ERWAT: Second Quarter Departmental Performance Reporting Template

2023/24 QUARTERLY REPORTING TEMPLATE AGAINST THE APPROVED BUSINESS PLANS

1. Executive Summary by the Department

ERWAT's key performance areas are aimed at ensuring sustainable delivery of sanitation services with current resources and seeking to address backlogs in the provision of sanitation to the wider City of Ekurhuleni (CoE) area. The performance areas of ERWAT are focused on clean public administration and sustainable financial management, increasing revenue streams, protection of the environment through improved quality of effluent discharges and adherence to best practices, ensuring sufficient wastewater capacity is available to meet current and future demands and ensuring adequate maintenance is performed. Achievement of performance in these areas are in alignment with strategic priorities of City of Ekurhuleni and the national imperatives.

ERWATs performance in Quarter 2 of 2023/2024 has declined compared to Quarter 1. The entity achieved six (6) out of the thirteen (13) reportable indicators, halfway through the financial year, as shown in Table A, below. It is important to note that there are in total sixteen (16) performance indicators for 2023/2024, of which the city-wide indicators comprise of five (5) indicators, with only four (4) being reportable in Quarter 2 and eleven (11) departmental indicators of which nine (9) are reportable in this quarter. In addition, eight (8) of these indicators were newly introduced in the current financial year.

Table A: Summary of Service Delivery Performance

Service Delivery Monitoring					
	Total number of targets	**Total number of targets set for the quarter**	**Achieved**	**Not achieved**	**Variance**
City Wide SDBIP	5	4	3	1	1

Service Delivery Monitoring					
	Total number of targets	**Total number of targets set for the quarter**	**Achieved**	**Not achieved**	**Variance**
Department SDBIP	11	9	3	6	6

ERWAT is committed to the strategic direction of CoE and achieved three (3) of the four (4) reportable city-wide indicators. The entity has established a sound internal control environment and operating model to support clean public administration and ensuring the environment is not polluted. This is further reinforced by a solid financial management performance, which contributes to the sustainability of the bulk sanitation services in the greater City of Ekurhuleni.

However, the variance in the performance is due to ERWAT not achieving seven (7) of the thirteen (13) reportable indicators in Quarter 2. The city-wide indicator targets for external business and the departmental indicator targets for expenditure compared to the budgets for Capital projects, repairs and maintenance, the internal Green Drop status, the total operating expenditure, number of repeat audit findings and cancellation of tenders, were not achieved. The under expenditure is attributed to internal inefficiencies for maintenance and procurement processes, longer lead times to acquire equipment on capital projects, whereas the total operating expenditure was affected by the under expenditure on employee costs, repairs and maintenance and bulk purchases. The situation has necessitated the establishment of a focused intervention for maintenance by the Managing Director, to identify and address the bottlenecks in the system and to continuously monitor progress, so that processes are streamlined for optimal expenditure in these areas. The Green Drop performance based on ERWATs internal assessment, is mainly impacted by the majority of the WCWs operating above their respective design capacities and the outstanding requirements for the sewer network and pumpstations, which are managed by CoE. The detailed corrective measures for each of the missed targets are provided under Section 2 and are presently at various stages of implementation.

ERWAT with the support of City of Ekurhuleni is making good progress towards the feasibility assessment phases of the Mega Catalytic projects, which also forms part of the entity's 50-year Regionalisation plan to accommodate new developments within

the City of Ekurhuleni. Dependent on obtaining the necessary funding, the implementation phases are next to commence. The planned capacity upgrade needs of the Water Care Works are critical for the current backlog in capacity and to make provision for future housing and industrial developments. ERWAT is working hard to close the short-term gaps and to ensure that the capex budget allocation is fully utilised before the end of the current financial year. However, there remains a significant shortfall in the in the Capex funding requirements for ERWAT to implement the 5-year capex programme, to upgrade of the Water Care Works.

2. Service Delivery Monitoring

2.1 CITY-WIDE SDBIP

KPI 1 – City-Wide

Percentage of wastewater treatment capacity unused

Method of Measure

The percentage of wastewater treatment capacity unused. Sewer treatment capacity refers to the maximum amount of sewage that a facility is allowed to treat or to direct to a particular reuse or effluent disposal system. This refers to the collective available design capacity of all facilities servicing the municipal area. 'Available design capacity' refers to the overall design capacity that is available on a daily basis. If part of the treatment facility requires refurbishment or is not in operation this should be excluded from 'available design capacity'.

Evidence

Dated and signed report indicating actual flow received and treated per WCW and totalised for ERWAT system (19 WCW) drawn from LIMS (Laboratory Information Management System), in conjunction with the original or re-graded design hydraulic capacity (available capacity) per WCW for the ERWAT system (total of 19 WCW).

Q2 Target

-50%

Q2 Actual

-47%

Comment

The target has been met with a positive variance of -3%

Reasons for Variance

The daily inflows to the Water Care Works were less.

Remedial Actions

The implementation of the capacity upgrade or extension is subject to the availability of funds. Currently, the allocated MTREF does not have provision for any capacity upgrade

or extension projects. ERWAT require additional funding on the current budget allocation. ERWAT cannot commit to a specific date due to unavailability of budget.

KPI 2 – City-Wide

Total revenue generated from external business.

Method of Measure

Increased Commercial Business revenue generated from commercial sources (Absolute Rand Value per quarter). The indicator target is measured across the Quarters Revenue generated from: External Income (none NDA).

Evidence

Invoices - (The invoices to be coupled with sales report with a balance that agree to the amount reported for SDBIP purposes)

Q2 Target

R 9 000 000,00

Q2 Actual

R8 083 484.75

Comment:

Target not achieved.

Reason for Variance

The target for the second quarter of R9 000 000 in external revenue was not achieved, due to reduced daily volume of effluent and organic loading from one of the external clients 'site. The revenue target for Quarter 2 included income projections from beneficiation projects where external clients (industries) are billed for effluent discharge based on the volume and organic loading that is discharged at ERWAT Water Care Works. The penalty levied to the client is directly linked to the volume discharged and organic loading.

Remedial Action

A thorough investigation will be done on the reduction of volumes discharged by the external client.

KPI 3 – City-Wide

Audit Opinion

Method of Measure

The Audit Opinion is defined by the Auditor General. It is given across a qualitative, ordinal scale including Unqualified with no findings; Unqualified with findings; Qualified with findings; Adverse with findings; and disclaimed with findings. For those who have not completed the process 'Outstanding audits' are recorded.

Evidence

Dated and signed Audit report from Auditor General South Africa (AGSA).

Q2 Target

Unqualified Audit Opinion

Q2 Actual

Unqualified Audit Opinion

Comment:

Target achieved.

Reason for Variance

Target achieved.

Remedial Action

Not applicable, target was achieved.

KPI 4 – City-Wide

Number of Green Drop certified wastewater treatment works (Bi-annually)

Method of Measure

The indicator measures the number of wastewater treatment works that achieved Green Drop certification bi annually. external assessment is conducted by the National Department of Water and Sanitation bi-annually

Evidence

The Green Drop results as published by the National Dept of Water and Sanitation.

Q2 Target

N/A

Q2 Actual

N/A – To be reported in Q4.

Comment:

N/A – To be reported in Q4.

Reason for Variance

N/A – To be reported in Q4.

Remedial Action

N/A – To be reported in Q4.

KPI 5 – City-Wide

Percentage compliance with wastewater treatment works license conditions and/or exemptions standards

Method of Measure

The indicator measures the compliance of wastewater works effluent to the requirements of biological and chemical indicators as per the water use license granted by the Regulator. It is calculated by dividing the number of determinants complying to the Water Use Authorization with the total number of determinants.

Evidence

Water quality Data of each Wastewater Treatment Works (from the Lab) Spreadsheet used to calculate over all compliance. Applicable Water use authorization of each Wastewater Treatment Works.

Q2 Target

75%

Q2 Actual

83%

Comment

Target achieved.

Reason for Variance

KPI achieved.

The entity achieved the 75% quarterly target by a positive variance of 8%. This was due to the following reasons:

- Decrease in the number of loadshedding events.
- Significant increase in availability of critical chemicals.

It is important to take note that although the target was achieved, serious ongoing challenges remain. These challenges are discussed below as well as under Section 3.3.

Operational Challenges

The following operational challenges are experienced on an ongoing basis at the WCW operated by ERWAT:

1. Industrial pollution
2. Critical equipment failures
3. Loadshedding/power outages
4. Chemical shortages

1. <u>Industrial pollution incidents:</u>

The WCWs (water care works) listed in the Table below received industrial pollution during Quarter 2. The pollution impacts negatively on the biochemical treatment processes, the operation of the Works and subsequently results in the ability of the Works to meet the final effluent compliance levels. The total number of industrial pollution incidents increased in Q2 (wet season) as compared to Q1, as detailed in the Table below.

(Refer Section 3.4 for further details of organic loading per WCW)

WCW	Number Of Industrial Pollution Incidents during Q2	Number Of Industrial Pollution Incidents during Q1
Olifantsfontein	38	26
Hartebeestfontein	79	26
Benoni	0	1
Rynfield	0	22
Esther Park	38	8
Ancor	41	29
Daveyton	8	9
JP Marais	2	0
Jan Smuts	10	0
Welgedacht	1	10
Heidelberg	48	38
Carl Grundling	1	0
Tsakane	13	0
Herbert Bickley	19	18
Dekema	15	8
Ratanda	0	1

WCW	Number Of Industrial Pollution Incidents during Q2	Number Of Industrial Pollution Incidents during Q1
Rondebult	26	20
Vlakplaats	**19**	1
Total incidents	**320**	**234**

Hartebeestfontein, Olifantsfontein, Esther Park, Ancor, Dekema and Vlakplaats WCW were heavily impacted by industrial pollution. Q2 increase in industrial pollution incidents is an annual phenomenon whereby industries prepare for the year-end shut down in December by cleaning tanks and process units and dump the contents in the sewer lines. Even though ERWAT monitor, sample, analyse and report to CoE the industrial pollution received at the various WCW daily, it is often too late to track the source once the pollution enters the WCW, due to the vast sewer networks.
It should also be noted that even though some of the WCW listed in the Table met the final effluent compliance target, they are still negatively impacted by industrial pollution on specific days.

2. *Critical equipment failures*

The following WCWs experienced critical equipment failures impacting directly on the effluent compliance. The critical equipment failures are expressed as a % of the number of critical equipment failures over the reporting period divided by the total number of duty critical equipment that directly impacts final effluent water quality.

WCW	% of critical equipment not available Q2 2023/2024	% of critical equipment not available Q1 2023/2024
Ancor	4%	4%
Benoni	36%	31%
Carl Grundlingh	0%	5%
Daveyton	2%	0%
Dekema	19%	16%
Esther Park	39%	17%
Hartebeestfontein	19%	18%
Heidelberg	7%	7%

WCW	% of critical equipment not available Q2 2023/2024	% of critical equipment not available Q1 2023/2024
Herbert Bickley	7%	19%
Jan Smuts	0%	0%
JP Marais	9%	1%
Olifantsfontein	3%	6%
Ratanda	9%	6%
Rondebult	10%	7%
Rynfield	41%	53%
Tsakane	10%	5%
Vlakplaats	6%	13%
Waterval	3%	4%
Welgedacht	13%	14%
Average of 19 WCW	**12.47% 7 improvements, 3 remained the same and 9 deteriorated.**	**11.9%**

It should be noted that several critical equipment failures were not resolved in previous quarters and the impact on compliance are thereof carried over from quarter to quarter. The progress on restoration of critical equipment is directly proportional to the percentage maintenance expenditure for the quarter, and the progress made on addressing this aspect is fairly represented by the KPI on percentage maintenance expenditure.

3. *Power outages and Loadshedding*

The WCWs tabulated below experienced frequent loadshedding and/or power failures during Quarter 2 impacting the compliance of the WCWs directly. It must be noted that the impact of loadshedding during ESKOM stages 4-6 have an increasing detrimental impact on the WCW as the processes don't have sufficient time to recover before the next loadshedding event. It can be noted that in total 2893 hours of loadshedding and power failures were experienced on the WCW for Q2, compared to 4803 hours in Q1.

Some of the WCW do not have installed generators at all critical plant processes whilst others are not operational, awaiting repairs.

