



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

DRAFT NATIONAL SANITATION FRAMEWORK AND PRELIMINARY DRAFT NATIONAL FAECAL SLUDGE MANAGEMENT STRATEGY

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PRESENTATION OUTLINE

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PART A: NATIONAL SANITATION FRAMEWORK

INTRODUCTION AND BACKGROUND



PURPOSE OF THE NATIONAL SANITATION FRAMEWORK (NSF)

- Provides revised norms and standards which will result in greater equity in the provision of sanitation services
- Provides for strengthening of the monitoring of compliance to the norms and standards and for strengthening of corrective action whether there is non-compliance
- Provides for improved coordination and planning between responsible sector departments

LEGISLATIVE FRAMEWORK FOR SANITATION SERVICES

Constitution

Local water supply and sanitation services are a function over which municipalities have executive authority in terms of section 156 of the Constitution read together with Schedule 4 Part B

Municipal Structures Act

Section 84 – deals with the division of functions and powers within the local government sphere

Municipal Systems Act

Sections 76-82 provides for mechanisms for provision of municipal services including sanitation services

Water Services Act

Section 9: Enables the Minister of Water and Sanitation to set norms and standards for water and sanitation services

CONSTITUTIONAL AND LEGISLATIVE IMPERATIVES FOR GOVERNMENT SUPPORT AND INTERVENTION IN MUNICIPAL WATER AND SANITATION SERVICES

Although municipalities have executive authority over sanitation, other sections of the Constitution and legislation requires government (national and provincial) to support and intervene in municipalities where there is failure of municipal water and sanitation services:

- **Schedule 4** of the Constitution indicates that municipal water and sanitation services are a functional area of national and provincial concurrent legislative competence – therefore national legislation such as the Water Services Act provides for minimum norms and standards for municipal water and sanitation services.
- **Section 10** of the Constitution provides that everyone has inherent dignity and the right to have their dignity respected and protected – this means that government has a duty to intervene where the provision of municipal water and sanitation services is resulting in people’s dignity not being respected and protected (such as the current situation with sewage spillages into people’s houses in the Vaal)
- **Section 139** of the Constitution enables government to intervene in the affairs of municipalities where there is failure to fulfill their Constitutional obligations
- **Sections 40 and 41** of the Constitution require all spheres of government to work in a cooperative manner

LEGISLATIVE FRAMEWORK continued...

- **Sections 40 and 41** of the Constitution require all spheres of government to work in a cooperative manner
- **Sections 62 and 63** of the Water Services Act enable DWS to intervene in municipalities where monitoring of municipal water and sanitation services by DWS indicates failure to adhere to national norms and standards, subject to section 139 of the Constitution
- **Sections 19 and 20** of the National Water Act enables DWS to intervene and remedy pollution of water resources and to recoup the costs of such intervention from the polluters – this could enable DWS to intervene where municipal waste-water treatment plants are resulting in pollution of the environment, peoples' homes and rivers

THE STATE OF SANITATION





- South Africa remains with a large number of households that are still not served with adequate and safe sanitation
- A lack of maintenance of on-site sanitation solutions (such as pit latrines not being emptied) has resulted in some households reverting to unimproved sanitation solutions including open defecation

THE STATE OF WASTEWATER TREATMENT WORKS



- The majority of WWTW accommodate effluent exceeding their current design capacity
- The pollution of water resources caused by spillages of raw sewage into streets and rivers has negative environmental and health impact.
- Ageing WWTW infrastructure results in high maintenance costs and performance failures.
- Growing incidents of WWTW Infrastructure being vandalised
- General poor operation and maintenance
- Inadequate investment in maintenance of infrastructure which render assets to fail before their end of useful life

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REVISED SANITATION NORMS AND STANDARDS



THE NEED TO REVISE THE RDP MINIMUM NORMS AND STANDARDS FOR SANITATION

- The RDP (1995) set a VIP solution as the minimum standard of acceptable sanitation across all geographies and settlement types
- This has resulted in inequitable service provision based on location and class (and hence race), with connotations of onsite VIP toilets for low income settlements vs waterborne to other settlements
- On-site sanitation solutions such as VIP's in dense formal settlements have not adequately provided safe sanitation, due to lack of emptying of pits, flooding of pits, lack of space to dig additional pits, and result in potential contamination of ground water in areas with high water tables
- Municipalities have failed to maintain or empty VIP toilets thus leaving no service to households
- Introduce alternatives sanitation solutions

REVISED SANITATION NORMS AND STANDARDS

- DWS will issue revised water and sanitation services norms and standards in terms of the Water Services Act, which will include revised minimum standards for acceptable sanitation
- The new norms and standards will be based on technical considerations:
 - Population density
 - Groundwater pollution risks
 - Economies of scale

REVISED SANITATION NORMS AND STANDARDS Continued...

