that the City of Tshwane is partly to blame for the pollution due to the failure to upgrade the local WWTW. He wrote that "[i]t's really unfortunate and sad. I would go as far as to say that I am ashamed that we got to this point but I also take full responsibility"."⁴¹
- 5.28. In late 2017, the Head of Department (**HOD**) for the City of Tshwane's Environment and Agriculture Management ('**Agriculture**') notified the City of Tshwane's Head of the Utility Services Department that in terms of the City's Environment Authorisation Exemption Permit 16/2/7/A230/D7/X3, in respect of the Baviaanspoort ('**Baviaanspoort EA**') WWTW that:
 - "a. The minimum requirements of the EA were not being adhered to.
 - b. There was insufficient equipment and machinery for daily operations.
 - c. The WWTW was on by-pass at regular intervals due to cable theft.
 - d. The flow was above the corrected design capacity.
 - e. The water quality variables had not been monitored due to an expired contract.
 - f. The run-off & ground water variables had not been monitored due to an expired contract.
 - g. Groundwater pollution was occurring due to sludge irrigation practices.
 - h. The bulk waste container for grit was full causing a health nuisance, odour and flies.
 - i. There was sludge overflow from the sump causing groundwater pollution.
 - j. Sludge was flowing from the instant lawn area towards a public road.
 - k. The effluent discharged into the Pienaars River did not comply with the authorized limits.
 - I. Untreated sewage flow was witnessed from the secondary sedimentation tank down the road into the storm water system.

⁴¹ https://www.jacarandafm.com/news/news/watch-inquiry-launched-polluted-roodeplaat-dam/

- m. There was sludge overflow from an onsite sump.
- n. There were visible sludge and related solids as well as solids observed in the Pienaars River downstream from the WWTW."
- 5.29. The HOD for Agriculture added that based on the findings, listed in the paragraph above, that there were reasonable grounds to believe that the non-compliance with the Baviaanspoort EA contravened sections 19 and triggered section 20 of the NWA, respectively. The letter from the HOD for Agriculture then stated:

"You are hereby advised to, in terms of the City's obligations in terms of Section 152(1)(d) of the Constitution of the Republic of South Africa, 1996 which specifically states that the objects of local government are to promote a safe and healthy environment, and Section 24 of the Bill of Rights in the Constitution of the Republic of South Africa, 1996 (Act 108 of 1996):

- a. Prevent, as far as reasonably possible, the release of insufficiently treated sewage into the Pienaars River.
- b. Work towards compliance with the onsite EA.
- c. Plan for urgent remediation of the effects of pollution both onsite as well as the receiving environment (Pienaars River).
- d. Ensure implementation of the recommendations by the Department in the Environmental Compliance Report dated 25 August 2017.

Further note that continuing with activities which are in contravention of the NWA constitutes an offence in terms of section 151(1) of the NWA and may result in a fine or imprisonment for period not exceeding five years, or both a fine and such imprisonment and in the case of second conviction or subsequent conviction, to a fine or imprisonment for a period not exceeding ten years or to both a fine and such imprisonment.

Please also take cognizance that, although section 40 of the Constitution makes provision for the principle of co-operative governance to facilitate efficient governance, section 48 of NEMA preventing criminal actions against government institutions has been repealed. This implies that criminal action can be instituted between different tiers of government. The same applies for government officials contravening environmental legislation in their official capacity. To prevent litigation by National Water and Sanitation it is hence important that the CoT complies with all environmental legislation.

In terms of the above you are therefore advised to work towards environmental compliance at the Baviaanspoort WWTW."

5.30. According to the City of Tshwane, it has been engaging openly and transparently with DWS and representatives of the affected community groups.

6. Domestic Legal Framework

The Constitution

- 6.1. South Africa is a democratic state founded on, amongst others, the values of human dignity, the achievement of equality and the advancement of human rights and freedoms, and supremacy of the Constitution and the rule of law.⁴²
- 6.2. The Bill of Rights guarantees everyone the right "to an environment that is not harmful to their health or well-being ... [and] to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that ... prevent pollution and ecological degradation".⁴³
- 6.3. Obligations imposed by the Constitution "must be fulfilled" and any conduct inconsistent with the Constitution is invalid.⁴⁴
- 6.4. The obligations for national, provincial and local government, more generally, include the obligations (within its jurisdiction) to:
 - "(b) secure the well-being of the people of the Republic;
 - (c) provide effective, transparent, accountable and coherent government for the Republic as a whole;
 - (d) be loyal to the Constitution, the Republic and its people". 45
- 6.5. In addition to setting out these obligations, the Constitution requires Members of Cabinet ('Ministers') (National government) and Members of the Executive Council ('MECs') (provincial government), through the taking of an oath or making of an affirmation, to confirm their loyalty to the Constitution and the people of South Africa and to confirm their undertaking to "perform the functions of [their respective] offices conscientiously and the best of their abilit[ies]."46
- 6.6. The Constitutional provisions apply with equal force to local government. In respect of local government, the Constitution requires that a municipality "strive, within its financial

⁴² Section 1(a) and (c).

⁴³ Section 24 of the Constitution.

⁴⁴ Section 2.

⁴⁵ Section 41(1).

⁴⁶ Schedule 2, section 3 and 5, respectively.

and administrative capacity to achieve its objectives set out in the Constitution.⁴⁷ These are objectives are:

- "(a) to provide democratic and accountable government for local communities:
- (b) to ensure the provision of services to communities in a sustainable manner;
- (c) to promote social and economic development;
- (d) to promote a safe and healthy environment; and
- (e) to encourage the involvement of communities and community organisations in the matters of local government."48
- 6.7. In addition to the above, section 195 prescribes basic values and principles applicable to all tiers of public bodies and states:
 - "(1) Public administration must be governed by the democratic values and principles enshrined in the Constitution, including the following principles:
 - (a) ...
 - (b) Efficient, economic and effective use of resources must be promoted.
 - (c) Public administration must be development-oriented.
 - (d) Services must be provided impartially, fairly, equitably and without bias.
 - (e) People's needs must be responded to, and the public must be encouraged to participate in policy-making.
 - (f) Public administration must be accountable.
 - (g) Transparency must be fostered by providing the public with timely, accessible and accurate information.
 - (h) Good human-resource management and careerdevelopment practices, to maximise human potential, must be cultivated.
 - (i)"⁴⁹

⁴⁷ Section 152(2).

⁴⁸ Section 151(1).

⁴⁹ Section 195(1).

6.8. The Public Service Act ⁵⁰ and the Public Service Regulations ⁵¹ provide the statutory regulatory frameworks for the administration, organisation and conditions of service for the public service of South Africa⁵².