Plant		Quarter 2 2023				
		Scheduled Loadshedding	Total hours Loadshedding	Power failures	Total hours Power Failures	Total hours without power
Benoni	DD3	26	35	1	12	47
Esther Park	DD3	51	112	4	44	156
Hartebeestfontein	DD3	105	213	0	0	213
Olifantsfontein	DD3	0	0	0	0	0
Rynfield	DD3	82	159	1	9	168
Ancor	DD4	2	6	12	139	145
Daveyton	DD4	84	174	2	9	183
Jan Smuts	DD4	91	160	0	0	160
JP Marais	DD4	88	177	1	1	178
Welgedacht	DD4	0	0	4	44	44
Herbert Bickley	DD5	16	32	3	15	47
Heidelberg	DD5	87	177	18	139	316
Tsakane	DD5	105	220	2	26	246
Ratanda	DD5	86	176	10	51	227
Carl Grundlingh	DD5	0	0	1	7	7
Dekema	DD6	128	269	0	0	269
Rondebult	DD6	28	56	6	119	175
Vlakplaats	DD6	95	193	5	119	312
Waterval	DD6	0	0	0	0	0
Total		Loadshedding hours	2159	Power failure hours	734	
Total number of hours without electricity on all Water Care Works for Q2						**2893**

Critical Chemical shortages

Ferric chloride is used in the treatment process to remove ortho-phosphate from the final effluent as well as improving the settleability of solids in the settling tanks.

Due to challenges at the manufacturing plants of the sole producer of the product in Africa and with the suitably qualified transportation, shortages of ferric chloride are experienced from time to time despite placing orders with suppliers timely. These shortages impact directly on the quality of the final effluent at the affected the WCW. The table below provides the days without availability of essential treatment chemicals in the reporting quarter.

WCW	Q2 Ferric chloride shortages (Number of days)	Q1 Ferric chloride shortages (Number of days)
Ancor	4 of 92	52 of 92
Dekema	22 of 92	5 of 92
Rondebult	7 of 92	38 of 92
Vlakplaats	19 of 92	14 of 92
Herbert Bickley	15 of 92	0 of 92
Hartebeestfontein	21 of 92	55 of 92
Rynfield	8 of 92	28 of 92
Avg. number of days without Ferric chloride	**13.7**	**27.4**

Action plans:

1. Industrial pollution incidents

ERWAT works closely with the CoE and report all incidents as soon as detected to assist in tracing the source of the pollution. However, the pollution source is not often identified as it is difficult to trace in the vast sewer networks. Illegal tanker discharges were however identified to be one of the primary sources of pollution. Subsequently, some of the authorised open manholes used by tanker services were closed by the COE to tighten supervision, but more interventions are required. Fingerprinting of the pollution by the ERWAT Laboratory is a valuable tool to assist CoE in identifying the industrial pollution sources and to apply the By-Laws. ERWAT has also introduced an organic tariff formula, included in the Service Delivery Agreement whereby the City will be invoiced for increased organic content (strength) beyond the capabilities of the relevant WCW

2. Critical equipment failures

Asset Care plans for critical equipment were developed but only partially implemented. Breakdowns still occur frequently, and the number of outstanding jobs for critical equipment is significant, impacting the final effluent quality directly. OPEX funds are urgently required to implement the full asset care plans and reduce the failure rate and improve reliability. A joint task team (comprising of Operations, Maintenance, Finance, Strategy, Monitoring & Evaluation, Infrastructure Planning and Projects Departments and Office of the Managing Director) has been established (effective from Q2) to

closely monitor progress implementation of outstanding critical maintenance work and improve the internal business processes.

3. Power outages and Loadshedding

Short to medium term: Standby diesel generators are available at some of the most critical process units of the various WCW. Several new generators have been procured to cover all WCW critical process units. Installation is expected to be completed by Q3 of 23/24 as per approved Capex plan. Long term: ERWAT has applied for funding to DBSA and IDC to install renewable energy at some of the identified WCW. Awaiting outcome of the application in Q3.

4. *Chemical shortages (Ferric chloride)*

ERWAT is in daily contact with the supplier to secure product and prioritise deliveries according to the stock levels of the various WCW. The production has stabilised, and product stock levels are improving. ERWAT is currently busy with the procurement process for alternative chemicals to mitigate any future shortages.

KPI 6 – Departmental SDBIP

% Capital expenditure on planned projects

Method of Measure:

Increase ERWAT Wastewater Treatment Plants (WWTP) treatment capacity and improve process efficiency through infrastructure development projects (CAPEX). The total capital expenditure on major capital projects associated with increasing capacity and improving process efficiency in ERWAT Wastewater Treatment Plant according to green drop requirements and ERWAT Facility Development Plan (FDP 2032).

Evidence

a) Project progress reports (weekly, quarterly and annual reports)
b) Payments certificates
c) Invoices

Q2 Target

60%

Q2 Actual

40.08%

Reasons for Variance

ERWAT has currently spent R 51 154 785,82 (40.08%) of its capital budget at the end of the second quarter. The planned SDBIP target for the quarter has not been achieved with a 19.92% negative variance. The reasons for the poor performance in expenditure, include long lead time on delivery of the equipment, mainly for the supply and installation of Generators for emergency backup power for the Water Care Works.

Remedial Action:

Accelerate project timelines and compress project schedule.

KPI 7 – Departmental SDBIP

Percentage of repairs and maintenance budget spent

Method of Measure:

The indicator measures the total budget spent. The indicator target is measured cumulatively across the quarters. The indicator formula is (1) Expenditure year to date / (2) total approved maintenance budget approved.

Evidence

Finance year to date expenditure report (Budget Variance Report)

Q2 Target

50%

Q2 Actual

25.17%

Comment:

Target not achieved.

Reasons for Variance

The reason for not achieving the target is due to most of the maintenance requires the appointment of service providers. Delays have been experienced in procurement process and this is being addressed at the highest level.

Remedial Actions:

A task team has been put together to identify the constraints in the maintenance services procurement process, this team congregates on regular basis to analyse the maintenance services procurement value chain and work orders requests approval stage gates performance assessment. This proactive initiative is intended to target areas of concern and unblock any process delays to improve maintenance services acquisition efficiency.

KPI – 8 Department SDBIP

Percentage of procurement spend allocated to SMME's

Method of Measure

The indicator measures the percentage of procurement spend allocated to SMME's through ensuring appropriate application of the preferential procurement practices. This support will be calculated aa a percentage of the total value paid to Small, Medium and Micro Enterprises either directly or via the principal contractor in terms of a Preferential Procurement Regulation 4 or 9 contractual condition.

The indicator formula is:

(1) rand value of procurement spend allocated to SMME's / (2) rand value of total procurement spend *100

Evidence

Award and payment listing (Report) of SMME expenditure amount (including invoices).

Q2 Target

60%

Q2 Actual

96%

Comments

Target achieved.

Reason for Variance

Target exceeded by 36%, because of measures put in place at specification stage to prioritise SMME's.

Remedial Action

Not applicable, target was achieved.

KPI 9 – Departmental SDBIP

Number of Repeat Audit Findings

Method of Measure:

The indicator tracks the number of findings made on the same matter as of the last audit cycle. The “Repeat” findings refer to those findings that have persisted from one year of reporting to the next. These are identified as repeat findings by the Auditor-General on the following administrative areas including but not limited to: i) Annual financial statements and annual report.

The formula for the indicator is the (1) Simple count of the number of "repeat" findings itemized in the Auditor-General's report of each municipality.

Evidence

Dated and signed Audit report from Auditor General South Africa (AGSA).

Q2 Target

0 repeat audit findings

Q2 Actual

4 repeat audit findings.

Comment:

Target not achieved.

Reason for Variance

Weakness in internal controls in SCM.

Remedial Action

Management to enhance internal controls to prevent splitting and enhance internal controls in SCM and contracts management.

KPI 10 – Departmental SDBIP

Number of Green Drop (90%) wastewater treatment works (Bi-quarterly)

Method of Measure:

The indicator measures the number of wastewater treatment works that achieved the Green Drop standard bi quarterly. (90%) Internal assessment is conducted by ERWAT Compliance Office (internal assessment.)

Evidence

The Green Drop scorecard as released by the internal ERWAT Compliance office (in-house. Assessment

Q2 Target

6(90%)

Q2Actual

0(90%)

Comment:

Target not achieved.

2023-2024 Q2 Internal Green Drop Performance

The figure above depicts the 2023-2024 (July-December) internal Green Drop performance per WCWs. It is evident from the graph that three (3) WCWs: Carl Grundlingh JP Marais and Daveyton achieved Good Green Drop status as compared to the other sixteen (16) WCWs which are on the average Green Drop performance with Tsakane being the lowest by 57.6%. None of the WCWs achieved Green Drop excellence status of 90% or more.

Reasons for Variance

The reasons for not achieving the target attributed from the following areas of concerns as identified during the Internal Green Drop assessments:

- Unavailability of funds to address risks identified in the W_2RAP, in particular the required capacity upgrades of WCWs.
- Effluent water quality non-compliance attributed due to but not limited to the following:
    - Organic and Hydraulic over-loading.

- Load-shedding.
- Critical equipment failure.
- Insufficient supply of Ferric chloride in August 2023 due to manufacture shutdown.

- Disposal practice for both solid and sludge not in line with the WRC sludge management guidelines disposed into unlined Paddies and/or Lagoons at the following WCWs; Ancor, Carl Grundlingh, Daveyton, Dekema, Heidelberg, Jan Smuts, Rondebult, Tsakane, Waterval.

- Unavailability of the required Porfolio of Evidence (PoE) from the Water Services Authorities (CoE and LLM) for information relating to:
  - Implementation of Incident Management Protocols,
  - Site-specific O&M Budget and Expenditure for the sewer network and pump stations,
  - Pump station asset register and asset maintenance plans,
  - Sewer network and pumps stations maintenance teams, repairs and maintenance schedules and related maintenance records.
  - Annual condition assessment report for sewer network and pump stations (current Report outdated).
  - Evidence on the enforcement of By-laws by both CoE and LLM for monitoring of industrial effluent discharge and tankers.
- Pump stations dysfunctionality causing long term spillage (Confirmed during the technical site inspection).

Remedial Actions:

The following are the remedial actions required to improve and/or achieve the GD target:

- Prioritise the CAPEX budget to address the required WCW upgrades, replacement of aged equipment and refurbishments in line with the W_2RAP.
- Review, update and approve all the outdated documents namely, Process Audits for all WCWs and ERWAT W_2RAP.
- Establish a joint Task Team with the Water Services Authorities (CoE and LLM) to address Green Drop requirements.

Green Drop Champions, together with Plant Management to source all the required PoEs from the internal support Departments as per Green Drop requirements.

KPI 11 – Departmental SDBIP

Percentage of total municipal operating expenditure spent on contracted services physically residing within the municipal area

Method of Measure:

This indicator measures the value of municipal operating expenditure that has been spent on payments to contracted organisations with a physical address within the municipal area as a percentage of the total operating expenditure on payments to all contracted organisations. Contracted services are inclusive of consultancy services and refer to services rendered by any entity outside of the municipality secured through a public procurement process.

Indicator Formula: (1) R-value of operating expenditure on contracted services within the municipal area / (2) Total municipal operating expenditure on contracted services. The indicator is reported quarterly.

Evidence

Signed Expenditure report on municipal operating expenditure spent on contracted services

Q2 Target

4%

Q2 Actual

72%

Comment:

Target Achieved

Reasons for Variance

A total operating expenditure value of R68 136 102.44 was paid on contracted services (all active contracts that were awarded through the public procurement process) whereof R49 065 151.85 were paid to contracted service providers within the municipal area (COE)

Remedial Actions

Not applicable, target was achieved.

KPI 12 – Departmental SDBIP

Total Operating Expenditure as a percentage of Total Operating Expenditure Budget

Method of Measure:

The indicator measures the extent to which operating expenditure has been spent during the financial year. Operating Expenditure (non-capital spending) is costs which the municipality incurs through its

normal operations. Indicator Formula: (1) Actual Operating Expenditure / (2) Budgeted Operating Expenditure This indicator results will be reported quarterly.

Evidence

Signed Excel spreadsheet as extracted from Budget statements for the period.

Q2 Target

40%

Q2 Actual

37.41

Comment:

Target not achieved.

Reasons for Variance

Under expenditure on employee costs, repairs and maintenance, bulk purchases and general expenditure

Remedial Actions:

Employee costs:

Acceleration of the filling of vacant positions as per the recruitment plan in the third and fourth quarter.

Repairs and maintenance

Acceleration of the supply chain management processes to put relevant contracts in place and the resolution of delays experienced in the procurement process.

Bulk purchases:

Acceleration of the supply chain management processes to put relevant contracts in place for alternative chemicals (e.g. Aluminium Suplhate) to reduce delays in the procurement of essential chemicals. While Loadshedding also has a significant impact on the ability to spend the electricity budget allocation, fuel costs to power the generators has increased but not to the same extent of electricity budget.

General expenditure:

Acceleration of the procurement of protective clothing and the appointment of a service provider for the transport of bio-solids.