The revised norms and standards will set the following new minimum standard for sanitation services:

- **Dense formal settlements** – Waterborne seweraged sanitation or equivalent¹ provided that the WWTW have adequate capacity
- **Less dense formal settlements** – Waterborne seweraged sanitation or equivalent with lower-cost waste-water treatment solution²
- **Low density / sparsely populated settlements** – Non-sewered solutions which meet minimum standards.
- **Informal settlements** – Temporary solutions which meet SABS standards

Notes:

1. Equivalent = innovate sanitation solutions are emerging, which are off-grid (not seweraged), use little or no water, and involve on-site treatment of human waste. These solutions provide the same level of service to the user as a conventional water-borne seweraged system.
2. Less dense formal settlements may not have the economies of scale to justify high-cost waste water treatment solutions.
3. All new settlements and developments should use alternative and water efficient sanitation solutions.

OTHER IMPROVEMENTS TO SANITATION NORMS AND STANDARDS

The revised norms and standards will also include:

- Regulations relating to compulsory national standards for qualifications for process controllers at waste-water treatments works
- Minimum qualifications and experience requirements for waste- water treatment plant managers will also be considered
- Minimum operating requirements for waste-water treatment works
- Minimum maintenance requirements for waste-water treatment works
- Require adherence to SABS 0224 Standards (which are in process of development), which will include performance indicators and minimum norms and standards for maintenance and operation of sanitation services such as WWTW
- Regulations related to faecal sludge management (for on-site sanitation solutions) to ensure safe faecal sludge emptying, transportation and treatment

STRENGTHENING MONITORING OF COMPLIANCE WITH NORMS AND STANDARDS



APPROACH TO STRENGTHENING MONITORING OF NORMS AND STANDARDS

- DWS will establish better links to monitoring processes to strengthen compliance to norms and standards
- On the basis of the results of the Green Drop assessments, there will be more consistent interventions to address non-compliance
- DWS is currently in the process of finalising the 2021 Green Drop audits for Wastewater Treatment Works (WWTW) at 160 Water Services Institutions across the country that will reflect the health of the works across the country. The results will be ready for release in March 2022.
- Together with the WRC, DWS is also developing a monitoring mechanism for non-sewered sanitation (using globally developed 'Shit Flow Diagrams (SFD's)')
- Over the next 3 months, DWS will develop a framework for how strengthened support and interventions will take place and be funded, in consultation with SALGA, COGTA and NT
- The framework will provide for the capacity of the Water Boards, the provincial offices of DWS, the DWS construction unit, and the private sector to be mobilised for interventions to address non-compliance with the norms and standards
- It will also provide for different forms of support and intervention, ranging from training to long-term management interventions

FRAMEWORK FOR SUPPORT AND INTERVENTION

Working together with SALGA, NT and COGTA, DWS will lead the development and implementation of a range of inter-related and coordinated support measures and interventions which will include doing the following differently:

1. Ensure universal access to basic sanitation for the 2.9m households that are currently not served.
 2. Fastrack removal of buckets in formal areas and support uptake of innovative sanitation solutions for settlements. (by supporting and enhancing WRC initiatives)
 3. Using DWS internal construction capacity for rapid deployment to address urgent intervention needs
 4. Strengthen regulatory interventions based upon the results of monitoring mechanisms such as Blue Drop, Green Drop and No Drop , and develop regulatory approaches for or non-sewered sanitation based on new norms and standards proposed e.g SFDs.
 5. Strengthen the National Norms and Standards (Water Services Act) and put in place a new framework to guide the provision of sanitation services
 6. Introduce longer term interventions such as for example taking over the management of wastewater treatment works from municipalities for a longer prescribed period where there is continued non-compliance with WULA requirements and norms and standards
 7. More effectively prioritize the allocation of municipal water and sanitation grants to enable support and interventions
 8. Increase involvement of private sector financing and management in municipal sanitation services.
 9. Putting in place appropriate financing frameworks and mechanisms for support and interventions
 10. Improve coordination and linkages of the interventions made in terms of sections of various legislation
- Some of these measures will start to have an impact on municipal water and sanitation services in the short term (within 3 months) and others will yield results in the medium term

CHALLENGES WITH ERADICATING BUCKET SANITATION SYSTEMS

- Informal settlements are provided with buckets / chemical toilets by municipalities
- New informal settlements spring up and are being provided with buckets by municipalities, on an ongoing basis
- Alternatively, households in informal settlements build makeshift pit toilets
- Legislation does not allow municipal investment in infrastructure development before the formalization process is complete. Therefore, it is not possible for municipalities to invest in waterborne sanitation in informal settlements until they are formalized
- Settlements have to be formalized through a planning process – Township Establishment by DHS / CoGHSTA
- Traditionally the Bucket Eradication Programme focused on eradicating traditional buckets in formal areas
- As informal settlements are formalized, more needs for eradicating buckets (in formal settlements) emerge, on an ongoing basis
- In future, DWS will focus on ensuring that municipalities meet the minimum norms for sanitation in informal areas, and stop providing buckets

STRENGTHENING NATIONAL AND PROVINCIAL WATER AND SANITATION COORDINATING FORUMS

- The nature of sanitation services provision and challenges requires a vast number of stakeholders and institutions.
- The efforts of these stakeholders and institutions are often uncoordinated, incompatible and in some cases conflicting, resulting in poor provision of services and slow progress.
- Through various fora which provide strategic leadership and technical advice at national and provincial level, DWS will lead the integrated planning, monitoring and reporting on delivery of sustainable sanitation services.
- Whilst some national and provincial coordination structures are functional others may require strengthening and or in some cases revived e.g. Provincial Sanitation Task Teams.