- "(a) be faithful to the Republic and honour and abide by the Constitution and all other law in the execution of his or her official duties;
- (b) put the public interest first in the execution of his or her official duties;
- (c) loyally execute the lawful policies of the Government of the day in the performance of his or her official duties;
- (d) abide by and strive to be familiar with all legislation and other lawful instructions applicable to his or her conduct and official duties; and
- (e) cooperate with public institutions established under the Constitution and legislation in promoting the interest of the public

. . .

- (a) promote the unity and wellbeing of the South African nation in performing his or her official duties:
- (b) serve the public in an unbiased and impartial manner in order to create confidence in the public service;
- (c) be polite, helpful and reasonably accessible in his or her dealings with the public;
- (d) have regard for the circumstances and concerns of the public in performing his or her official duties and in the making of decisions affecting them;
- (e) be committed through timely service to the development and upliftment of all South Africans;
- (f) not abuse his or her position in the public service to promote or prejudice the interest of any political party or interest group;
- (g) respect and protect the dignity of every person and his or her rights as contained in the Constitution; and
- (h) recognise the public's right of access to information, excluding information that is specifically protected by law

- - -

(b) not engage in any transaction or action that is in conflict with or infringes on the execution of his or her official duties;

. . .

(e) immediately report to the relevant authorities, fraud, corruption, nepotism, maladministration and any other act which constitutes a contravention of any law (including, but not limited to, a criminal offence) or which is prejudicial to the interest of the public, which comes to his or her attention during the course of his or her employment in the public service".

⁵² In the performance of their official duties, employees in the public service must:

"(a) strive to achieve the objectives of his or her institution cost effectively and in the interest of the public;

⁵⁰ Act 103 of 1994.

⁵¹ Published under Government Notice R877 in Government Gazette 40167of 29 July 2016

⁵² In terms of these statutes: In terms of the PSA and the PSA Regs and Public Service Charter⁵², an employee in the public service is obligated to:

- 6.9. Where a head of department or other employee fails to comply with the requirements of the PSA and PSA Regulations provision, is made for the executive authority (Premier) in the case of a province, or head of department, respectively, to take disciplinary action against the head or employee.¹ The laws are also quite clear that employees in public service may have their employment terminated on account of "incapacity due to poor work performance" or "misconduct".¹
- 6.10. In respect of co-operative governance, section 41 of the Constitution requires all spheres of government (national, provincial and local) to:
 - "(1) All spheres of government and all organs of state within each sphere must -
 - (a) ...
 - (b) secure the well-being of the people of the Republic;
 - (c) provide effective, transparent, accountable and coherent government for the Republic as a whole;
 - (d) be loyal to the Constitution, the Republic and its people;
 - (e) respect the constitutional status, institutions, powers and functions of government in the other spheres;
 - (f) not assume any power or function except those conferred on them in terms of the Constitution;
 - (g) exercise their powers and perform their functions in a manner that does not encroach on the geographical, functional or institutional integrity of government in another sphere; and
 - (h) co-operate with one another in mutual trust and good faith by -

(h) be committed to the optimal development, motivation and utilisation of employees reporting to him or her and the promotion of sound labour and interpersonal relations;

⁽b) be creative in thought and in the execution of his or her official duties, seek innovative ways to solve problems and enhance effectiveness and efficiency within the context of the law;

⁽c) be punctual in the execution of his or her official duties;

⁽d) execute his or her official duties in a professional and competent manner;

⁽e) cooperate fully with other employees to advance the interest of the public;

⁽f) be honest and accountable in dealing with public funds and use the State's property and other resources effectively, efficiently, and only for authorised official purposes;

⁽i) avail himself or herself for training and development;

⁽j) promote sound, efficient, effective, transparent and accountable administration; ...

⁽q) shall immediately report any noncompliance of the Act to the head of department."

- (i) fostering friendly relations;
- (ii) assisting and supporting one another;
- (iii) informing one another of, and consulting one another on, matters of common interest;
- (iv) co-ordinating their actions and legislation with one another;
- (v) adhering to agreed procedures; and
- (vi) avoiding legal proceedings against one another."53
- 6.11. Section 41(3) requires government departments in intergovernmental disputes to "make every reasonable effort to settle the dispute by means of mechanisms and procedures provided for that purpose, and must exhaust all other remedies before it approaches a court to resolve the dispute."

The Municipal Systems Act

- 6.12. Section 4 of the Municipal Systems Act 32 of 2000 ('the MSA') states that a municipal council, within the municipality's financial and administrative capacity and having regard to practical considerations, has the duty to—
 - "(a)exercise the municipality's executive and legislative authority and use the resources of the municipality in the best interests of the local community;
 - (b) provide, without favour or prejudice, democratic and accountable government;
 - (c) ...
 - (d) strive to ensure that municipal services are provided to the local community in a financially and environmentally sustainable manner;
 - (e) consult the local community about—
 - (i) the level, quality, range and impact of municipal services provided by the municipality, either directly or through another service provider; and
 - (ii) the available options for service delivery;
 - (f) give members of the local community equitable access to the municipal services to which they are entitled;
 - (g) ...
 - (h) ...
 - (i) promote a safe and healthy environment in the municipality; and

⁵³ Section 41(1).

- (j) contribute, together with other organs of state, to the progressive realisation of the fundamental rights contained in sections 24, 25, 26, 27 and 29 of the Constitution."
- 6.13. In addition, section 4(3), a municipality must "in the exercise of its executive and legislative authority respect the rights of citizens and those of other persons protected by the Bill of Rights."
- 6.14. The general duties of a municipality are set out in section 73 of the MSA, and they include the duty to give effect to the Constitution and to:
 - "(a) give priority to the basic needs of the local community;
 - (b) promote the development of the local community; and
 - (c) ensure that all members of the local community have access to at least the minimum level of basic municipal services."⁵⁴
- 6.15. Municipal services must be equitable and accessible; be provided in a manner that is conducive to the prudent, economic, efficient and effective use of available resources; and the improvement of standards of quality over time. Municipal services must be financially sustainable; be environmentally sustainable; and be regularly reviewed with a view to upgrading, extension and improvement.⁵⁵
- 6.16. In terms of section 6, a municipality's administration is governed by section 195 of the Constitution, set out above, and the administration of a municipality must:
 - "(a)be responsive to the needs of the local community;
 - (b) facilitate a culture of public service and accountability amongst staff;
 - (c) take measures to prevent corruption;
 - (d) establish clear relationships, and facilitate cooperation and communication, between it and the local community;
 - (e) give members of the local community full and accurate information about the level and standard of municipal services they are entitled to receive; and
 - (f) inform the local community how the municipality is managed, of the costs involved and the persons in charge."⁵⁶

55 Section 73(2).

⁵⁴ Section 73(1).