KPI 13 – Departmental SDBIP

Irregular, Fruitless and Wasteful, Unauthorised Expenditure as a percentage of Total Operating Expenditure

Method of Measure:

The indicator measures the extent to which the municipality has incurred irregular, fruitless and wasteful and unauthorised expenditure. Fruitless and wasteful expenditure is expenditure that was made in vain and would have been avoided had reasonable care been exercised. Irregular expenditure is incurred by the municipality in contravention of a requirement of the law. Unauthorized expenditure includes overspending of the total amount appropriated in the approved budget. Indicator Formula: ((1) Irregular + (2) Fruitless and Wasteful + (3) Unauthorised Expenditure) / (4) Total Operating Expenditure The Audited Annual Financial Statements for the previous financial year are finalised in January of the following financial period for the previous financial period, therefore this indicator will be reported annually in the Q3 of the following financial year for the previous financial year-end.

Evidence

The Audited Annual Financial Statements for the previous financial year as finalised in January of the following financial period for the previous financial period.

Q2 Target

N/A

Q2Actual

N/A-To be reported in Q3.

Comment:

N/A-To be reported in Q3.

Reasons for Variance

To be reported in Q3.

Remedial Actions:

To be reported in Q3.

KPI 14 – Departmental SDBIP

Repairs and Maintenance as a percentage of property, plant, equipment and investment property

Method of Measure:

This indicator measures the extent at which the municipality spent on repairs and maintenance of infrastructure assets relative to its asset base. Repairs and maintenance are a group of accounts consisting of labour costs, material costs, secondary costs, etc.

Evidence

The Audited Annual Financial Statements for the previous financial year as finalised in January of the following financial period for the previous financial period

Q2 Target

2%

Q2 Actual

3.20%

Comment:

Target Achieved

Reasons for Variance

The target of 2% was exceeded by mid-year, however the main assessment will be done at year end where the target is 4%.

Remedial Actions

N/A – Target achieved.

KPI 15 – Departmental SDBIP

Percentage of tender cancellations

Method of Measure:

This indicator measures the percentage of tender cancellations in relation to the total number of tender business cases that was recorded, advertised and closed. Indicator Formula: (1) Number of tenders cancelled / (2) Total number of tenders advertised and closed. The indicator is reported quarterly.

Evidence

Signed and dated SCM report containing tender cancellations in relation to the total number of tender business cases that was recorded, advertised and closed.

Q2 Target

10%

Q2 Actual

44%

Comment:

Target not achieved.

Reasons for Variance

Two bids were cancelled due to change is scope of works, one bid was cancelled as the services were no longer required in the period advertised and one bid was cancelled due to an awarded bidder not accepting the award.

Remedial Actions:

Review the specifications and get sign-off of the specs by the respective Executive Managers. Initiate the tender process well in advance.

KPI 16 – Departmental SDBIP

Net Surplus /Deficit Margin for Wastewater

Method of Measure:

Wastewater is measured separately to track the extent to which the municipality generates surplus or deficit. Total expenditure, in this context, refers to direct costs, overheard costs and capital financing costs incurred in providing wastewater and sanitation services. Direct costs include employee related costs, bulk purchases, repairs and maintenance, contracted services, debt impairment, depreciation and other costs not grouped under the above-mentioned categories. Overheard costs, also referred to as indirect costs, are costs that are not directly attributable to a service but are incurred in running a municipality, for example office space or computer software and all charges or recoveries. Capital financing costs are costs associated with financing infrastructure expansion or rehabilitation of existing assets, for example interest and redemption charges.

The Audited Annual Financial Statements for the previous financial year are finalised in January of the following financial period for the previous financial period, therefore this indicator will be reported annually in the Q3 of the following financial year for the previous financial year-end.

Evidence

The Audited Annual Financial Statements for the previous financial year as finalised in January of the following financial period for the previous financial period.

Q2 Target

N/A

Q2 Actual

N/A-To be reported in Q3.

Comment:

N/A-To be reported in Q3.

Reasons for Variance

To be reported in Q3.

Remedial Actions:

To be reported in Q3.

3.1 City-Wide/Institutional SDBIP 2023/24

Refer to the City-wide SDBIP 2023/24.

Table1: City-Wide Indicators

NB: Please note that reasons for variance must be provided for both overachievement and under achievement

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
IDP Strategic Objective 1: To deliver reliable, affordable and sustainable services and ensure improved infrastructure maintenance															
Ekurhuleni Water Care Company (ERWAT)	Improved quality of water (incl. wastewater)	WS4.31	Percentage of wastewater treatment capacity unused	Dated and signed report indicating actual flow received and treated per WCW and totalised for ERWAT system (19 WCW) drawn from LIMS (Laboratory Information Management System), in conjunction	New KPI	-50%	-50%	-47%	-2%	The target was achieved	-48%	Water Care Works received lesser daily inflows.	The implementation of the capacity upgrade or extension is subject to the availability of funds. The currently allocated MTREF does not have provision	CAPEX	

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
				with the original or re-graded design hydraulic capacity (available capacity) per WCW for the ERWAT system (total of 19 WCW).									for any Upgrade or Extension projects, ERWAT require additional funding on the current budget allocation. ERWAT cannot commit to a specific date due to unavailability of budget		
	IDP Strategic Objective 2:TO Build a Clean, Capable and Modernised Local State														

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
	Improved Quality of water (including wastewater)	ER W1.1	Total revenue generated from external business	Invoices coupled with general ledger with a balance that agree to the amount reported	R40 547 890	R35 700 000.00	R9m million	R 8 083 484.75	(R 916 515.25)	The target was not achieved	R 8 083 484.75	The target was not achieved due to reduced daily volume of effluent and organic loading from one of the clients 'site which impacted on the total revenue collected.	A thorough investigation will be done on the reduction of volumes discharged by the external client.	Opex	Opex
	To build a clean, Capable and Modernised Local State	ER W1.2	Audit Opinion	Dated and signed Audit report from AGSA	Unqualified Audit Opinion	Unqualified Audit Opinion	Unqualified Audit Opinion	Unqualified Audit Opinion achieved	No variation	Unqualified Audit Opinion achieved	Target achieved	NA	NA	OPEX	OPEX

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
	Improved Quality of water including wastewater	ER WA T1.5	Number of Green Drop certified wastewater treatment works	The Green Drop results as published by the National Department of Water and Sanitation	New KPI	6	N/A	N/A	N/A			N/A	N/A	N/A	N/A
IDP Strategic Objective 4: To protect the natural environment and promote resource sustainability															
Ekurhuleni Water Care Company (ERWAT)	Improved Quality of water (including wastewater)	ER W1.3	Percentage compliance with wastewater treatment works license conditions and/or exemptions standards	Water quality analyses results of each Wastewater Treatment Works (from the LIMS) is downloaded. Spreadsheet	85%	75%	75%	83%	8%		Target Achieved	1. Decrease in the number of loadshedding events. 2. Slight increase in availability of		R181 582 642.25	R144 773 128.19

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
				is used to calculate average compliance of each of the 3 compliance categories and then the average of the 3 categories gives the over all compliance per WCW and then per ERWAT system(19 WCW). Applicable Water use authorization limits of each Waste Water Treatment Works							critical chemicals			

3.2 Entity's SDBIP Score card with Key Performance Areas and Indicators 2023/24

Table 2: Departmental Entity's SDBIP

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
IDP Strategic Objective 2: To build a clean, capable and modernized local state															
Ekurhuleni Water Care Company (ERWAT)	Improved Quality of Water including Wastewater	1.M	Percentage of Capital Expenditure on Planned Projects	Finance year to date expenditure report	99.56% (2021/2022)	95%	60%	40.08%	-19.92%	Target not achieved	Not Achieved	Long lead items on current projects	Acceleration plans in place	R 76 587 656,40	R 51 154 785,82
	Improved Quality of Water including Wastewater	2.M	Percentage expenditure on Repairs and Maintenance Budget	Expenditure report from Finance AND Listings of R&M vote numbers and expenditure	89% 2021/2022	95%	50%	25.17%	24.83%	25.17%	Target Not Achieved	The reason for not achieving our target is that most of the maintenance work orders are being processed to appoint service providers. Delays have been experienced in procurement process and this is being addressed at the	A task team has been put together to identify the constraints in the maintenance services procurement process, this team congregates on regular basis to analyse the maintenance services	R 38 953 466.50 (Quarterly budget) R 155 813 866.00 (Annual Budget)	R 23 651 046. 27

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
												highest level.	procurement value chain and work orders requests approval stage gates performance assessment. This proactive initiative is intended to target areas of concern and unblock any process delays to improve maintenance services acquisition efficiency.		
	Improved Quality of Water including Wastewater	3.M	Percentage of procurement spend allocated to SMME's	Award and payment listing (Report) of	91.4% 2021/2022	60%	60%	96%	36%	96%	Target Achieved	Measures put in place at specification stage to	None	OPEX	R118 989 799.82

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
				SMME expenditure amount (including invoices).								prioritise SMME's.			
	Improved Quality of Water including Wastewater	4.M	Number of Repeat Audit Findings	AGSA signed management letter	8 repeat audit findings noted in the AGSA signed management letter for the 2021/2022 regularity audit	0 repeat audit findings noted in the AGSA signed management letter for the 2022/2023 regularity audit	0	4	4	4	Target Not Achieved	Weakness in internal controls in SCM.	Management to enhance internal controls to prevent splitting and enhance internal controls in SCM and contracts management.	OPEX	OPEX
	Improved quality of water including wastewater	6.M	Number of Green Drop (90%) wastewater	The Green Drop scorecard as released by	New KPI	6 (90%)	6 (90%)	0	-6			- Unavailability of funds to address	The following are the remedial	R181 582 642.25 (Departmental)	R144 773 128.19 (Departmental)

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
			treatment works (Bi-quarterly)	the internal ERWAT Compliance office (in-house. Assessment								risks identified in the W2RAP, in particular the required capacity upgrades of WCWs. - Effluent water quality non-compliance attributed due to but not limited to the following: - Organic and Hydraulic over-loading.	actions required to improve and/or achieve the GD target: Prioritise the CAPEX budget to address the required WCW upgrades, replacement of aged equipment and refurbishments in line with		

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
												- Load-shedding. - Critical equipment failure. - Insufficient supply of Ferric chloride in August 2023 due to manufacture shutdown. - Disposal practice for both solid and sludge not in line with the WRC sludge manageme	the W_2RAP. Review, update and approve all the outdated documents namely, Process Audits for all WCWs and ERWAT W_2RAP. Establish a joint Task Team with the Water Services Authorities (CoE and LLM)		

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
												nt guidelines disposed into unlined Paddies and/or Lagoons at the following WCWs; Ancor, Carl Grundlingh, Daveyton, Dekema, Heidelberg, Jan Smuts, Rondebult, Tsakane, Waterval. - Unavailability of the required PoE from	to address Green Drop requirements. • GD Champions together with Plant Management to source all the required PoEs from the internal support Departments as per GD requirements.		

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
												the Water Services Authorities (CoE and LLM) for information relating to: - Implementation of Incident Management Protocols, - Site-specific O&M Budget and Expenditure for the sewer network and pump stations,			

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
												- Pump station asset register and asset maintenance plans, - Sewer network and pumps stations maintenance teams, repairs and maintenance schedules and related maintenance records. - Annual condition assessment report for sewer			

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
												network and pump stations (current Report outdated). - Evidence on the enforcement of By-laws by both CoE and LLM for monitoring of industrial effluent discharge and tankers. - Pump stations dysfunctionality causing			

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
												long term spillage (Confirmed during the technical site inspection)			
	Financial Management	LED 1.11	Percentage of total municipal operating expenditure spent on contracted services physically residing within the municipal area	Signed Expenditure report on municipal operating expenditure spent on contracted services	New KPI	8%	4%	72%	64%	72%	Target Achieved	A total operating expenditure value of R68 136 102.44 was paid on contracted services (all active contracts that were awarded through the public procurement process) whereof R49 065 151.85 were paid to contracted services within the	None	OPEX	R49 065 151.85

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
												municipal area (COE)			
	Financial Management	FM1.12	Total Operating Expenditure as a percentage of Total Operating Expenditure Budget	Signed Excel spreadsheet as extracted from Budget statements for the period	New KPI	95%	40%	37.41%	2.59%	37.41%	Target Not Achieved	Under expenditure on employee costs, repairs and maintenance, bulk purchases and general expenditure.	Employee costs: Acceleration of the filling of vacant positions as per the recruitment plan in the third and fourth quarter. Repairs and maintenance Acceleration of the supply chain managem	OPEX	OPEX

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
													ent processes to put relevant contracts in place and the resolution of delays experienced in the procurement process. Bulk purchases: Acceleration of the supply chain management processes to put relevant contracts in place for alternative chemicals (e.g. Aluminium Suplhate) to reduce		

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
													delays in the procurement of essential chemicals. While Loadshedding also has a significant impact on the ability to spend the electricity budget allocation, fuel costs to power the generators has increased but not to the same extent of electricity budget. General expenditure: Acceleration of the procurement of		