CONCLUSIONS

- Guidelines will be developed to support the national sanitation framework
- If approved by the Minister, DWS will immediately commence consultations with key stakeholders.
- Following these consultations, the Draft Sanitation Framework will need to be submitted to Cabinet for approval, because it has far-reaching financial implications.

PART 2

NATIONAL FAECAL SLUDGE MANAGEMENT STRATEGY

BACKGROUND

- DWS in collaboration with USAID Resilient Waters Program is in the process of developing the National Faecal Sludge Management Strategy for non-sewered sanitation systems.
- The Strategy responds to the requirements of SDG 6.2 target on Sanitation and Hygiene to safely manage sanitation by 2030 and O&M challenges of on-site sanitation systems.
- The purpose of the Strategy is to guide the sector on the safe management of faecal sludge from non sewered sanitation systems to prevent groundwater contamination, safeguard public health and protects the environment from pollution throughout the sanitation value chain.
- Progress to date:
 - Conceptual Framework which outlines the vision of the strategy and areas of focus.
 - Faecal Sludge Management Status Quo Report in SA
 - Preliminary Draft Faecal Sludge Management Strategy which outlines propositions and interventions that are relevant to the challenges identified in the status quo report.
 - Finalising provincial consultations
 - Draft Strategy to be produced by March 2022 and Final strategy by March 2023.

CHALLENGES IN MANAGEMENT OF FAECAL SLUDGE

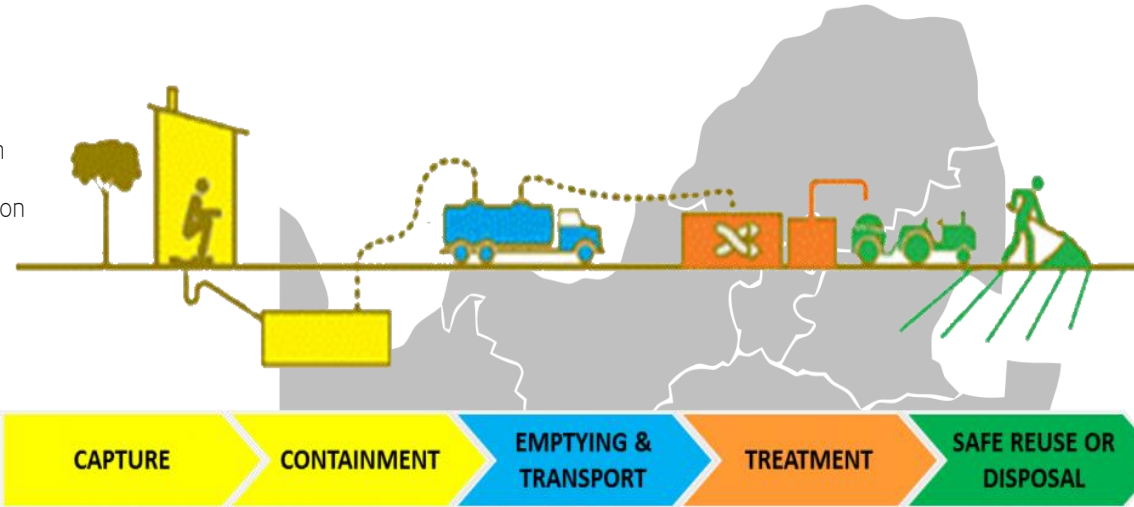
- More than 10% of pits are full, while more pits are being constructed with limited emptying services in place
- No coordinated emptying services in place, e.g. registered private services providers
- WSA planning and budgeting for FSM services is limited or non-existent
- There are no dedicated Faecal Sludge Treatment Plants in SA
- Most WWTW are not adapted or equipped for receiving faecal sludge.
- Rapid urbanisation has overloaded existing WWTW where faecal sludge is taken for treatment.
- Illegal dumping of faecal sludge by Service Providers
- Onsite sanitation Systems used as dustbins.
- Limited data on the entire sanitation value chain on non sewerer sanitation,
- Groundwater contamination risks due to poorly constructed sanitation facilities and private and communal boreholes drilled close to sanitation facilities.
- There is limited regulatory and support mechanisms in place to ensure on-site sanitation systems are both well constructed and well managed

CONCEPTUAL FRAMEWORK FOR NATIONAL FSM STRATEGY FOR NON SEWERED SANITATION

10 years

To establish sustainable management and regulatory frameworks for FSM in South Africa, in order to ensure its collaborative implementation by the sector

- ❗ Water security
- ❗ Perceptions of onsite sanitation
- ❗ Rapid urbanisation
- ❗ Groundwater contamination
- ❗ Service delivery



- ✓ Concept of FSM is accepted
- ✓ Clear regulatory and finance frameworks
- ✓ Private sector opportunities
- ✓ A variety of technologies are available
- ✓ FSM planning at local government level
- ✓ WSAs have commenced implementation



Key areas of enquiry

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Thank You



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