⁵⁶ Section 6(2).

- 6.17. A municipality must within its administrative and financial capacity establish and organise its administration in a manner that would enable the municipality to—
 - "(a)be responsive to the needs of the local community;
 - (b) ...
 - (c) be performance orientated and focused on the objects of local government set out in section 152 of the Constitution and its developmental duties as required by section 153 of the Constitution;
 - (d) ensure that its political structures, political office bearers and managers and other staff members align their roles and responsibilities with the priorities and objectives set out in the municipality's integrated development plan;
 - (e) establish clear relationships, and facilitate cooperation, coordination and communication, between—
 - (i) its political structures and political office bearers and its administration:
 - (ii) its political structures, political office bearers and administration and the local community;
 - (f) organise its political structures, political office bearers and administration in a flexible way in order to respond to changing priorities and circumstances;
 - (g) perform its functions—
 - (i) through operationally effective and appropriate administrative units and mechanisms, including departments and other functional or business units; and
 - (ii) when necessary, on a decentralised basis;
 - (h) assign clear responsibilities for the management and coordination of these administrative units and mechanisms;
 - (i) hold the municipal manager accountable for the overall performance of the administration;

...."57

- 6.18. The municipal manager of a municipality is the head of administration of a municipality and is responsible and accountable for, amongst other thing:
 - "(a)the formation and development of an economical, effective, efficient and accountable administration

(c) the implementation of the municipality's integrated development plan, and the monitoring of progress with implementation of the plan;

⁵⁷ Section 51.

(d) the management of the provision of services to the local community in a sustainable and equitable manner;

. . .

(f) the management, effective utilisation and training of staff;

. .

- (i) advising the political structures and political office bearers of the municipality;
- (j) managing communications between the municipality's administration and its political structures and political office bearers;

. . .

- (o) developing and maintaining a system whereby community satisfaction with municipal services is assessed;
- (p) the implementation of national and provincial legislation applicable to the municipality; and
- (q) the performance of any other function that may be assigned by the municipal council.
- (2) As accounting officer of the municipality the municipal manager is responsible and accountable for—
 - (a) all income and expenditure of the municipality;
 - (b) all assets and the discharge of all liabilities of the municipality; and
 - (c) proper and diligent compliance with the Municipal Finance Management Act."
- 6.19. According to the MSA, municipal councillors and all municipal staff members must abide by the Code of Conduct included in the Schedules of the MSA. Failure to comply with the applicable provisions of the Constitution, the MSA and the Code of Conduct is grounds for dismissal or other disciplinary steps.
- 6.20. At the very outset the Constitution, the PSA and the MSA place explicit and clear responsibilities on persons who are appointed to positions within the national, provincial and local government. The responsibilities listed above, and obligations included in a number of related statutes, remain the obligations of such persons and they agree in terms of the Constitution and the laws which bind them to be held to account for their compliance and performance with the law and responsibility of office.

The Water Services Act

6.21. The preamble to the Water Services Act 108 of 1997 ('WSA') confers a clear responsibility on all spheres of government to ensure that water supply services and sanitation services are provided in a manner which is efficient, equitable and

sustainable. The preamble of the WSA confers on national government custodial powers over the water resources of the country.

- 6.22. Section 11(1) of the WSA states that a municipality, as a "water services authority",⁵⁸ has a duty to all consumers⁵⁹ or potential consumers in its area of jurisdiction to "progressively ensure efficient, affordable, economical and sustainable access to water services".
- 6.23. "[W]ater services, as defined in section 1, is made up of "water supply services", which are the abstraction, conveyance, treatment and distribution of potable water, water intended to be converted to potable water or water for commercial use but not water for industrial use, ⁶⁰ and "sanitation services", which are the collection, removal, disposal or purification of human excreta, domestic wastewater, sewage and effluent resulting from the use of water for commercial purposes. ⁶¹
- 6.24. Section 11 (4) states that a municipality may not unreasonably refuse or fail to give access to water services to a consumer or potential consumer in its area of jurisdiction. However, sections 5 and 11(5) of the WSA require that, in an emergency, or where the municipality or "water services institution" cannot meet all of its water service and sanitation obligations, a municipality or a water services institution prioritise the provision of basic water supply and basic sanitation.
- 6.25. "[B]asic water supply" and "basic sanitation" refers to the prescribed minimum standard of water supply services and sanitation services, that "[e]veryone has a right of access

⁵⁸ In terms of section 1 of the NWA, "water services authority" means "any municipality, including a district or rural council as defined in the Local Government Transition Act, 1993 (Act No. 209 of 1993), responsible for ensuring access to water services".

⁵⁹ In terms of section 1 of the NWA, a "consumer" is defined as "any end user who receives water services from a water services institution, including an end user in an informal settlement".

⁶⁰ In terms of section 1 of the NWA, "water supply services" means "the abstraction, conveyance, treatment and distribution of potable water, water intended to be converted to potable water or water for commercial use but not water for industrial use."

⁶¹ In terms of section 1 of the NWA, "sanitation services" means the collection, removal, disposal or purification of human excreta, domestic wastewater, sewage and effluent resulting from the use of water for commercial purposes".

⁶² As per the definition in the NWA, a "water services institution" includes, a "water services authority" (municipalities including the Emfuleni Local Municipality), a "water services provider" (also usually a municipality and entities such as Rand Water who provide water to municipalities) and a "water board" (this also includes Rand Water).

to",63 and that "[e]very "water services institution"64 must take reasonable measures to realise these rights".65

- 6.26. Accordingly, in accordance with the WSA, the City of Tshwane is the local authority through which water is provided as the "water services provider[s]".⁶⁶
- 6.27. In addition to the obligations set out in the WSA, regulation 4 of the Regulations Relating to Compulsory Water Standards and Measures to Conserve Water, ⁶⁷ a water services institution must take steps to ensure that where the water services usually provided by or on behalf of that water services institution are interrupted for a period of more than 24 hours for reasons other than those contemplated in section 4 of the Act, a consumer has access to alternative water services, including sanitation services sufficient to protect health. These measures recognise the need for continued access to both water and sanitation on account of their vital importance to life and health.
- 6.28. It is therefore clear from the WSA and the Water Standards Regulations that the obligation to provide water supply services and sanitation services is that of the City of Tshwane, with support and oversight from the Gauteng Province, particularly Gauteng COGTA and National DHSWS.
- 6.29. In terms of planning and giving effect to this obligation, the WSA requires that every water services authority (i.e. all municipalities who provide water) have a "water services development plan" that sets out the measures a municipality will take or implement to realise these rights. The development plan must form part of a municipalities integrated development plan.
- 6.30. A draft water services plan must include information:
 - "(a) of the physical attributes of the area to which it applies;

⁶⁴ In terms of section 1 of the NWA, "water services institution" means "a water services authority, a water services provider, a water board and a water services committee". See footnote 88 above.