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
													protective clothing and the appointment of a service provider for the transport of bio-solids.		
	Financial Management	FM4.11	Irregular, Fruitless and Wasteful, Unauthorised Expenditure as a percentage of Total Operating Expenditure	The Audited Annual Financial Statements for the previous financial year as finalised in January of the following financial period for the previous financial period,	New KPI	0%	0%	Not due	N/A	N/A	Not due	N/A	N/A	OPEX	N/A

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
	Financial Management	FM5.31	Repairs and Maintenance as a percentage of property, plant, equipment and investment property	The Audited Annual Financial Statements for the previous financial year as finalised in January of the following financial period for the previous financial period,	New KPI	4%	2%	3.2%	1.2%	3.2%	Target Achieved	The target of 2% was exceeded by mid-year, however the main assessment will be done at year end where the target is 4%.	Not applicable achieved	OPEX	N/A
	Financial Management	FM6.13	Percentage of tender cancellations	Signed and dated SCM report containing tender cancellations in relation to the total number of	New KPI	10%	10%	44%	34%	44%	Target not achieved	Two bids were cancelled due to change is scope of works, one bid was cancelled	Review the specifications and get sign-off of the specs by the respective Executive Managers. Initiate the tender process well in advance.	OPEX	N/A

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
				tender business cases that was recorded, advertised and closed.								as the services were no longer required in the period advertised and one bid was cancelled due to an awarded bidder not accepting the award.			
	Improved revenue and debtors' management	FM7.33	Net Surplus /Deficit Margin for Wastewater	The Audited Annual Financial Statements for the previous financial year as	New KPI	5%	N/A	N/A - To be reported in Quarter 3	N/A - To be reported in Quarter 3	N/A - To be reported in Quarter 3	N/A - To be reported in Quarter 3	To be reported in Quarter 3	To be reported in Quarter 3	OPEX	N/A

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2022/23)	Annual Target (2023/24)	Planned Target Quarter 2	Actual Output Quarter 2	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 2	Actual Expenditure Quarter 2
				finalised in January of the following financial period for the previous financial period,											

3.3. Reflection on operations/ day-to-day activities (Analytical Narrative Account)

Flows

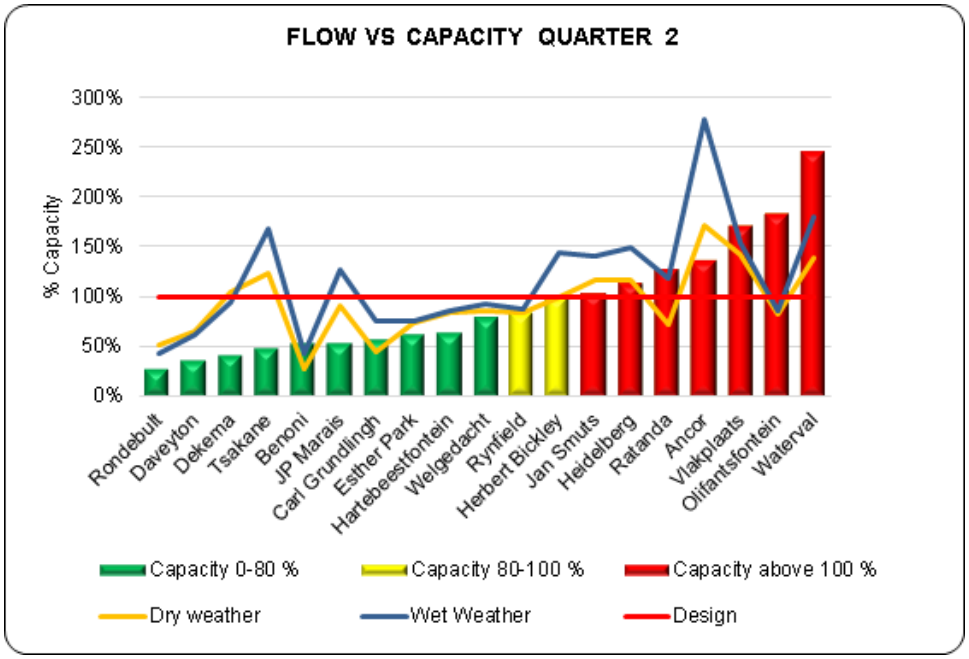


Figure 1

Flow and Rainfall

	Design Hydraulic Capacity (Ml/d)	Average Actual Flow Q2 Ml/d)	Rainfall Q2(mm)
Ancor	15.00	20.30	211.50
Benoni	7.50	3.96	183.00
Carl Grundlingh	5.20	2.94	291.00
Daveyton	19.00	6.83	185.10
Dekema	31.00	12.66	189.50
Esther Park	1.40	0.87	252.00
Hartebeestfontein	63.00	39.88	266.00
Heidelberg	5.40	6.17	273.00
Herbert Bickley	15.10	15.03	242.00
Jan Smuts	6.00	6.21	181.00
JP Marais	15.00	8.12	198.00
Olifantsfontein	65.00	119.03	183.80

	Design Hydraulic Capacity (Ml/d)	Average Actual Flow Q2 Ml/d)	Rainfall Q2(mm)
Ratanda	4.70	5.97	268.00
Rondebult	20.00	5.62	135.00
Rynfield	9.80	8.30	200.00
Tsakane	20.00	9.84	193.00
Vlakplaats	55.00	94.25	221.10
Waterval	170.00	416.43	98.00
Welgedacht	95.00	75.01	119.30
Total	**623.10**	**857.43**	**3860.00**

Information is based on 2 months

A total of 79 853.81. Ml was treated in Quarter 2, at an average of 857.43 Ml/day, utilising 137.54% of the available capacity, as compared with Q1 where 73 394.75 Ml was treated at an average of 797.77 Ml/day, utilising 128% of the available capacity. The slightly increased overcapacity is due to more rainfall received in Q2 as compared with Q1 (dry season)

As can be noted in the above graph, during Q2 seven (7) out of nineteen (19) WCW were operating above their hydraulic design capacity, two (2) operating between 80% and 100% and ten (10) below their hydraulic design capacity.

In Q2 Waterval operating at 245%, Olifantsfontein operated at 183%, Vlakplaats operated at 171%, Ancor operated at 135%, Ratanda operated at 127% and Heidelberg operated at 114% of their design capacity.

Until the overloaded WCW are upgraded/extended, serious challenges remain to support the CoE in meeting the Growth Development Strategy (GDS2055) and the development of the Aerotropolis.

Organic Load

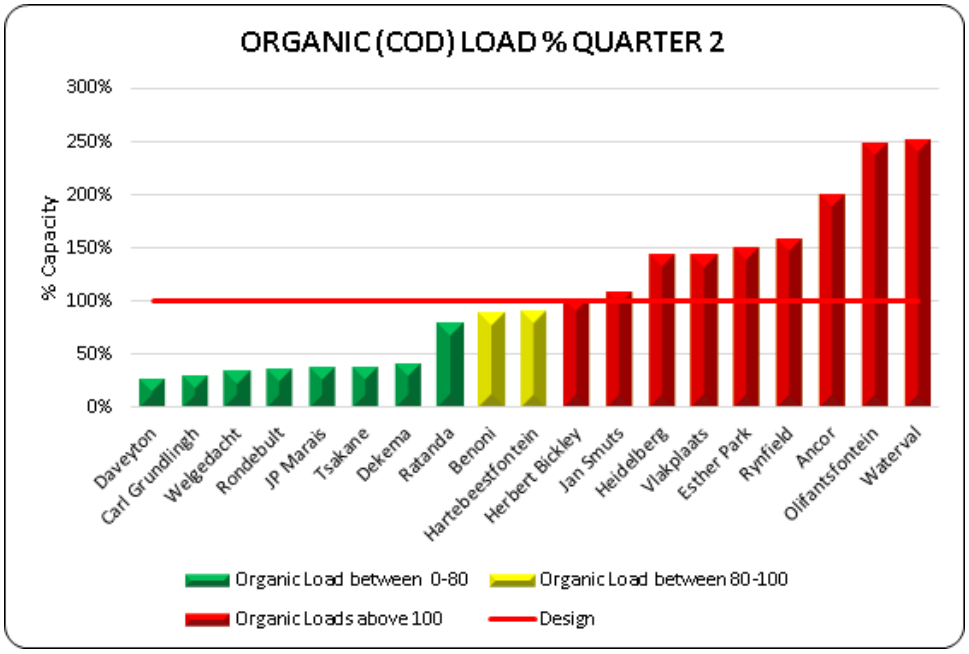


Figure 2

As can be noted, 9 (nine) WCW operated above 100% organic load, 2 (two) WCW's operated between 80-100% of the organic design capacity and 8 (eight) below their design capacity during Q2(wet season), as compared to 6 (six) WCW operated above 100% organic load, 3 (three) WCW's operated between 80-100% of the organic design capacity and 10 (ten) below their design capacity during Q1 (dry season).

3.4. Service Delivery Highlights and Challenges

3.4 Plant Specific Challenges

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
Benoni	Benoni complied with overall WUL effluent standards with compliance of Physical= 98% Chemical = 99 % Micro= 82% The average compliance target of 90% was achieved with the overall	Plant operated at 53 % of re-graded hydraulic capacity in Q2	Plant operated at 159% of re-graded organic capacity in Q2 due to high COD received	There were abnormal flow fluctuations in Q2 due to load shedding.	There was 14 high strength of COD from industrial pollution in Q2	6 Level 3 Equipment failures occurred in Q2	There were 26 power outages in Q2 and duration was 35 hrs	Open digesters walls are cracking,	None	None	Dried sludge is stockpiled at the plant.	Unlined sludge paddies and maturation ponds could cause possible ground water pollution in Q2	None	None	Sludge classification B2b. Sludge Samples were taken to the Laboratory for analysis of the new sludge classification. Screenings and grits that are generated at the plant and	Road is accessible	Portable water is available

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	compliance of 93%.														are collected by CoE.		
Esther Park	Esther Park complied with overall WUL effluent standards with compliance of Physical= 97% Chemical = 87 % Micro= 85% The average compliance target of 84% was achieved with the overall	Plant operated at 62 % of hydraulic capacity (Based on regraded capacity of 1.4 Ml/d)	Plant operated at 167% of organic capacity for Q2 2023/ 2024.	0x abnormal flows recorded for Q2 2023/ 2024 above regraded design capacity of 1.4 Ml/d	39x Industrial effluent pollution incidents in Q2 2023/ 2024.	5x critical equipment failure occurred in Q2 2023/ 2024	51x Loadshedding failure incidents recorded in Q2 2023/ 2024 lasting for total downtime of 112hours. 3x Unplanned failure incidents recorded in Q2 2023/ 2024 lasting for total downtime of 37 hours. Total without Electricity 114 hours.	Reactor walls are leaking	Not applicable	None	Not applicable	Not applicable	Not applicable	Not applicable	Screenings and grits collected by MCC Security and Projects.	Access road repaired.	Drop in water pressure occasionally that affects chlorine dosing

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	compliance of 90%.																
Hartebeestfontein	Hartebeestfontein complied with overall WUL effluent standards with compliance of Physical= 77% Chemical = 46 % Micro= 28% The average compliance target of 50% was not achieved with the overall compliance of 50%.	Plant operated at 63% of hydraulic capacity.	Plant operated at 152% of organic capacity	The plant experienced fluctuations inflows in October-December 2023 (Q2) due to continuous load shedding with an average flow of 40 Ml/d.	Plant received industrial high strength effluent 56 times out of 92 days during October-December 2023 (Q2).	15 Level 3 Equipment failures occurred in Q2.	There were 105 power outages in 2023 (Q2) for duration of 213 hours.	Aging infrastructure: Ferric plant, chlorine, thickeners, clarifier 1-4 bridge and siphons.	Digester 1, 4,6 and 9 sludge recirculation nozzles blocked. Digester 1-9 feeding lined was blocked.	There were 0 veld fires experienced in October-December 2023 (Q2)	589 616 kg of dry sludge was irrigated to the 200 hectares farm.	Borehole two has high concentration of Nitrates.	Sinkhole next to the fence towards FST 5 & 6 and around the Farm.	License amendment with relaxation on Electrical conductivity, Ammonia, E.coli and COD.	Sludge classification is B2c, not suitable for the intended purpose; this requires further engagement with the farmer.	The grading need to be done around the fence by June 2023. Sampling point access road need to be graded.	There was 2 portable water leakage next to module 1 & 2 MCC room.

