

REPORT TO THE EXECUTIVE MAYOR

NON REVENUE WATER: 2014 NO DROP REPORT

PURPOSE

The purpose of this report is to convey the findings of the 2014 No Drop Report by the Department of Water & Sanitation (DWS).

BACKGROUND

The Minister of DWs has released the first full audit report of non revenue water based on actions for the 2013/14 Financial Year. This report strives to summarise the finding and also to indicate the actions taken to improve the situation.

2014 NO DROP FINDINGS

The NMBM achieved an overall score of 61.61% as set out under Section 3.7 of the report attached as Ann “...”

The Sections below are extracts from the said report and highlights the areas of improvement for the NMBM:

“Regulatory impression

The metro is commended for having successfully completed their first full No Drop Audit, despite significant staff capacity and budget constraints. The metro has managed to accelerate their WCWDM programme in recent years, urged by the drought situation, and implemented projects of note. The Department is, however, disappointed to note that much of these gains were lost in the past year. The Department is concerned about the metro's billing system which reflects on the metro's water balance data inconsistencies and high non-revenue water. High non-revenue water impacts directly on the financial sustainability of the metro, ability to fill vacancies and fund additional WCWDM programmes. The metro is lauded for having worked with the Department to develop and adopt the results from the Algoa reconciliation strategy, but must ensure these targets are achieved to ensure water security and mitigate possible water restrictions. The metro must engage much closer with their community to ensure the value of water and implications of further water restrictions are clearly understood.

The metro achieved a commendable overall score of 67.61% for their first full No Drop Audit. High scores were achieved for WDM strategy and planning, credibility and local regulation. The metro was heavily penalised for their high water losses, non-revenue and efficiency scores, as reflected by the compliance and performance score. Penalties were raised for not presenting a WUL and exclusion of performance targets in senior official performance contracts.

No Drop findings

- Confirm the number of unmetered connections as the existing figure seems unrealistically low;

- Review the WDM strategy and business plan to ensure targets are aligned with the requirements of the Algoa reconciliation strategy;
- Ensure the WDM business plan projects are funded and implemented;
- Expand the mains replacement programme to avoid backlogs;
- Implement a bulk meter and PRV operations and maintenance programme;
- Provide WDM training and capacity building;
- Ensure 90% of leaks are repairs within 24 hours;
- Develop and disseminate a municipal customer charter; and
- Improve community awareness through informative billing, schools awareness and community awareness programmes.”

The above findings what has been identified as areas of improvement and the actions plans in this regards has been reported to the Infrastructure Engineering & Energy Committee on a regular basis. The reconciliation of the finding with the proposed interventions will be set out below.

ACTIONS TO IMPROVE ON NON REVENUE WATER

In terms of the report the following table was used as a yardstick of strategic actions that will assist in reducing Non Revenue Water. The report indicates that the NMBM is only active in areas 1, 4 and 9. This is currently however not the position and the interventions are set out under each area. The interventions have been summarised into 12 Workstreams after consultation

No	INTERVENTION	PROGRESS
1	Pressure management	Workstream 5
2	Pipeline, valve and meter replacement	Workstream 10
3	Top consumer audits	Workstream 6
4	Bulk metering, sectorisation and monitoring	Workstream 1
5	Household leak repair programme	Workstream 9.1
6	Removal of mid-blocks	Workstream 10
7	Metering of unmetered properties	Workstream 8 & 12.
8	Leak detection and repair	Workstream 2, 9, 10 & 11
9	Community awareness	Ambassador programme
10	Water reuse	Ambassador programme

WORKSTREAM 1: BULK WATER METERS

As a first phase the most critical bulk meters have been identified for either replacement or new installations are on track to be working by 31 July 2016.

WORKSTREAM 2: GMA AND DMA WATER METERS

Greater Measurement Area (GMA) and District Measurement Area (DMA) are needed to determine where the water losses occur. The locations have been identified and the most critical one identified for installations first.

WORKSTREAM 3: AMI METERING SYSTEM

A draft specification has been prepared for the Advanced Metering Infrastructure (AMI) for 1 500 water meters. The specification is near completion and will also be passed on to the Budget & Treasury for their input.

WORKSTREAM 4: EDAMS WATER MANAGEMENT SYSTEM

The Edams Water Management System drives the non-revenue water programme. A tender document is being drafted to update and or replace the existing system.

WORKSTREAM 5: PRESSURE MANAGEMENT

The existing PRV's have been assessed and repaired. A further 5 pressure reducing valves (PRVs) have been identified to reduce losses. Specialised controllers have also been procured to maximise the savings once the pressure is reduced.

WORKSTREAM 6: ICI CONSUMERS

Over the last 12 months detailed audits have been carried out on all the industrial, commercial and institutional consumers (ICI). The ±9 500 consumers use approximately 45% of total water consumption of the NMBM. Connections that were not on the billing system have been identified and also readings that were under recorded have been passed onto the Budget & Treasury Directorate for correction and implementations. This initial intervention has the potential to reduce NRW by about 3%.

WORKSTREAM 7: WATER TARIFFS

A comparison has been made of water tariffs of the different metros to see if NMBM tariffs are in line with other metros. This has been used as a basis for the structure of the new tariff structure.

WORKSTREAM 8: NON REVENUE WATER AND BILLING DATABASE RECTIFICATION

Verification has been carried out to identify erven within the NMBM without water meters. For various reasons the predominant area are some of the metro houses constructed over the last few years. Resources have now been put in place to address this matter over a 6-9 month period. One of the key matters here is the beneficiaries of the houses. This aspect is being addressed with the Budget & Treasury and Human Settlements Directorate.

WORKSTREAM 9: LEAK REPAIRS

WORKSTREAM 9.1: ATTP LEAK REPAIRS

ATTP leak repairs to RDP houses are continuing programme. What is of significant is the Ambassador Programme has identified about 14 000 water leaks in their door-to-door campaign of which ±70% of these are internal leaks. In order to give effect to this the

average monthly repairs of about 1000 repairs per month have been increased to over 2500 for the month of May 2016 and is planned to be increased further over the next few months.

WORKSTREAM 9.2: SCHOOL LEAK REPAIRS

A new MoU has been signed between NMBM and Department of Education to make funds available for leak repairs at schools.

WORKSTREAM 10: REPAIRS AND MAINTENANCE

Pipelines that regularly burst are identified in the EDAMS Operations & Maintenance Module that flags these pipelines for replacement. These replacements are carried in terms of the approved capital budgets. Historically midblock water mains have been removed with the introduction of metering in all areas.

WORKSTREAM 11: DISCRETETISATION OF GMA AND DMA ZONES

The discreteness of a zone is used as one of the measures to identify the leaks for repairs by dedicated teams to support the leaks detection teams.

WORKSTREAM 12: DOMESTIC METER AUDIT AND METER PROBLEMS

There are many anomalies with domestic water meters such as: unmetered connections (straight connections), meters being estimated, meters not on billing database, meter information missing. Actions have been implemented to reduce the anomalies. All faults with domestic meters prepared from service provider audits are entered into the complaints of the Operations Call Centre and sent to various service providers, municipal departments for rectification.

CONCLUSION

The have scored average for its NRW interventions, but as indicated in the report the measure that are in place have the potential to significantly improve the situation. What is of significant in the areas of evaluation in the reports means that deal with NRW is not only an Infrastructure & Engineering problem, but a multi-disciplined and sectorial approach that is required as follows:

- Infrastructure & Engineering
- Budget & Treasury
- Human Settlements
- Corporate services (staffing etc.)

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