⁶³ Section 3(1).

⁶⁵ Section 3(2).

⁶⁶ In terms of section 1 of the NWA, "water services provider": means "any person who provides water services to consumers or to another water services institution, but does not include a water services intermediary"

⁶⁷ Published under GN R509 of 8 June 2001.

- (b) of the size and distribution of the population within that area;
- (c) of a time frame for the plan, including the implementation programme for the following five years;
- (d) of existing water services;
- (e) of existing industrial water use within the area of jurisdiction of the relevant water services authority;

. . .

- (g) of the number and location of persons within the area who are not being provided with a basic water supply and basic sanitation:
- (h) regarding the future provision of water services ... including—
 - (i) the water services providers which will provide those water services:
 - (ii) the contracts and proposed contracts with those water services providers;
 - (iii) the proposed infrastructure necessary;
 - (iv) the water sources to be used and the quantity of water to be obtained from and discharged into each source;
 - (v) the estimated capital and operating costs of those water services and the financial arrangements for funding those water services, including the tariff structures;
 - (vi) any water services institution that will assist the water services authority; and
 - (vii) the operation, maintenance, repair and replacement of existing and future infrastructure;
 - (i) of the number and location of persons to whom water services cannot be provided within the next five years, setting out—
 - (i) the reasons therefor; and
 - (ii) the time frame within which it may reasonably be expected that a basic water supply and basic sanitation will be provided to those persons; and
- *(j)* of existing and proposed water conservation, recycling and environmental protection measures."⁶⁸
- 6.31. A municipality is required to submit a report on the implementation of its water services development plan, within four months after the end of its financial year, to the Ministers for DHSWS and COGTA, the province and the organisation representing the municipality (in this case the South Africa Local Government Association ('SALGA')).⁶⁹

⁶⁸ Section 14.

⁶⁹ Section 18.

- 6.32. The water services development plan is specifically regulated and detailed in law. It is obviously an important tool or mechanism for the municipality to support fulfilling the obligation to provide water supply and sanitation services. If complied with properly, and updated regularly or as required, the development plan allows a municipality the opportunity (in the form of a legal obligation) to gather information necessary to be able to, within its available resources, provide water supply and sanitation services in compliance its mandatory constitutional duty to provide for the right to access water and sanitation. The development plan and the obligation to report on its implementation also allows for the Ministers of the DWS and COGTA, the Province and other municipalities to monitor the performance of a municipality and to intervene where necessary given the significance to basic rights involved where this is not done.
- 6.33. In addition to the reporting requirements in sections 17 and 18, section 62 expressly requires that the Minister of DWS and, the Gauteng Province, monitor the performance of every water services institution, and not just water services authority in order to ensure compliance with and attainment of all applicable national standards prescribed by the WSA;⁷⁰ and compliance with every applicable development plan, policy statement or business plan adopted in terms of the WSA are observed.⁷¹
- 6.34. Section 63 gives specific effect to section 139 of the Constitution, which empowers a province or the National DWS to intervene where a water services authority has not effectively performed any function imposed on it by or under the WSA.
- 6.35. The power of the Minister of DWS to intervene is further supported by the Minister's general powers under section 73, which includes the power to:
 - "(b) construct, operate, alter or repair any water services work with the permission of the relevant water services institution;
 - (c) contract with any person to perform any work which the Minister is authorised to perform under this Act;
 - (d) act as a water services provider under contract or approval only if the relevant water services authority is unable to provide the water services;
 - (e) provide water services in emergency situations;
 - (f) perform the functions of a water services authority or water board:

⁷⁰ Section 62(1)(a).

⁷¹ Section 62(1)(c).

- (g) levy tariffs for water services provided by him or her;
- (h) issue guidelines to water services institutions on performing their functions in terms of this Act:
- (i) issue model conditions for the provision of services for use by water boards and water services committees:
- (j) prescribe measures to be taken by water services institutions to conserve water".
- 6.36. In addition to national and provincial government departments, the WSA establishes water boards and sets out obligations for water boards in South Africa.
- 6.37. In terms of section 30(2) a water board's⁷² services may include, but are not limited to—
 - "(a) providing management services, training and other support services to water services institutions, in order to promote cooperation in the provision of water services;
 - (b) supplying untreated or non potable water to end users who do not use the water for household purposes;
 - (c) providing catchment management services to or on behalf of the responsible authorities;
 - (d) with the approval of the water services authority having jurisdiction in the area—

. . .

- (ii) acting as a water services provider to consumers;
- (e) providing water services in a joint venture with water services authorities; and
- (f) performing water conservation functions."
- 6.38. In accordance with section 33, a water board must set conditions for the provision of services not inconsistent with the WSA, relating to at least—

- (b) <u>the installation, alteration, operation, protection and inspection</u> <u>of water services works and consumer installations;</u>
- (c) the determination and structure of tariffs;
- (d) the payment and collection of money due to the water board;
- (e) the circumstances under which water services may be limited or discontinued and the procedure for such limitation or discontinuation: and

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- (f) water conservation and the prevention of wasteful or unlawful use of water provided by the water board.."
- 6.39. "[W]ater services works" is defined in the WSA as, "a reservoir, dam, well, pumphouse, borehole, pumping installation, purification work, sewage treatment plant, access road, electricity transmission line, pipeline, meter, fitting or apparatus built, installed or used by a water services institution— (i) to provide water services ...".
- 6.40. In accordance with section 33, a water board must set conditions for the provision of services related to the operation, protection and inspection of purification works and sewage treatment plants used by a water services institutions.
- 6.41. In performing its activities, exercising its powers and carrying out its duties, a water board must achieve a balance between, amongst others, striving to provide efficient, reliable and sustainable water services; through optimal use of available resources; promoting the efficiency of water services authorities; taking cognisance of the needs of water services institutions, consumers and users; acting in an equitable, transparent and fair manner; and taking reasonable measures to promote water conservation and water demand management, including promoting public awareness of these matters.⁷³

The National Water Act

6.42. The purpose of the National Water Act 36 of 1998 ('the NWA') is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled in ways which take into account amongst other factors—

- "(a) meeting the basic human needs of present and future generations;
- (b) promoting equitable access to water;

..

(d) promoting the efficient, sustainable and beneficial use of water in the public interest;

. .