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
Olifantsfontein	Olifantsfontein complied with overall WUL effluent standards with compliance of Physical= 75% Chemical = 57 % Micro= 77% The average compliance target of 60% was achieved with the overall compliance of 70%.	Plant operated at a hydraulic capacity of 183% in Q2 23-24 With an average flow of 119ML/d	Plant operated at 130% of organic capacity	There were abnormal fluctuations of inflows in Q2 2023 With ranges of 98-157 Ml/d	Plant received industrial high strength influent (very high Electrical Conductivity above 80 mS/m) throughout the month of November. Plant also experiences fine sand ingress, and fats pollution that	6Level 3 Equipment failures occurred in Q2 2023. And. 2 of 91 (3%) critical equipment's reported	There were 0 power outages in November	Module 3 Anaerobic digesters.	Digester 1 of 6 digesters is blocked due to sand accumulation	There were no veld fire incident which occurred in November.	Total sludge of 184 028kg was produced in November-23. Sludge production is affected by frequent FBP and DAF unit breakdowns. Sludge is disposed on different farms around Bapsfonte	Unlined emergency dams contaminating borehole no.2&3. Borehole 1 runs dry during dry seasons	2 x Sinkholes behind and in front of the old laboratory which occurred in Dec 2019 still not rehabilitated	Olifantsfontein WUL is stringent on Ammonia of < 2mg/l, SS of 15 mg/l and EC of < 80 mS/m.	Sludge is classified into three streams: (1). Dewatering unit(B3a), the sludge not suitable for cultivating crops such as fruits trees (2). Drying beds (A3a), No restrictions and requirements apply 3) Grit and screenings is waste that should be dumped at specialise	Road to upstream sampling point need to be graded and there is high erosion on the banks. To be reported to the CoE..	No water leaks were reported in November 2023.

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
					solidifies in sedimentation tanks as scum.						in area and is used for agricultural purposes				d land fill under strict conditions to ensure ENV compliance, waste management by the city has been affected by lack of collection from site, leading to stockpiling and odour complaints.		
Rynfield	Rynfield complied with overall WUL	Plant operated at 85% of re-graded	Plant operated at 183%	There was low flows received	None	0 Level 3 Equipmen	There were 83 power	Pavement,	3 of 4 digesters are	None	Dried sludge is stockpiled	Unlined sludge paddies	None	None	CoE collects screening	None	None

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	effluent standards with compliance of Physical= 96% Chemical = 57 % Micro= 86% The average compliance target of 65% was achieved with the overall compliance of 80%.	hydraulic capacity in Q2, which was above the design capacity.	of re-graded organic capacity for Q2	during the Q2 fr due to scheduled stages 4 to 6 load shedding		t failures occurred in Q2.	outages in Q2 with a duration of 168 hrs.	Digesters, Reactor tank and Bio-feeder structures are cracked	blocked due to defective desludging valves		at the plant	and maturation ponds could cause possible ground water pollution			s and grits from the inlet works. Dried sludge is stockpiled at the plant		
Ancor	Ancor complied with overall WUL effluent standards with	Plant operated at 135% of its hydraulic capacity	Plant operated at 141% of organic capacity	Ancor experienced storm water ingress during	Plant received high COD industrial effluent on 74 of 92	0 Level 3 Equipment failures occurred in Q2.	14 outages occurred (145 hrs. total, loadshedd	Bio filter flow division boxes partially collapsed,	3 digesters blocked with sand and are partially in	No veld fires occurred during Q2 at paddies.	Stockpile area not lined. Stockpiles on plant is a risk due	Unlined sludge paddies pollute underground water	Area around humus tanks and final effluent	N/A	CoE removes solid waste (screenings and grit)	Access road in bad condition with lots	N/A

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	compliance of Physical= 74% Chemical = 53 % Micro= 56% The average compliance target of 50% was achieved with the overall compliance of 61%.			heavy rainfall, worsening the overloaded hydraulic capacity.	days. In Q2.		ing 2 times and 6 hrs) (Generator backup available for whole plant except disinfection section).	humus tanks/ PST's- and digesters structures are crumbling /cracked	operation. This causes the plant to run out of sludge handling capacity, which prevent proper de-sludging and resulting in non-compliances.		to veld fires and environmental pollution		channel are dolomitic according to Geotech study performed.		and ERWAT appointed a service provider to collect the grit and screenings when CoE is unable to do so.	of potholes	
Daveyton	Daveyton complied with overall WUL effluent standards with compliance of	Plant operated at 36% of its hydraulic capacity in Q2.	Sufficient capacity. Plant operated at 81% of its organic	Numerous sewer blockages in the CoE network, Power supply	N/A. Domestic only.	5 Level 3 Equipment failures occurred in Q2. Namely: Generator	86 power failures totaling 183 hours in Q2.	CCT sometimes leaking. Do not have direct impact on the	N/A	There were no veld fires in Q2.	Sludge lagoons are unlined Space for solar drying is	Unlined sludge lagoons pollute the ground water.	N/A	N/A	Screenings is collected by COE for proper disposal.	N/A	N/A

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	Physical= 99% Chemical = 97 % Micro= 96% The average compliance target of 90% was achieved with the overall compliance of 97%.		capacity in Q2.	interruption at Etwatwa ext.10 pump station, pump failures at Etwatwa ext.18 pumpstation and potable water supply interruption to Etwatwa lead to inconsistent and irregular flow to the plant.		,Chlorine rotor meter, RAS pumps, WAS pipe		operation of the plant at the moment			in-sufficient						

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
JP Marais	JP Marais complied with overall WUL effluent standards with compliance of Physical= 100% Chemical = 91 % Micro= 95% The average compliance target of 90% was achieved with the overall compliance of 95%.	Sufficient capacity. Plant operated at 54% of hydraulic capacity	Sufficient capacity. Plant operated at 72% of organic capacity	Blockage of Daveyton outfall sewer line since the 08th November, leading to decreased flows received at the plant.	None in Q2	9 Level 3 Equipment failures occurred in Q2, namely: Degritter pump#1, Chlorine room power supply, Screw pump#3, submersible pump to drain PST tank, Chlorine rotameter, Chlorine dosing system, WAS	88 load shedding (178 hours) and power failure occurred 1 time (1 hour).	None	N/A	No veld fire incident experienced in Q2	Sludge pumped to Welgedacht, where it is treated.	Some boreholes polluted. Ongoing monitoring of boreholes.	No dolomitic soil	N/A	CoE removes solid waste (screenings and grit) except for PST screenings, due to no screen compactor.	N/A	N/A

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
						pumps #1 and #2, Screen compactor, and Vacuum truck to drain PST tank with 9% ratio impact on compliance											
Welgedacht	Welgedacht complied with overall WUL effluent standards with compliance of	WCW operated below design capacity of 79% of its capacity	Sufficient capacity WCW operated at 44% organic capacity.	Sewage blockages at old McComb plant line	1 foreign objects(small plastics)	24 Level 3 Equipment failures occurred in Q2	4 x power outages which lasted for 44 hours due to unplanned power	N/A	N/A	none	None	Unlined De-chlorination channels and Emergency dam	N/A	N/A	Contractor removes solid waste (screenings and grit).and dispose at	Gravel access road in very bad conditions and very slippery when wet.	No potable water supply to the plant. Borehole water used for

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	Physical= 100% Chemical = 95 % Micro= 93% The average compliance target of 81% was achieved with the overall compliance of 96%.						outage at Eskom substation								licensed solid waste site.		hygiene. Drinking water is being transported in from other plants.
Jan Smuts	Jan Smuts complied with overall WUL effluent standards with compliance of Physical= 83% Chemical = 68 % Micro= 91%	Plant operated at 103% of its hydraulic capacity	Plant operated at 115% of its organic capacity.	26 days of High incoming flows in Q2	Plant received industrial high strength effluent on 7 of the 91 days in Q2.	Q2, no critical equipment failures.	76 Power outages (16 hours total) due to load shedding, Generator backup was operational	Humus Tanks scum boards, digester number 2's wall, drying beds' walls and the bio-filters'	None	None	Dried sludge is stockpiled on site.	Unlined sludge stockpile area can cause groundwater pollution.	No	No	Screenings incinerated at the plant and the grit buried on site. This practice does not comply with WUL	Fair	Rand Water

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	The average compliance target of 70% was achieved with the overall compliance of 81%.							feed flow division box/tower.							conditions.		
Heidelberg	Heidelberg complied with overall WUL effluent standards with compliance of Physical= 100% Chemical = 75 % Micro= 85%	Plant operated at 114% of its hydraulic capacity	Plant operated at 116% of organic capacity	High incoming flows	The plant received 21 high CODs and 27 high NH_3s levels that are above the design in the current quarter.	Six critical equipment failures occurred in the current quarter, including the substation that tripped, the sludge land pump	Heidelberg had 139 power outage with a duration of 316 hours. Diesel used was 4727 L	The joint sealants of Carousel reactor concrete wall are damaged	None	No veldfires occurred during Q2.	Sludge at the plant stockpiled after dewatering, and is also applied/irrigated to the lands and could potentially contaminate	Unlined sludge paddies/lack of groundwater monitoring in the sludge paddies	None	None	Screenings and grit generated at the plant buried and this practice is not environmental friendly. Potential groundwat	The access road to Heidelberg works is severely damaged and a new-tarred road is required urgently	None

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	The average compliance target of 80% was achieved with the overall compliance of 87%.					that failed, the motor of the PST bridge, the gearbox of the PST, the fine screen, and the restoration of the power at the plant.					groundwater resources				er pollution		
Herbert Bickley	Herbert Bickley complied with overall WUL effluent standards with compliance of	Plant operated at 100% of hydraulic capacity	Plant operated at 106% of organic capacity	11 High incoming COD were experienced in Q2.	Plant received industrial high strength effluent on 19 of 90 days	15 Level 3 Equipment failures occurred in Q1.2x Chlorine system, 2xsludge	Herbert Bickley had 18 power outages which lasted 45 hours Diesel used was 3136L	Anaerobic digesters cracked concrete structures, Biofilter 1 ans 2 have cracked	4 out of 8 digesters not in use due to blockages and leaking	0 veldfires occurred during Q2	Sludge used for irrigation at instant lawn	Irrigation of sludge for Instant lawn is a source of pollution Activities are carried out as per	None	None	Collected by MCC Projects to a dedicated landfill site	Access road to the plant damaged and requires an upgrade	None

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	Physical= 99% Chemical = 99 % Micro= 92% The average compliance target of 80% was achieved with the overall compliance of 97%.					to land pump, 6x main pumps, 2X Fine screen, 2x Coarse Screen, 1x RAS pumps, 1x Surface Aerator, 1x Irrigation Pump, 3x Digester Feed pumps		concrete structures,	digester pipes			Guidelines					
Tsakane	Tsakane complied with overall WUL effluent standards with compliance of	Sufficient capacity. Plant operated at 49% of	Sufficient capacity. Plant operated at 81% of	Minimal incoming flow was experienced at the plant due	Plant received industrial high strength effluent on	5 Level 3 Equipment failures occurred in Q2.namely, Sludge to land pipe,	Tsakane had 105 load shedding events which lasted 247 hours. Diesel used was	Digesters and channel for raw sewage feeding HYBACS concrete structures cracked	N/A	No veldfires occurred during Q1	Sludge pumped to unlined lagoons/paddies for solar	Unlined sludge lagoons and paddies/lack of	None (There's a dolomitic report that shows	None	Screenings and grit collected by MCC Security to a	None	Potable water leaks next to Tsakane hostel. It

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	Physical= 98% Chemical = 96 % Micro= 94% The average compliance target of 70% was achieved with the overall compliance of 96%	hydraulic capacity.	organic capacity.	to equipment breakdowns and spillages at Reticulation pump stations (Rockville, Extension 11 and 22)	0 of 91 days	Mechanical Corse screen 2. Sludge to land sensor, Chlorine heater, Chlorine Rotometer	11 978L. 1x Backup generator available.	and leaking			drying. Drying beds have been decommissioned	groundwater monitoring at the sludge lagoons and paddies. Unfenced drying paddies	none at Tsakane)		dedicated landfill site		also creates a wetland next to the fence.
Carl Grundlingh	Carl Grundlingh complied with overall WUL effluent standards with compliance of	Plant operated at 57% of its hydraulic capacity	Plant operated at 59% of organic capacity,	WCW experienced low flows from 18 to 22 October 2023 due to COE repairing	Plant received industrial with colour on 1 of 91 days	none	Carl Grundlingh had 1 power failure incident which lasted for		N/A	No veldfires occurred during Q2	Land application of sludge is being used	Unlined sludge to land posing ground water pollution	None	None	Collected by a contractor to a dedicated landfill site	Access road to the plant is damaged and requires an upgrade.	None

