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SPEECH BY THE EXECUTIVE MAYOR OF THE CITY OF JOHANNESBURG

Councillor Dada Morero

Symposium on Advancing Innovative Water-Efficient Sanitation Solutions

Programme Directors, Ms Alana Potter and Mr Diale Lodi; the MEC for Human Settlements in Gauteng, the Honourable Tasneem Motara; the MMC for Human Settlements in the City of Johannesburg, Councillor Mlungisi Mabaso; the Deputy Director-General of the Department of Water and Sanitation, Dr Risimati Mathye; the Group Executive for Programmes at the Development Bank of Southern Africa, Ms Phindile Msangane; the SALGA Chairperson, Councillor Fatimah Moloi; our City Manager, Dr Floyd Brink; honoured guests.

Overview of Johannesburg's sanitation challenges, long-term vision and priorities

MMC Mabaso, thank you for convening this important symposium. Human Settlements is where the consequences of a failed sewer system directly impact families and communities. It is therefore appropriate that your portfolio hosts this gathering. I would also like to thank the Department of Water and Sanitation, Gauteng Human Settlements, the Development Bank of Southern Africa, UN-Habitat, SALGA, the Water Partnerships Office, the Water Research Commission, Planact, and Johannesburg Water for their collaboration and commitment.

My role today is to address Johannesburg's sanitation challenges, outline our long-term vision, and set out our strategic priorities.

OUR SANITATION CHALLENGES

Johannesburg Water operates close to 12 000 kilometres of sewer, 38 pump stations and 6 wastewater treatment works receiving over 1 000 megalitres of sewage a day. A quarter of the entity's assets have less than 10 years of useful life remaining, and 22% are in poor or very poor condition. Those are the conditions we inherit. But the two forces that will determine our sanitation future are not in the pipes at all. They are in how this city is planned, and in how it is growing.

Consider first the effect of spatial planning. Our Spatial Development Framework tested three growth models for Johannesburg: dispersed sprawl, linear corridor development, and a compact polycentric city concentrating growth around transformation areas and transit nodes. Of the three, the compact polycentric model was preferred, and it is the approach this City has taken. We direct capital accordingly through the Johannesburg Strategic Infrastructure Platform, and 87% of this year's capital budget is aligned to those transformation zones and corridors. That is the correct spatial choice, because sprawl is ruinously expensive to service.

It carries a consequence, however, that this symposium is uniquely placed to address. Densification concentrates load. More households on the same erf means more litres entering and leaving through bulk sewers and treatment works that are already full. Our spatial frameworks make it clear that development must not overload the capacity of existing public infrastructure, including bulk services. Set that principle against the Department's own Green Drop finding that Gauteng's wastewater treatment facilities operate collectively at 99% of their hydraulic design capacity. There is no headroom in this province. The Water

Research Commission has put the consequence plainly in its own research: constrained and failing bulk infrastructure translates into an inability to approve and to service new development. In other words, our sewer capacity is now a constraint on our spatial plan.

Secondly consider the effect of unplanned urbanisation. Census 2022 counted 4.8 million people in this metropolitan municipality, and our Spatial Development Framework plans for some 7 million by 2040. But that growth does not arrive where our plans anticipate it. Our Integrated Development Plan is explicit about the mechanism, and it is one this room should attend to: the housing backlog is exacerbated by high population growth and by the illegal occupation of land, and as the number of households increases and unsafe, illegal connections multiply, extra strain is placed on existing infrastructure.

This is fundamentally a water and sanitation problem, not merely a housing issue. It places load on networks never designed for such use, in locations where no bulk main was ever laid, through connections the City did not build and cannot meter. This is a substantial part of why almost half the water Johannesburg purchases is not billed. On the sanitation side, the difficulty is greater, because water can be tankered but waste cannot.

Taken together, these two structural forces present us with three possible courses of action. First, we could attempt to build bulk capacity rapidly enough to keep pace with demand. Second, we could permit urban sprawl, which is costlier, less equitable, and detrimental to our water resources. Third, we can focus on reducing the burden that each household places on the network from the outset. This third approach—water-efficient sanitation—is not a mere environmental add-on to our spatial plan. It is what renders our spatial plan feasible in concrete terms.

OUR LONG-TERM VISION

Let me define our vision by what changes rather than by adjectives, on the same horizon our Spatial Development Framework uses.

We are working toward a Johannesburg where sanitation systems are decoupled from drinking water, so the volume of potable water used to transport waste is reduced by design. Every household should have access to safe and dignified sanitation, even where conventional sewers may never be available, requiring us to treat non-sewered solutions as permanent infrastructure. Our treatment works must consistently meet regulatory standards and support sustainability by generating energy and producing reusable water. Two of our six plants have already converted methane into power. Achieving this vision depends on a utility that retains its revenue and leverages it for further investment.

That vision has a vehicle. It is Johannesburg Water’s ten-year Infrastructure Investment Plan, to which this City has formally committed.

OUR PRIORITIES

Our priority is to deliver the water supply programme. Nationally, Phase 2 of the Lesotho Highlands Water Project delivers water in 2028/29, transferring an additional 490 million cubic metres a year into the Integrated Vaal River System, and we are grateful for it. I should say plainly, in the Department’s presence, that augmentation upstream is not a remedy for downstream losses.