- (g) protecting aquatic and associated ecosystems and their biological diversity;
- (h) reducing and preventing pollution and degradation of water resources;
- (i) meeting international obligations;

⁷³ Section 34.

(j) promoting dam safety".74

- 6.43. According to section 3, the National Government, acting through the Minister of DWS, has the "power to regulate the use, flow and control of <u>all water</u> in the Republic", ⁷⁵ and that the National Government, acting through the Minister of DWS has the responsibility to ensure that: water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner, for the benefit of all persons and in accordance with its constitutional mandate; and s allocated equitably and used beneficially in the public interest, while promoting environmental values.⁷⁶
- 6.44. Chapter 2 of the NWA regulates the development, content and implementation of the National Water Resource Strategy ('the NWRS') the framework, published by the DWS, after consultation with relevant parties, for the protection, use, development, conservation, management and control of water resources for the country at national, provincial and local level. The NWRS has to make reference to international rights and obligations; estimates of present and future water requirements; and objectives in respect of water quality to be achieved through a classifications system.⁷⁷
- 6.45. According to section 7, the National DWS, organs of state and water management institutions must give effect to the NWRS when exercising or performing any duties in terms of the NWA.
- 6.46. In terms of section 19, a person (including an organ of state and the Minister for DWS) who is the owner of land or in control of land on which any activity or process is or was performed or undertaken; or any other situation exists, which causes, has caused or is likely to cause pollution⁷⁸ of a water resource, must take all reasonable measures to prevent any such pollution from occurring, continuing or recurring.
- 6.47. Section 19 makes it the responsibility of a water catchment management agency to direct the person in control of the land to take action to prevent the pollution, or where

⁷⁵ Section 3(3).

⁷⁴ Section 2.

⁷⁶ Sections 3(1) and (2).

⁷⁷ Section 6.

⁷⁸ Pollution is defined as "the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it—(a) less fit for any beneficial purpose for which it may reasonably be expected to be used; or (b) harmful or potentially harmful— (aa) to the welfare, health or safety of human beings; (bb) to any aquatic or nonaquatic organisms; (cc) to the resource quality; or (dd) to property".

the landowner does not take steps to stop and/or prevent the pollution, the catchment management agency is allowed take steps itself to prevent the pollution and claim the costs it incurs.

- 6.48. Section 151 of the NWA makes any act or omission, whether by intent or negligence, which has the effect of polluting or likelihood of polluting a water resources unlawful. Such act or omission constitutes a statutory offence which is punishable through penalties such as a fine or imprisonment.⁷⁹
- 6.49. Where harm, loss or damage caused by the offence, for which a person was convicted, is established, the person/s who suffered harm, loss or damage may be awarded pecuniary damages.⁸⁰
- 6.50. The liability of the state in terms of the NWA is triggered when the exercise of power or performance of duty, or failure to exercise power or perform duties was unlawful, negligent <u>or</u> in bad faith.

The National Environmental Management Act

- 6.51. According to the National Environmental Management Act 107 of 1998 ('**NEMA**'), like the NWA requires that international responsibilities relating to the environment must be discharged in the national interest.⁸¹
- 6.52. All organs of state, including National and Provincial Departments must have a five-year environmental implementation and management plan, the purpose of which is meet the objectives of NEMA. To this end the implementation and management plans are intended to:
 - "(a) coordinate and harmonise the environmental policies, plans, programmes and decisions of the various national departments that exercise functions that may affect the environment or are entrusted with powers and duties aimed at the achievement, promotion, and protection of a sustainable environment, and of provincial and local spheres of government, in order to—
 - (i) minimise the duplication of procedures and functions; and
 - (ii) promote consistency in the exercise of functions that may affect the environment;

⁷⁹ Sections 151(1)(i) and (j) and 151(2).

⁸⁰ Section 152 and 153.

⁸¹ Section 2(4)(n).

- (b) give effect to the principle of cooperative government in Chapter 3 of the Constitution;
- (c) secure the protection of the environment across the country as a whole:
- (d) prevent unreasonable actions by provinces in respect of the environment that are prejudicial to the economic or health interests of other provinces or the country as a whole; and
- (e) enable the Minister [of Environment, Forestry and Fisheries] to monitor the achievement, promotion, and protection of a sustainable environment."
- 6.53. The Director-General for DEFF has the statutory duty to monitor compliance with environmental implementation plans and environmental management plans and may—
 - "(a) take any steps or make any inquiries he or she deems fit in order to determine if environmental implementation plans and environmental management plans are being complied with by organs of state; and
 - (b) if, as a result of any steps taken or inquiry made under paragraph (a), he or she is of the opinion that an environmental implementation plan and an environmental management plan is not substantially being complied with, serve a written notice on the organ of state concerned, calling on it to take such specified steps as the Director General considers necessary to remedy the failure of compliance."⁸²
- 6.54. The Minister for DEFF, has the power to at any time appoint one or more persons to assist either him or her or, after consultation with a Municipal Council or MEC or other national Minister, to assist such a Municipal Council or MEC or another national Minister in the evaluation of a matter relating to the protection of the environment by obtaining such information, whether documentary or oral, as is relevant to such evaluation.⁸³ The Minister may even establish a Commission of Inquiry to evaluate a matter,⁸⁴ or appoint external investigators or inspectors to inquire about possible failures to comply with NEMA.
- 6.55. NEMA therefore has a number of control mechanisms which allow for interventions at the national level to secure protection of the environment.

⁸² Section 16(2).

⁸³ Section 20.

⁸⁴ Section 20(a).

The Disaster Management Act 57 of 2002

- 6.56. In terms of section 1 of the Disaster Management Act 57 of 2002 (**DMA**), a "disaster" is defined as "progressive or sudden, widespread or localised, natural or human caused occurrence which—
 - "(a) causes or threatens to cause—
 - (i) death, injury or disease;
 - (ii) damage to property, infrastructure or the environment; or
 - (iii) significant disruption of the life of a community; and
 - (b) is of a magnitude that exceeds the ability of those affected by the disaster to cope with its effects using only their own resources".
- 6.57. The DMA does not apply to occurrences falling within the definition of a "disaster" to the extent that the occurrence can be dealt with effectively in terms of other national legislation—
 - "(i) aimed at reducing the risk, and addressing the consequences, of occurrences of that nature: and
 - (ii) identified by the Minister [of COGTA] by notice in the Gazette."
- 6.58. The DMA requires National Government, Provincial Government and metropolitan and district municipalities to have disaster management plans and disaster management centres in order to deal with a disaster, once declared.
- 6.59. Once a disaster is declared, the respective Minister, Premier or Mayor or executive committee may issue legislation which allows for far reaching control and direction of things, such as the regulation of traffic in a disaster stricken area, the regulation of movement and goods to and from a disaster stricken area; the provision of emergency accommodation and emergency procurement measures.