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	Physical= 100% Chemical = 92 % Micro= 88% The average compliance target of 88% was achieved with the overall compliance of 93%.			the main sewer pipeline outside the plant.			7 hours in Q2										
Ratanda	Ratanda complied with overall WUL effluent standards with compliance of Physical= 100% Chemical = 89 % Micro= 95%	Plant operated at 127% of its hydraulic capacity	Plant operated at 60% of organic capacity,	None	None	A-recycle pump no 3, Generator software.	WCW experienced 86 load shedding events and 10 unplanned power outage with the total duration	Drying beds drainage system and chlorine contact tanks are badly leaking structures	N/A	No veldfires occurred during Q2	Dried sludge is stockpiled on-site, potential groundwater pollution	Unlined sludge ponds and leaking drying beds, potential groundwater pollution	None	None	MCC /Contractor removes solid waste (screenings and grit).and dispose at licensed solid	The access road to Ratanda Works is severely damaged and a new-tarred road is	No link to the Municipal Potable Water Supply, water transported from Heidelberg Works and

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	The average compliance target of 85% was achieved with the overall compliance of 94%.						of 227 hours in Q2								waste site.	required urgently	borehole water is used for other domestic purposes
Dekema	Dekema complied with overall WUL effluent standards with compliance of Physical= 74% Chemical = 65 % Micro= 92% The average	Plant operated at 41% of hydraulic capacity	Incoming organic concentration exceeded design organic capacity. Plant operated at 111% organic capacity	Plant received high flows on 0 out of 92 days	Plant received inflow that contained industrial effluent with high COD 11 of 92 days and high NH_3 4 of 92 days.	11 Level 3 Equipment failures occurred in Q2.Namely: 2x sludge pump , 3 x PST chain, 1 x Ferric chloride dosing pump, 1x humus tank bridge, 1x PST bridge, 3 x Mechanical screen.	128 Outages occur (269 hrs total) Load shedding is a big concern.	Channels feeding sections partially collapsed. Biofilters and digesters wall are cracked.	1 out of 12 Anaerobic digesters is blocked	No veld fires occurred during Q2	Sludge pumped to unlined paddies for solar drying and dried sludge spread to land area to be ploughed into land.	Screenings and grit are disposed to suitable landfill that is lawful according to the NEMA.	None	N/A	Screenings and grit generated at the plant are disposed to suitable landfill that is lawful according to the NEMA. A Service	The access road to Dekema WCW needs to be tarred as it gets muddy and slippery during rainy season.	N/A

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	compliance target of 75% was achieved with the overall compliance of 77%.					Three Equiment failures roll over Q1: Namely 1 x Degritter pump and 1x Generator, 2 x PST scrappers									Provider screenings and grit transport to authorised landfill site courtesy of CoE		
Rondebult	Rondebult complied with overall WUL effluent standards with compliance of Physical= 95% Chemical = 88 % Micro= 92%	Plant operated at 28% of hydraulic capacity	Exceeded organic capacity. Plant operated at 125% organic capacity	The plant received an average of 5.64 ML/d for Q2 and highest flow recorded was 17.53 Ml/d .Rondebult works treated low flows during the	Plant received high COD industrial effluent on 24 of 92 days and NH3 on 0 of 90 days	10 Level 3 Equipment failures occurred in Q2. 1 critical equipment, reported during the month of October 2023. Namely; 1x Secondary biofilter	34 Outages with the total hours of 175 occurred during Q2, 28 power outages were due to loadshedding with a total hours of 58.	Channels feeding sections partially collapsed. Biofilters and digesters wall are cracked. Biofilter walls cracked. Brick work of open channels are	None	No veld fires occurred during Q2	Sludge pumped to unlined paddies for solar drying and dried sludge spread to land area and	Unlined sludge lagoons, Collection and transportation of screenings, grit disposed of at a	The entire area of the plant are dolomitic	N/A	Collection and transportation of waste (screening and grit) to a waste disposal site done by MCC	The access road in and around the plant are deteriorating and will need attention	Potable water pipeline rusted and need to be replaced

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	The average compliance target of 90% was achieved with the overall compliance of 92%.			month of November and December 2023 due to prolonged power outages and the flow was diverted to Vlakplaats during power outages. The flow diversion to Rondebult WCW is almost fully open, and yet the inflow is very low. A call was logged with CoE with ref number: 0491 of 2023/11/22 for possible blocked		feed pump #20 4 critical equipment reported during the month of November 2023. Namely; 2x Raw sludge pump(failed twice) 2x Primary biofilter feed pump #7(failed twice) 5 critical equipment reported during the month of December 2023. Namely: 2x Raw sludge pump	6 power outages due to CoE power interruptions(cable theft, cable faults, faulty electrical substation) with a total hours of 119 (Load shedding is a big concern.	unstable, collapsing and cracked. The feed pipe from the primary biofilters to the secondary biofilters has collapsed. Anaerobic digester #4 and #5 walls have cracks. Digester #6 dome has open/ visible cracks on the surface			ploughed into land.	registered hazardous waste landfill sites			security and Projects ERW202107/TNDR-003 .		

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
				/obstructed reticulation line.		#12(failed twice) 2x Request for a crane truck to adjust the temporary installed sluice positioned at Boksburg bypass line to get the minimum flow from the connection to Rondebult WCW. 1x Leaking biofilter pipeline											
Vlakplaats	Vlakplaats complied with overall	Plant operated at 171%	Plant operated at 110%	The plant received an	Plant received industrial	15 Level 3 Equipment failures occurred	95 Outages occur	Office building have	None	No veld fires	Dried sludge is stockpiled	Unlined Maturation pond.	Area around bio filters	N/A	Screenings and grit tender is	Access road to DBF	None

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	WUL effluent standards with compliance of Physical= 66% Chemical = 31 % Micro= 8% The average compliance target of 47% was not achieved with the overall compliance of 35%.	of hydraulic capacity. Needs to be upgraded	of organic capacity	average of 94 ML/d for Q2 and highest flow recorded was 194 Ml/d .Rainfall measured at the plant was 221 mm. Fluctuation of inflow is due to inconsistent Pump stations.	high strength effluent on 19 of 92 days	in Q2. -Namely: 5 x theft electrical cable at main supply, 2 x failure of Module 4 Level 3 Equipment failures occurred in Q2. 15x failure of raw sludge pumps 7xfailure of humus pumps 3x failure of inlet works screen.	(193 hours in total) due to Load shedding and cable theft.	some cracks.		occurred during Q2.	on the drying beds. Demand for instant lawn application is seasonal		at Mod A are dolomitic		awarded generated solid waste at the plant is disposed to landfill site starting from the 1 Feb 2023	dosing station is slippery during rainy season	
Waterval	Waterval complied with overall WUL effluent standards	Plant operated above capacity	Sufficient capacity Plant operated	Average flow of up to 423 Ml/day received due to developm	Plant received industrial high	13 alert level 3 Critical equipment failures occurred in Q2	0 Hours planned blower outage	None	None	0 veld fires at sludge land	Dried sludge is stockpiled on the	Unlined Emergency dams.	None	N/A	Screenings and grit generated at the	N/A	

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Level 3 Equipment Failure	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Groundwater pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	with compliance of Physical= 98% Chemical = 89 % Micro= 89% The average compliance target of 80% was achieved with the overall compliance of 92%.	(operated at 245% capacity)	at 103% organic capacity.	ents and bypasses for upstream plants.	strength effluent on 0 of 92 days. Plant is receiving and treating 30 m^3 of leachate daily from EnviroServ	2023/2024 Mainly from 4 x Wash water pump failure, 3 x Blower trippages 1 x Cornel pump is pumping slow, 1 x Digested pump failure, 2 x SST failure, 2 x pond return/ substandard pump failure,				occurred during Q2	plant. Demand for agricultural application is seasonal.				plant are now disposed at landfill site, this to prevent underground seepage		

3.5. Project/Infrastructure Report

This section includes all major projects that will contribute to the Mega Catalytic projects. ERWAT receives new township applications timeously from CoE and provide responses about the capacity availability at various Water Care Works as and when applications are received. This section focuses on feasibilities studies and major projects at ERWAT Water Care Works (WCW), for projects that contribute either directly or indirectly to the flagship projects. Below is the summary of these planned and running projects that have been identified to address planned Mega Catalytic Projects within City of Ekurhuleni (CoE).

Running Projects

The appointment of service provider/s for the supply, delivery and installation of Generators at ERWAT wastewater care works on ‘as and when required’ basis for a period of thirty-six (36) months.

a. The project involves the procurement, supply, and delivery of diesel generators to meet the power requirements during load shedding at ERWAT Water Care Works. The purpose of the project is to ensure a reliable and uninterrupted power supply, particularly in areas where grid electricity is unreliable or unavailable. The diesel generators serve as backup power sources during power outages or as primary power supply in off-grid locations. The project is in implementation phase.

b. The appointment of service provider/s for the supply, delivery and installation of Pumps at ERWAT wastewater care works on ‘as and when required’ basis for a period of of thirty-six (36) months. The project involves the procurement, supply, and delivery of Pumps for the efficient and effective operation of ERWAT Water Care Works, maintaining flow rates, pressures and mixing for effective treatment and disposal of sludge. The project is on implementation phase.

Planned Projects

This section includes all major projects that will contribute to the Mega Catalytic projects such as the John Dube Development and Obed Mthombeni Nkosi. This section focuses on feasibilities studies and major projects at ERWAT Water Care Works (WCW), for projects that contribute either directly or indirectly to the flagship projects. COE and ERWAT undertook a comprehensive “Wastewater Conveyance and Treatment Systems Regionalisation and 50-

year Master Plan" that will give strategic direction for future wastewater system extensions/consolidation planning, investment and implementation for the next fifty (50) year planning horizon. The plan cover all the Water Care Works operated by ERWAT and conveyance systems within the CoE operational area with the intention to optimize existing WCW systems and wastewater conveyance systems. The WCW capacity upgrades is required urgently to accommodate the short to medium term capacity requirements in line with the Regionalization and 50-year Master Plan is summarized in table below. To alleviate the immediate pressures faced by the institution, the City of Ekurhuleni, through their Human settlement department and EPMO have made funding available to kick start the process of appointing Professional Service Providers to undertake the designs of the identified WCW. The appointments follow the ECSA guidelines that are detailed below.

STAGE 1 – Inception
STAGE 2 – Concept & Viability (Preliminary Design)
STAGE 3 – Design Development (Detail Design)
STAGE 4 – Documentation & Procurement (Including Tender Doc)
STAGE 5 – Contract Administration and Inspection
STAGE 6 – Close Out

The following WCW were identified to be in urgent need for expansion , discussed in section below. Table below outlines the key milestones progress to date.

Table 3.5.2.1 Key Milestone Progress to Date

PROJECT NAME	PROJECT STAGES	IMPLEMENTATION STATUS
Waterval WCW Upgrade	Inception	Completed
	Preliminary Desing	Ongoing
Olifantsfontein WCW Upgrade	Inception	Completed
	Preliminary Desing	Ongoing
Ancor WCW Upgrade	Inception	Completed
	Preliminary Desing	Ongoing
Welgedacht WCW Upgrade	Inception	Completed
	Preliminary Desing	Completed
	Detail Design	Ongoing
Vlakplaats WCW Upgrade	Inception	Completed
Ratanda WCW Upgrade	Detail Design	Ongoing

Ancor Water Care Works

The Ancor WCW is situated in Springs and falls within the DD4 drainage district. Built in 1936 and upgraded on several occasions over a period of time, the works is designed to treat 15 megalitres of wastewater per day from the Springs and Kwa Thema areas. The plant is currently operating above its design capacity, which leads to poor quality of the final effluent. The new Daggafontein Megacity that is currently under construction will require a connection to the Ancor outfall .

The scope of work entails the additional 15ML/d treatment Module and restoration of the current regraded 15 ML/d back to 35ML/d design capacity

	PLANNED PROJECTS	STATUS /COMMENTS	COMMISSIONING DATE
1	Upgrade to 35 Mℓ/d. Additional 15 Mℓ/d.	The capacity treatment plant upgrade is planned in relation to the 50-year master plan.	Preliminary Designs to be completed in March 2024.

Vlakplaats Water Care Works

Vlakplaats water care works is situated in Vosloorus and falls within the DD6 drainage district. The original design capacity of the plant was 83 Mℓ/d. The plant capacity has been downgraded to 55 Mℓ/d. The plant is currently operating above its design capacity, which leads to poor quality of the final effluent. Vlakplaats flow distribution project is currently under construction phase to augment and add a peak flow balancing capacity into the plant by converting the old existing ponds into a balancing tank.

Plans are currently underway to upgrade and restore its original capacity of 83 Mℓ/d in order to enhance the treatment capacity. These upgrades will ensure that the plant meet the required standards as stipulated by the department of water and sanitation (DWS).

PLANNED PROJECTS		STATUS /COMMENTS	COMMISSIONING DATE
1	Additional 28 Mℓ/d Plant Upgrade	The capacity treatment plant upgrade is planned in relation to the 50-year master plan.	Inception stage-Completed

Welgedacht WCW

The Welgedacht water care works is situated in Springs and falls within the DD5 drainage district. The original design capacity of the plant was 85 Mℓ/d. Module 2 have been commissioned and is currently undergoing defects liability period. The plant capacity has been upgraded to 95 Mℓ/d.