Accordingly, our own programme concentrates on retaining what we have already purchased. We are constructing the Crosby pump station and a new B-line pipeline connecting the Rand Water endpoint directly to Johannesburg, for completion this December. Brixton Reservoir 2 is at 26 megalitres in supply. We are refurbishing the H1 and H2 reservoirs within a programme covering 44 reservoirs and towers, adding 140 megalitres of new reservoir capacity and 5 new water towers, and we have registered a performance-based non-revenue water contract with National Treasury across 5 district metered areas carrying 22% of our system input.

Our second priority is to deliver the sanitation programme. Our Action Plan carries 11 major long-term projects across our treatment works. Northern Works is being upgraded to 460 megalitres a day, and Unit 5 Module 2, adding 50 megalitres, is 98% complete on civil works. Lanseria will ultimately deliver 150 megalitres a day across three modules. We are investing R207 million in citywide sewer replacement this year, measured in blockages per 100 metres, and reducing blockage response times from 48 hours to 24. Effluent quality rises to 85% by December. One date warrants particular attention: the first Lanseria module, at 50 megalitres a day or the equivalent of 50 000 households, is programmed for February 2033. That is seven years, and it is what new bulk capacity costs in time.

Our third priority is to reduce demand for potable water. The City prices water at R6.81 per kilolitre and values full delivery of its demand management programme at R245 million a year. Water-efficient sanitation is not currently included in that programme. As a result, it earns no incentive, attracts no lender, and appears in no business plan. Once it is priced, it becomes measurable; when measured, it can be demonstrated as reform; when demonstrated, it unlocks conditional funding and development finance. Dr Khuzwayo will present Johannesburg Water's implementation action plan at this symposium tomorrow. My instruction to our entity, and my request to this room, is to bring this plan with an attached price.

Our fourth priority is to prepare our water and sanitation systems for the future. Infrastructure planning must anticipate Johannesburg's growth, account for climate pressures on water security, and use new technologies to deliver services efficiently and equitably.

Johannesburg Water is advancing a future-focused infrastructure programme that explores decentralised, non-sewer sanitation technologies and climate-resilient infrastructure. These approaches complement, rather than replace, conventional infrastructure and will allow us to extend safe, dignified sanitation to communities that traditional sewers may not reach for years.

Future planning requires us to better understand the relationship between spatial planning, sanitation, and water supply. While our spatial planning framework has advanced conventional infrastructure, the Water-Efficient Sanitation Strategy requires new thinking. Sanitation infrastructure must address community needs, support dignity, and integrate both existing and emerging technologies into a connected, reliable network.

At the same time, unplanned urbanisation places enormous pressure on infrastructure never designed for today's growth patterns. The pace and location of expansion are overtaking traditional planning assumptions. We need more sophisticated tools, stronger data-driven decision-making, and adaptable infrastructure models to maintain reliable services as settlement patterns change.

Our response is already taking shape:

• Aligning municipal policies and by-laws with the Water-Efficient Sanitation Strategy (WESS) and the National Sanitation Strategy (NSSS).
• Expanding pilot projects to assess community acceptance, operational performance and long-term operations and maintenance requirements.
• Updating the City's Package Plant Guidelines for broader application.
• Exploring innovative financing mechanisms to accelerate project implementation.
• Engaging the market to develop solutions tailored to Johannesburg's unique environment.
• Preparing for the independent rollout of permanent, dignified sanitation solutions where conventional sewer infrastructure is neither practical nor immediately achievable.

That is how we shift from reacting to today's challenges to building resilient water and sanitation systems for Johannesburg's future.

Our final priority is to fund and plan for the infrastructure that follows. Our current Integrated Development Plan commits this City to confronting the historical renewal backlog across our core engineering networks through the Infrastructure Asset Management Improvement Programme, moving from reactive repair to

managed assets. Johannesburg Water's ten-year plan requires R19.1 billion, and over the current three-year framework we have allocated R6.39 billion, one third of the requirement, against a renewal backlog of R32.5 billion. We have therefore changed the structure rather than the language.

The sweeping of Johannesburg Water's cash into the City's group treasury ceased on 30 June. From 1 July, single-point management accountability is in force, and the revenue this city pays for water and sanitation now remains within water and sanitation. Our capital programme is supported by loan funding from the International Finance Corporation; we are working to raise R13 billion for pipe replacement with the Development Bank of Southern Africa among the institutions we are engaging, and the national trading services reform carries up to R10 billion in incentive grants for this City, R1.4 billion of it this year, conditional on demonstrated reform.

To that I add one further undertaking. I am asking our Development Planning department, together with Johannesburg Water and Human Settlements, to report to me on recognising water-efficient sanitation within our Development Contributions Policy and our land-use processes: in how we calculate development contributions and engineering services agreements, how we assess applications against constrained bulk capacity, and how our infrastructure platform prioritises capital. A developer who halves the load imposed upon our sewers renders this City a measurable service, and our approval processes cannot presently see it.

Mr Bhagwan brings a proposed permitting system for municipalities before this symposium later this morning, and I say from this podium that Johannesburg would use it. When these technologies require proving at scale, this City is prepared to host that work and to publish the results, including the failures.

In closing, let me offer a perspective. Somewhere on the edge of Johannesburg, a family is building a home on unserviced land, settling there long before a sewer line reaches them. We cannot construct conventional sewer infrastructure rapidly enough to serve such communities, and the planned treatment plant that will eventually help is scheduled for 2033. However, we can influence the demand each household places on the network from the outset. These decisions are made not at the treatment plant, but through building regulations, development contribution formulas, and spatial planning.

Thank you.