The National Health Act

6.60. In terms of the National Health Act 61 of 2003, 'environmental pollution control' is listed as a municipal health service, and a health officer has a right to investigate "any condition" which they believe to constitute, amongst other things, "pollution detrimental to health'.85

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⁸⁵ Section 1.

6.61. In addition, in terms of section 21(2)(j) the Director-General of the National Department of Health must, in accordance with health policy, "facilitate the provision of indoor and outdoor environmental pollution control services", while in terms of section 25(1)(u), provincial health departments must, in accordance with national policy, "provide environmental pollution control services".

7. Regional Legal Framework

- 7.1. There is considerable progress on the recognition of the right to water and sanitation in line with the 2010 United Nations Resolution on the Right to Water and Sanitation. 29 out of the 56 African countries have recognized the human right to water in their constitutions or legislations and 25 have recognized the right to sanitation.
- 7.2. Article 16 under the Principles and Guidelines on the Implementation of Economic, Social and Cultural Rights in the African Charter on Human and Peoples Rights obligates State parties to ensure that the "determinants of health include access to safe and potable water and adequate sanitation, an adequate supply of safe food, nutrition and housing, healthy occupational and environmental conditions."
- 7.3. The Guiding Principles further take note that "while the African Charter does not directly protect the right to water and sanitation, it is implied in the protections of a number of rights, including but not limited to the rights to life, dignity, work, food, health, economic, social and cultural development and to a satisfactory environment." By implication and in line with the international legal framework, the right to water and sanitation are indivisible and interdependent on the non-derogable rights to life and dignity. There is therefore a legal obligation on the State to guarantee the protection, promotion and fulfilment of the enjoyment of these rights.
- 7.4. The Guiding Principles further provide the criteria upon which to assess the enjoyment of the right to water and sanitation derived from international legal treaties that "the human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal, domestic, and agricultural uses."
- 7.5. The State as a party is charged with specific obligations in the context of this matter, to ensure that "safe water is water that, in particular, is free from hazardous substances (microorganisms, chemical substances and radiological hazards) that could endanger human health, and whose colour, odour and taste are acceptable to users."
- 7.6. Furthermore, the Guiding Principles obligate the State parties to guarantee that "everyone has the right to have access to adequate and safe sanitation that is conducive to the protection of public health and the environment. Sanitation comprises at least, a clean toilet or latrine, together with collection, disposal and treatment of human excreta, wastewater, solid waste and storm water removal and hygiene education."

7.7. The African Union, in its Guidelines on the Right to Water in Africa, stipulated that: "States shall develop comprehensive integrated strategies to realise the right to water in such a way as to ensure the right to water of present and future generations. Sustainability goes beyond the functionality of services. Water and sanitation shall be provided in ways that protect water resources from overexploitation and pollution."

8. International Legal Framework

- 8.1. Despite having two international covenants at the level of the United Nations: The International Covenant on Civil and Political Rights ('ICCPR') and the International Covenant on Economic, Social and Cultural Rights ('ICESCR') which govern specific rights separately; human rights must be seen as a system where all rights are interdependent, indivisible and interrelated. The vision of a comprehensive human rights system⁸⁶ was built on the understanding that, in order to guarantee the dignity of the human person, all human rights should be reached. In this way, the integral human rights system is established where the violation of either their civil or political right; or economic, social and cultural right, damages the achievement of the others.
- 8.2. Everyone has the right to safe drinking water. The right to water is essential for a dignified life and is vital for the realisation of many other rights, such as the rights to health, life and an adequate standard of living. Although not mentioned explicitly in the International Covenant on Economic, Social and Cultural Rights, it is an essential part of realizing the right to an adequate standard of living, and has been recognized in a wide range of international human rights instruments.
- 8.3. In its November 2002 General Comment 15⁸⁷, the United Nations Committee on Economic, Social and Cultural Rights provided detailed guidance to State Parties regarding their obligations to respect, protect and fulfil the right to water. The Committee on Economic, Social and Cultural Rights also notes that the right includes the following interrelated and essential features:
 - Availability Everyone should have access to the quantity of water needed to satisfy basic needs. While the minimum quantity of water required will vary depending on the context (including health status, climate, and work conditions), ordinary personal and domestic uses of water will generally include drinking, personal sanitation, clothes, washing, food preparation, and personal and household hygiene.
 - **Quality** Water for personal and domestic use should be free from harmful substances such as micro-organisms, chemical

⁸⁶ In 1948 the Universal Declaration of Human Rights (UDHR) was drawn up. The content of this document was further reflected two treaties, the Covenant on Civil and Political Rights, and the Covenant on Economic, Social and Cultural Rights. To maintain the interrelationship between the rights contained in each of the Covenants, the idea that all rights are interdependent and indivisible was stressed.

⁸⁷ United Nations Committee on Economic, Social and Cultural Rights (UNCESCR) General Comment 15

substances and radiological hazards. Its odour, colour and taste should be acceptable for human consumption.

- Accessibility Access to water involves four key elements: physical accessibility, economic accessibility, non-discrimination, and information accessibility. Water, and associated facilities and services, must be within safe physical reach for everyone, without discrimination on any prohibited ground. States should ensure that water facilities and services are safe to access, and be attentive to gender, cultural, life-cycle, and privacy requirements. Everyone has the right to seek, receive and impart information concerning water issues.
- 8.4. On 28 July 2010, through Resolution 64/29288, the United Nations General Assembly explicitly recognized the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realisation of human rights. To demonstrate the indivisibility of these rights the Resolution further emphasised that universal access to sanitation is, "not only fundamental for human dignity and privacy, but is one of the principal mechanisms for protecting the quality" of water resources.
- 8.5. Affirming the substance of this General Assembly Resolution, the United Nations Human Rights Council resolved in September 2010 that the human right to water and sanitation was legally binding on state governments under established human rights, tempering the expansive international obligations declared by the General Assembly while reiterating the "primary responsibility" of national governments for safe drinking water and sanitation.
- 8.6. Furthermore, in April 2011, the Human Rights Council adopted, through Resolution 16/2, access to safe drinking water and sanitation as a human right: a right to life and to human dignity.
- 8.7. On May 2011, the World Health Organisation (WHO), through Resolution 64/24, made a call to Member States "to ensure that national health strategies contribute to the realisation of water and sanitation related Millennium Development Goals while coming in support to the progressive realization of the human right to water and sanitation".
- 8.8. On 28 September 2011, the Human Rights Council passed a new Resolution 18/1 which takes the human right to safe drinking water and sanitation a step further. The Human

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⁸⁸ The Resolution calls upon States and international organisations to provide financial resources, help capacity-building and technology transfer to help countries, in particular developing countries, to provide safe, clean, accessible and affordable drinking water and sanitation for all.