Plans are currently underway to upgrade the plant to 155 Mℓ/d in order to enhance the treatment capacity. These upgrades will ensure that future developments flows are accommodated thereby meeting the required standards as stipulated by the department of water and sanitation (DWS).

	PLANNED PROJECTS	STATUS /COMMENTS	COMMISSIONING DATE
1	Additional 60 Mℓ/d Plant Upgrade	The capacity treatment plant upgrade is planned in relation to the 50-year master plan.	The project is currently on Stage 3 (Detail Design)

Ratanda Water Care Works

The Ratanda WCW is situated south-west of Ratanda town and falls within the DD5 district. Built in 1998, it is designed to treat 4.7 Mℓ/d of raw sewage from Ratanda. Conventional activated sludge is employed as the main treatment process.

The scope of work entails the refurbishment of the existing works and upgrade by extension of the works with an additional capacity of 5 ML/d, by provision of a new module.

	PLANNED PROJECTS	STATUS /COMMENTS	COMMISSIONING DATE
1	Additional 5 Mℓ/d Plant Upgrade	The capacity treatment plant upgrade is planned in relation to the 50-year master plan.	The designs are currently being developed to be finalised.

Waterval Water Care Works

The Waterval water care works is the largest works operated by ERWAT and is situated in the DD6 area at the Kliprivier. The original design capacity of the Waterval wastewater care works was155 Mℓ/d. The plant capacity has been upgraded to 170 Mℓ/d. Plans are currently underway to upgrade the plant to 420 Mℓ/d in order to enhance the treatment capacity. These

upgrades will ensure that future developments flows are accommodated thereby meeting the required standards as stipulated by the department of water and sanitation (DWS).

	PLANNED PROJECTS	STATUS /COMMENTS	COMMISSIONING DATE
1	Additional 250 Mℓ/d Plant Upgrade	The capacity treatment plant upgrade is planned in relation to the 50-year master plan	The project is currently on Stage 2 (Preliminary Design)

Olifansfontein Water Care Works

The Olifantsfontein works, situated in the northern Drainage District (DD3), serves the majority of the communities and industries in Tembisa, Olifantsfontein and Ivory Park, as well as sections of Kempton Park and Midrand. The works is designed to treat 15 105 Mℓ/d.

Plans are currently underway to upgrade the plant with an additional 50 Mℓ/d to enhance the treatment capacity. These upgrades will ensure that future developments flows are accommodated thereby meeting the required standards as stipulated by the department of water and sanitation (DWS).

	PLANNED PROJECTS	STATUS /COMMENTS	COMMISSIONING DATE
1	Additional 50 Mℓ/d Plant Upgrade	The capacity treatment plant upgrade is planned in relation to the 50-year master plan	The project is currently on Stage 2 (Preliminary Design)

Conclusion:

ERWAT is striving and working hard towards addressing all Mega Catalytic projects to accommodate all new developments within the City of Ekurhuleni. As discussed above, the mentioned Water Care Works need to be upgraded urgently to cater for the current backlog in capacity and to make provision for future housing and industrial developments.

3. Financial Report

The operational and capital expenditure are provided in Table 5 and 6, respectively.

Table 5: Operational expenditure

Line item	Total Original Budget	Budget for the year (Yr. to date) 6 months	Budget for Quarter (3 months)	Actual for Quarter (3 months)	Variance for the Quarter (3months)	Actual for FY (Yr. to date) (6 months)	Variance for year (Yr. to date) (6 months)
Employee Related Costs - Salaries & Wages	484 802 331,00	242 401 166,00	121 200 583,00	107 035 699,00	(14 164 884,00)	211 297 102,00	(31 104 064,00)
Remuneration of Directors	3 991 959,00	1 995 980,00	997 990,00	326 356,00	(671 634,00)	648 150,00	(1 347 829,00)
Bad Debts (Provision for Bad Debts)	1 856 135,00	928 068,00	464 034,00	(63 879,00)	(527 913,00)	182 172,00	(745 896,00)
Depreciation	103 878 876,00	51 939 438,00	25 969 719,00	31 057 905,00	5 088 186,00	58 030 346,00	6 090 908,00
Repairs and Maintenance	155 813 866,00	77 906 933,00	38 953 467,00	23 651 046,00	(15 302 421,00)	39 225 230,00	(38 681 703,00)
Interest Expense	27 929 554,00	13 964 777,00	6 982 389,00	8 032 746,00	1 050 357,00	16 252 821,00	2 288 044,00
Bulk purchases	400 254 021,00	200 127 011,00	100 063 505,00	79 219 289,00	(20 844 216,00)	139 120 238,00	(61 006 773,00)
General Expenses - Other	223 102 982,00	111 551 491,00	55 775 746,00	40 161 978,00	(15 613 768,00)	59 544 475,00	(52 007 016,00)

Line item	Total Original Budget	Budget for the year (Yr. to date) 6 months	Budget for Quarter (3 months)	Actual for Quarter (3 months)	Variance for the Quarter (3months)	Actual for FY (Yr. to date) (6 months)	Variance for year (Yr. to date) (6 months)
TOTAL OPERATING EXPENDITURE	**1 401 629 724,00**	**700 814 862,00**	**350 407 431,00**	**289 421 140,00**	**(60 986 291,00)**	**524 300 534,00**	**(176 514 328,00)**

ERWAT has spent 37.41% YTD (R 524 300 534/R1 401 629 724) of the total approved budget. The total overall YTD underspending in the 2nd Quarter of R176 514 328 is due to the following reasons:

1. Employee costs due to a reduction in overtime spent and the recruitment plan for the financial year was that approved in September 2023 and recruitment drive has commenced for those positions.
2. There was an under expenditure on Director's remuneration as the budget provided for 8 Directors however only 4 Directors are employed during the financial year.
3. Repairs and Maintenance, under expenditure due to relevant contracts not in place and delays experienced in the procurement process.
4. Bulk purchases, load shedding significantly impacts the electricity charges, which are included in Bulk purchases. Fuel costs to power the generators has increased but not to the extent of electricity budget. Delays in the procurement of essential chemicals due to challenges faced by the manufacturer in the chemical manufacturing process.
5. General expenses, under expenditure of the protective clothing budget due to challenges experienced with procuring on the awarded irregular expenditure contract. Under expenditure of transport and freight budget in the first two quarters which should be realised in the third and fourth quarter of the financial year.

Table 6: Capital expenditure

Project Detail	Total Original Budget	Total Revised Budget (applicable only after Adjustment)	Budget for Quarter	Actual for Quarter	Variance	Total Budget for the year	Actual for FY (Yr. to date)	Variance for year (Yr. to date)	% Completion
CAPITAL PROJECTS	R127,646,091	N/A	76 587 654.60	R 51 154 785,82	R -25 432 870.58	R127,646,091	51 154 785,82	R – 31 521 357.66	40.08%

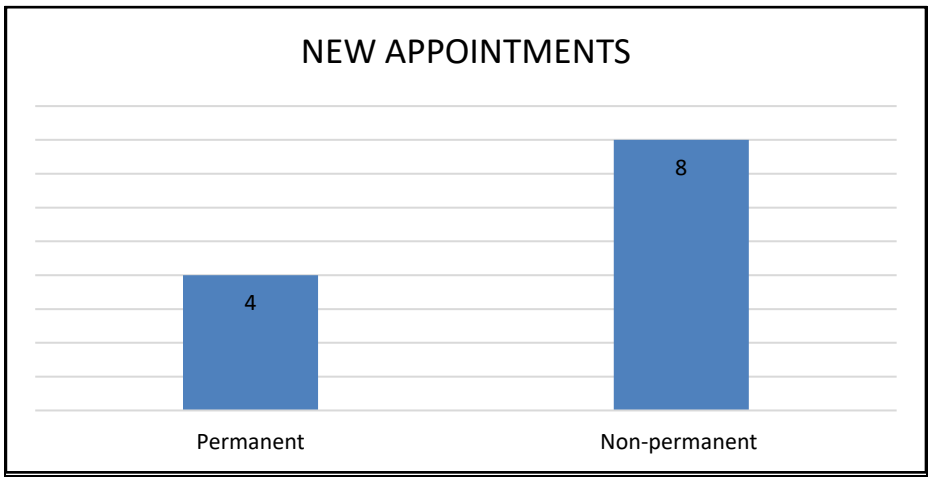
ERWAT has currently spent R 51 154 785,82 (40.08%) of its capital budget at the end of the second quarter.

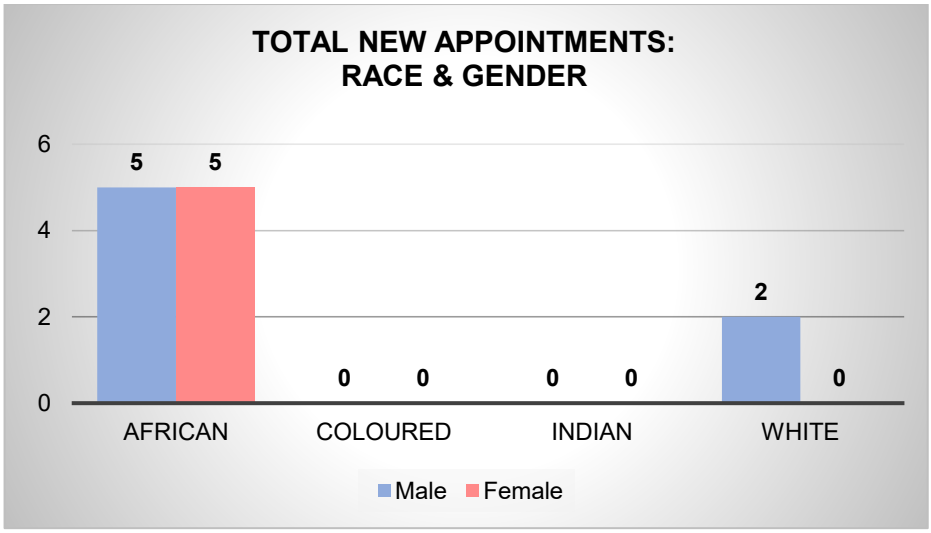
4. Human Resources

4.1 Staff Movements

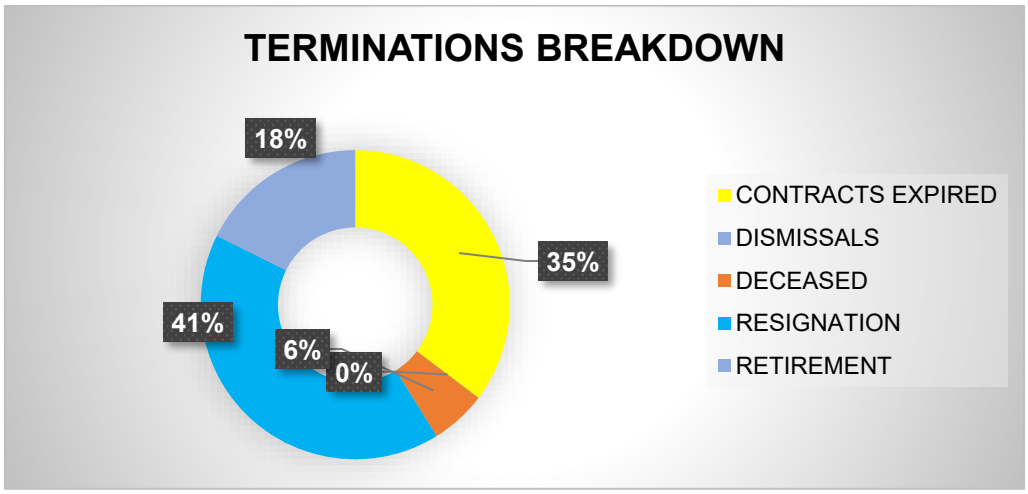
Staff Movements	African		Coloured		Indian		Whites		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
Recruitments	4	5	0	0	0	0	2	0	11
Resignations	5	2	0	0	0	0	0	0	7
Retirements	0	1	0	0	0	0	2	0	3
Contract Expired	1	5	0	0	0	0	0	0	6
Dismissals	0	0	0	0	0	0	0	0	0
Deceased	0	1	0	0	0	0	0	0	1
Promotions	1	0	0	0	0	0	0	0	1