Rights Council welcomed the submission of the compilation of good practices on the right to safe drinking water and sanitation, in which the Special Rapporteur put particular emphasis on practical solutions with regard to the implementation of the human right to safe drinking water and sanitation. *The Resolution calls on States to ensure enough financing for sustainable delivery of water and sanitation services*. (Own emphasis)

- 8.9. Most human rights treaties were drafted and adopted before environmental protection became a matter of international concern. Legal recognition has however been expanding for decades at national and regional levels. Since the United Nations Conference on the Human Environment in 1972, more than 100 countries have incorporated the right to a healthy environment into their national constitutions, in varying formations.
- 8.10. The human right to a healthy environment brings together the environmental dimensions of civil, cultural, economic, political and social rights, and protects the core elements of the natural environment that enable a life of dignity.
- 8.11. Diverse ecosystems and clean water, air, and soils are now accepted as being indispensable for human health and security. The right also protects the civic space for individuals to engage in dialogue on environmental policy.
- 8.12. General Comment 15⁸⁹ also notes that environmental hygiene, as an aspect of the right to health under Article 12 paragraph 2 (b) of the ICESCR, encompasses taking steps on a non-discriminatory basis to prevent threats to health from unsafe and toxic water conditions. The Committee on Economic, Social and Cultural Rights further notes that State parties should ensure that natural water resources are protected from contamination by harmful substances and pathogenic microbes. In addition, State parties should monitor and combat situations where aquatic systems serve as a habitat for vectors of diseases wherever they pose a risk to human living environments.
- 8.13. South Africa by virtue of the Constitution and ratification of the ICESCR, bears responsibilities for the fulfilment of the obligations to protect the environment and to provide access to safe water and sanitation.

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⁸⁹ General Comment 15 Paragraph 08.

9. Findings

- 9.1. Given time frames limiting the Inquiry and limitation on the number of participants, the findings by the Commission are directed at critical concerns, central to violations of rights forming the basis of its complaints. The findings below are therefore brief in nature.
- 9.2. It is clear from the numerous complaints, site visits, reports from the Magalies Water Board and the information provided by the DWS, that the WWTWs in the City of Tshwane Metropolitan Municipality are malfunctioning and, as a result, the freshwater sources – the Apies, Tolwane, Pienaar and Hennops Rivers and the Roodeplaat and Leeukraal Dams – are being polluted with untreated and partially treated sewage and sludge.
- 9.3. The effects of the pollution on the water, its eco-systems and the people who use the water has been devastating. This is made clear by the Magalies Water Board's water sample analysis carried out last year that showed horrendous levels of faecal coliforms and *E. coli*. Fauna and flora are dying or growing at an unhealthy rate, further polluting the water. People and animals who drink the water are vulnerable to illnesses such as bilharzia, cholera and hepatitis. Such exposure renders those most vulnerable like the elderly, children, and those who are ill, even more at risk of adverse health conditions.
- 9.4. Consumption of polluted water has been taking place for a period of time, at least from 2008; and the long term effects of such exposure on health remain undocumented. The polluted water affects the groundwater and irrigation with the polluted water further affects crops and cattle which graze on the land affected by such water. The sewage pollution means that the water can no longer be used for water sports and as a tourist attraction.
- 9.5. The primary reason for the unacceptable levels of pollution is the failure to manage and maintain existing WWTWs in the City of Tshwane over a prolonged period of time. Failures in management which have resulted in a regression in standards of delivery, include poor planning and implementation evidenced by the insufficient number of WWTWs to accommodate the growing population in the City of Tshwane.
- 9.6. The failure to properly maintain, or to have a sufficient number of WWTWs constructed and the consequences thereof the pollution of our rivers and dams violates section 24 of the Constitution, and a number of constitutional and other legislative and regional and international law norms and standards, as set out sections 6, 7 and 8 of this Report.

- 9.7. In terms of our Constitution and the legal framework, the people living in South Africa are entitled to an environment, which includes rivers and dams, which are "not harmful to their health or well-being", as well as to proper water and sanitation services.
- 9.8. The constitutional scheme is not limited in its articulation of rights, but unequivocally entrusts organs of state, office bearers and public servants with the responsibility of creating an environment where the rights of people are given meaning through proper delivery.
- 9.9. High levels of pollution over a period of time have been allowed by various organs of state entrusted to maintain services and prevent degradation of the environment, and water sources in particular. The National, Provincial and Local governments can therefore not be, in accordance with section41(1) of the Constitution, "secur[ing] the well-being of the people of the Republic", while the local government, in the form of the City of Tshwane has failed to fulfil its constitutional objectives by not "ensur[ing] the provision of services to communities in a sustainable manner" and has not "promote[d[a safe and healthy environment", in accordance with section 152 of the Constitution.
- 9.10. The constitutional scheme referred to above, confers powers and responsibilities, and it does so through statute created to detail the roles and responsibilities of organs of state. The City of Tshwane is in violation of its obligations in terms of the MSA, the WSA, the NWA, NEMA and the National Health Act, statutes which enable and regulate the provision of water services, protect basic rights and protect water sources.
- 9.11. The reasons given for the WWTW malfunction and inadequate state of repair are varied.

 The City of Tshwane conceded, amongst other reasons:
 - 9.11.1. Insufficient budget allocation;
 - 9.11.2. Continuous change in municipal managers;
 - 9.11.3. Not having the necessary skilled human resources available to maintain the WWTWs.
- 9.12. The DWS advised that the reason for the failing WWTWs is a result of poor planning and poor management.
- 9.13. It is clear from the steps taken by the DWS since 2011 that efforts had been made to prevent further pollution and to try and hold the City of Tshwane to account. They have had several meetings and issued several directives in terms of the NWA. The City of

Tshwane failed to comply with directives to prevent further pollution, and this has resulted ultimately in the DWS instituting legal action in the Gauteng Division of the High Court.

9.14. The DEFF has not engaged with the City of Tshwane, preferring to defer to the DWS as the pollution relates specifically to water resources, but has, in the spirit of co-operative governance, included in its Standing Operational Protocol with SAPS, contraventions of the NWA. No findings are therefore made in respect of the DEFF.

10. Recommendations

- 10.1. The Commission is aware that the DWS, as the custodian of South Africa's water resources has taken active steps to secure compliance by the City of Tshwane with its legal obligations to repair the WWTWs, and to prevent further pollution of the rivers and dams affected by the WWTW, which includes litigation instituted against the City of Tshwane.
- 10.2. The Commission has also recently engaged the DWS regarding the failing WWTW in the Emfuleni Local Municipality and the pollution of the Vaal River and Vaal Dam with raw, untreated sewage. The Commission is also aware that failing WWTW is not confined to the Gauteng Province, but is a problem nationwide rendering rights vulnerable.⁹⁰ A fragmented, case by case engagement by the DWS is therefore unlikely to resolve the systemic failures throughout the country.
- 10.3. DWS, DEFF and the Commission agree that South Africa's water resources are precious and are integral to dignified living in South Africa. Once polluted, it is not guaranteed that the water quality may easily or quickly be restored. The situation regarding WWTW and pollution of South Africa's water resources is dire and widespread. It would appear that given the breadth of the challenges, and its impacts on large numbers of people, the situation could lend itself to being declared a disaster within the definition of the DMA. Not only is there ongoing and increasing threat to people, but also to the environment, fauna, flora, tourism; productivity, both subsistence and commercial; and businesses linked to these water resources. The situation cannot be managed by small pockets of affected community members throughout the country. Efforts by DWS to hold municipalities such as the City of Tshwane or the Emfuleni Local Municipality to account using the NWA, have not yielded success and effective measures to prevent pollution have not been adequately taken for a period of time to the detriment of the public.
- 10.4. The Commission therefore recommends that the situation regarding failing WWTWs in South Africa and its consequent pollution of South Africa's water resources be declared a national disaster, in accordance with the DMA.

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⁹⁰ See fn 18 above.

10.5. As part of declaring the situation a national disaster, the Commission recommends that:

10.5.1. ESTABLISHMENT OF A NATIONAL WATER CARE ENTITY

- 10.5.2. The need for a mechanism which oversees water care in the context of WWTPs from a national level, and which integrates and operates at provincial level is an acute one. At present challenges appear throughout the value chain in the current design from the various national departments through to local government delivery entities. A National Water Care Entity ("entity") could be a viable and effective response to the challenges, providing a central point, expertise and integration for the proper management of waste water services in the country. The purpose of such a mechanism would be to ensure that the persistent issues around Waste Water Treatment plants (WWTP) in the country are holistically addressed, pooling and harnessing existing resources in the sector, and monitoring effectiveness, efficiency and need through a wider lens in the regions. A primary focus of such an entity should be to plan remedial actions, for uniform strengthening; and effective implementation in the operation and maintenance of the associated (WWTP's). Such a mechanism would contribute vastly to better planning, synergy between organs of state and local government, including in respect of budgeting. The Commission is amenable to further consultation regarding the creation of such an entity.
- 10.5.3. In addition Government could consider either through the entity envisaged above or through its national and provincial plans; a potential Beneficiation Programme to support sustainability. Such a program could include initiatives already being researched for use in other countries such as:
 - i. Waste Water Reuse (initially for industrial purposes), to provide additional revenue streams for the entity;
 - ii. Sludge: Processed sludge to appropriate quality could be of benefit to the agricultural sector. An added benefit of such processing would mean that there is no longer the depositing of sludge in land parcels, a practice which is currently contaminating underground and surface water, as well as rendering the land parcels sterile;
 - iii. **Struvite:** Extracted from waste, could result in chemicals such as MAP (magnesium ammonia and phosphate compound), extracted from the

waste water and processed for use in the agricultural industry as fertilizer;

- iv. **FOG's (Fats Oils Greases):** The extractive processing of fats, oils and greases from wastewater could potentially contribute to the fuel industry as renewable additives to diesel, petrol, paraffin, etc;
- v. Methane Gas: The extraction of methane gas could potentially be utilised as a BioGas to generate energy for the WWTP's. This will go a long way in reducing the costs of energy for the WWTP's, and could result in such WWTP's being energy neutral. Nothing would exclude the use of such a biogas by vehicle manufacturers, as they move away from fossil fuels to cleaner energy;
- vi. Floating Solar Panels: The use of solar panels to harness and use less costly solar energy are also opportunities to be considered in reducing the energy costs associated with the operations of the WWTP's. This will see floating solar panels being installed on top of the lagoons and balancing tanks at the WWTP's, floating on waste water to harness energy; and,
- vii. **In-line Turbines at Outfall Sewers:** The installation of such turbines inside outfall sewers, would generate energy and contribute to the reduction of energy costs for the WWTP's, and maybe even result in them being energy neutral;
- 10.4.3 Apart from sustainability, and long-term gains, the initiatives and opportunities listed above would create employment opportunities, strengthen South Africa's skills on waste water management, create new secondary industries to harness existing industries in wastewater management and coordinate research and development in the waste water management sphere.
- 10.4.4 The central waste water care entity will also ensure that the laboratories located in the Municipal areas are upgraded, operated and maintained through it to reach the ISO17025 accreditation, and that water quality is capable of being assessed against the Blue Drop and Green Drop standard of Assessments.

- 10.6. As an alternative to the declaration of a national disaster the Commission recommends that in terms of section 139(7) of the Constitution and section 63 of the WSA and sections19 and 63 of the NWA, Cabinet seriously consider taking a decision for National Government to intervene in the running of the City of Tshwane Metropolitan Municipality.
 - The failure to repair and replace the sewerage systems of the Municipality is not only a failure to comply with the WSA, it is a failure of many people over many years to properly run the Municipality.
 - It is proposed that the water and sanitation departments of the Municipality, be taken over by National Government.
- 10.7. Such an intervention can also make use of the services of organs of state such as Rand Water, and the Ekurhuleni Waste Care Company (ERWAT).
- 10.8. Municipal managers who were in place during the deterioration of WWTW in the City of Tshwane, and who allowed pollution to continue through failure to deliver on their statutory and constitutional obligations in terms of the MSA, WSA and NWA be held accountable in terms permissible by legislation, including, through criminal prosecution.
- 10.9. The Commission requests that all parties to which the above recommendations apply, respond to the Commission jointly or separately, <u>within 60 days</u> of receiving the final report.

The Commission's directives herein are binding on the Respondents. Should any of the parties be aggrieved by the findings and directives of the Commission as contained herein, such a party is entitled to challenge same in court through the process of judicial review. An application for judicial review must be made within 180 days of the date on which all internal remedies were exhausted. Where there are no internal remedies available, the application must be made within 180 days of the date on which the applicant became aware of the decision (or could reasonably be expected to have become aware of the decision).

ISSUED ON THIS THE 26 DAY OF OCTOBER 2021.

Jonas Ben Sibanyoni

Commissioner