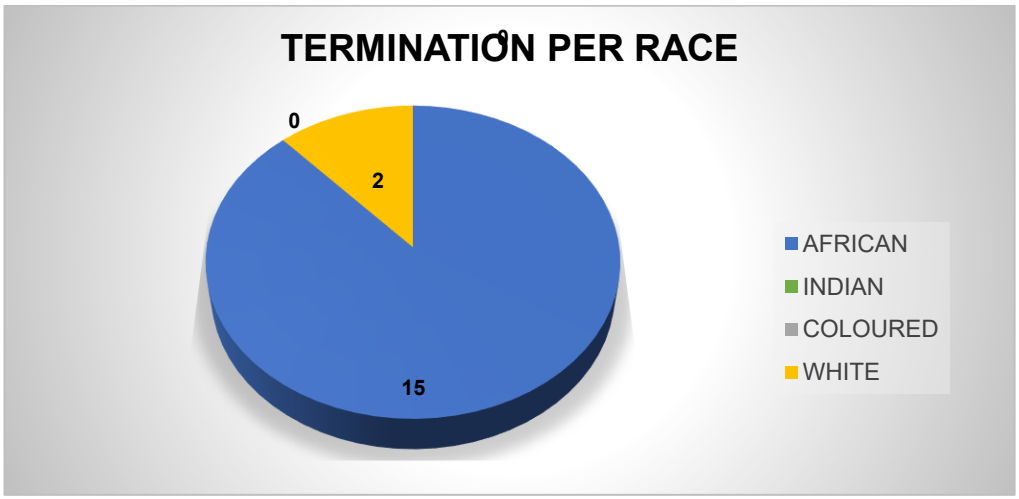
4.1.1 Appointments





4.1.2 Terminations





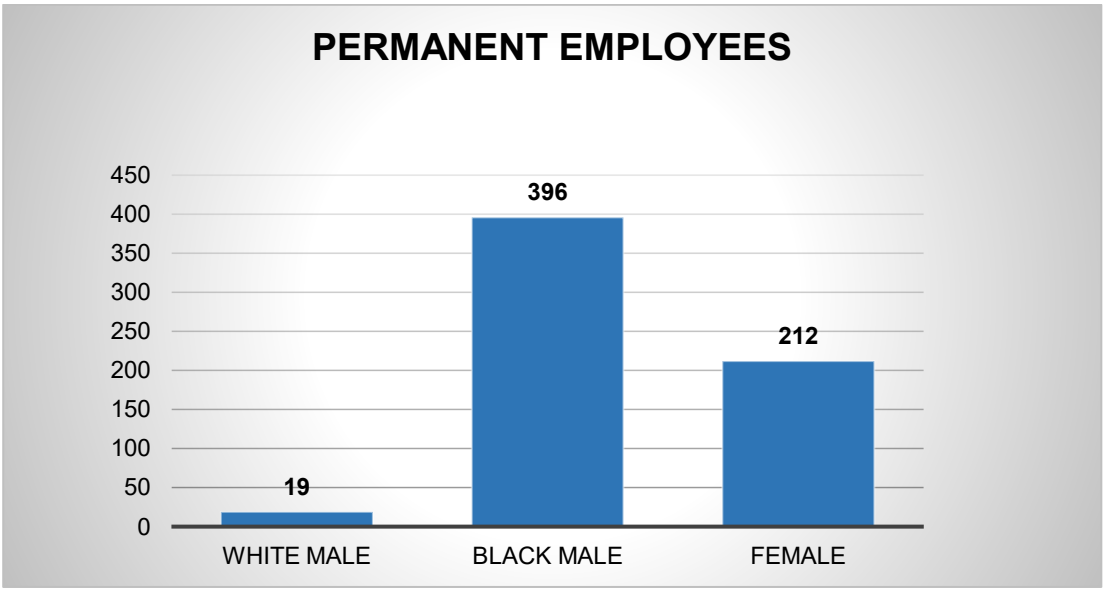
Status Analysis

- During the period under review, 12 employees were appointed.

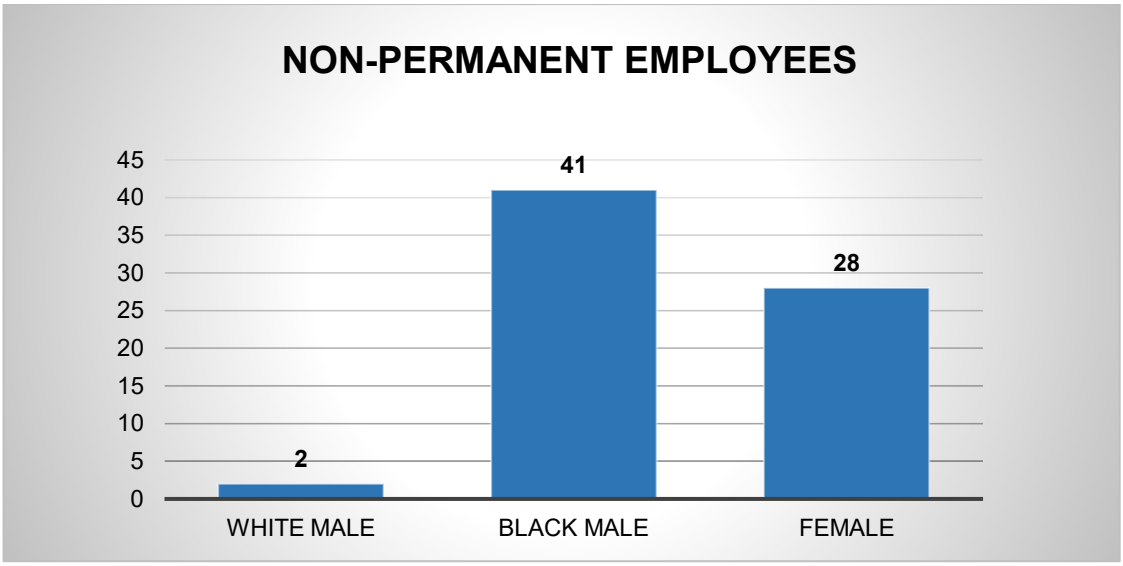
- During the period under review, 17 employees exited the organisation for the following reasons;

    - 6 contracts expired;
    - 7 employees resigned;
    - 1 employee passed away; and
    - 3 employees went on retirement during the period under review

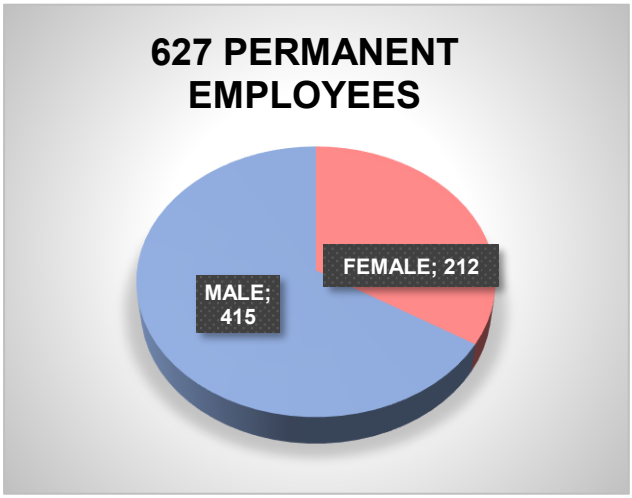
4.2 Employment Equity Demographics

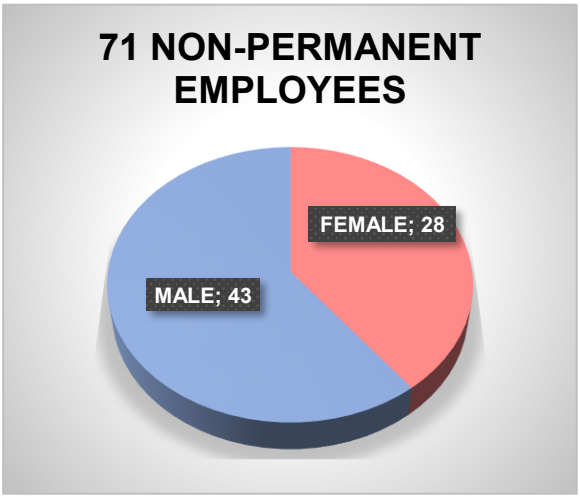


ERWAT has **627** permanent employees.



ERWAT has **71** non-permanent employees.





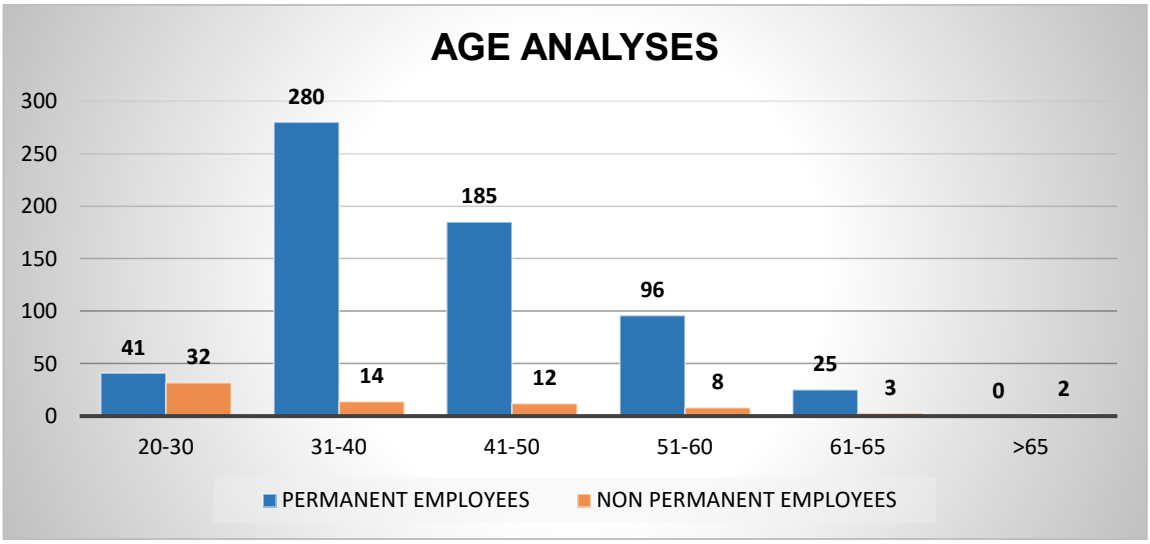
Status Analysis

- The employment demographics of ERWAT as at 31st December 2023 reflects:
    - Females in both permanent and non-permanent positions within ERWAT account for 240 or 34% of total positions filled.
    - Males in both permanent and non-permanent positions within ERWAT account for 458 or 66% of total positions filled.

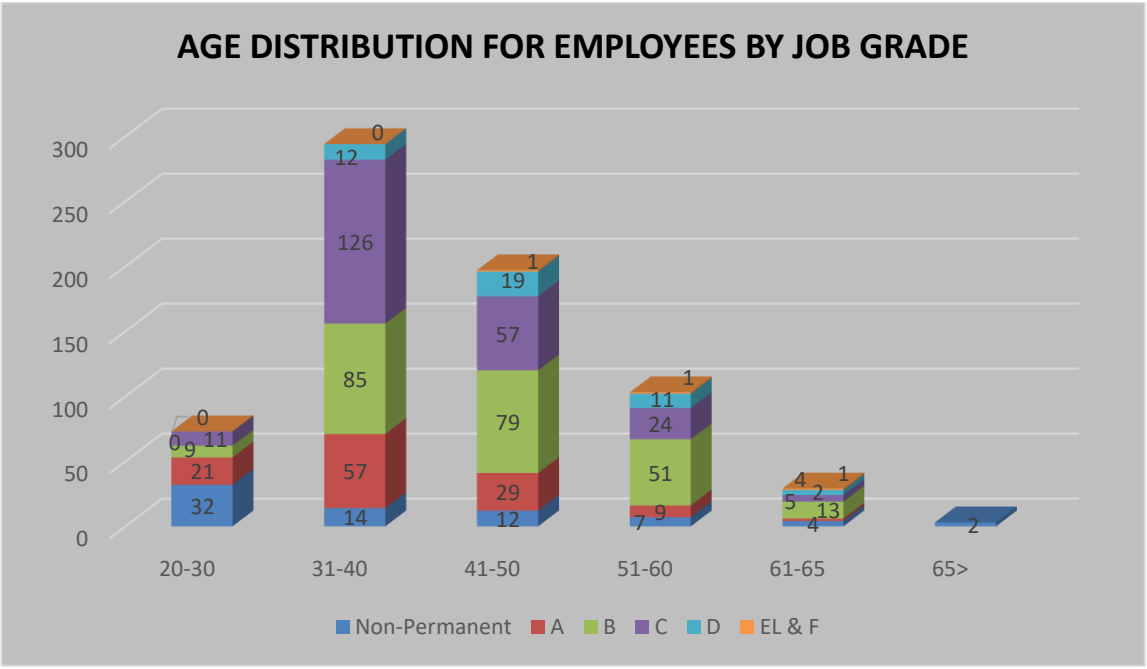
4.3 Employment Equity Update

The Employment Equity Committee did a report for the Board of Directors to highlight the new changes on the Employment Equity Act and how it will impact ERWAT.

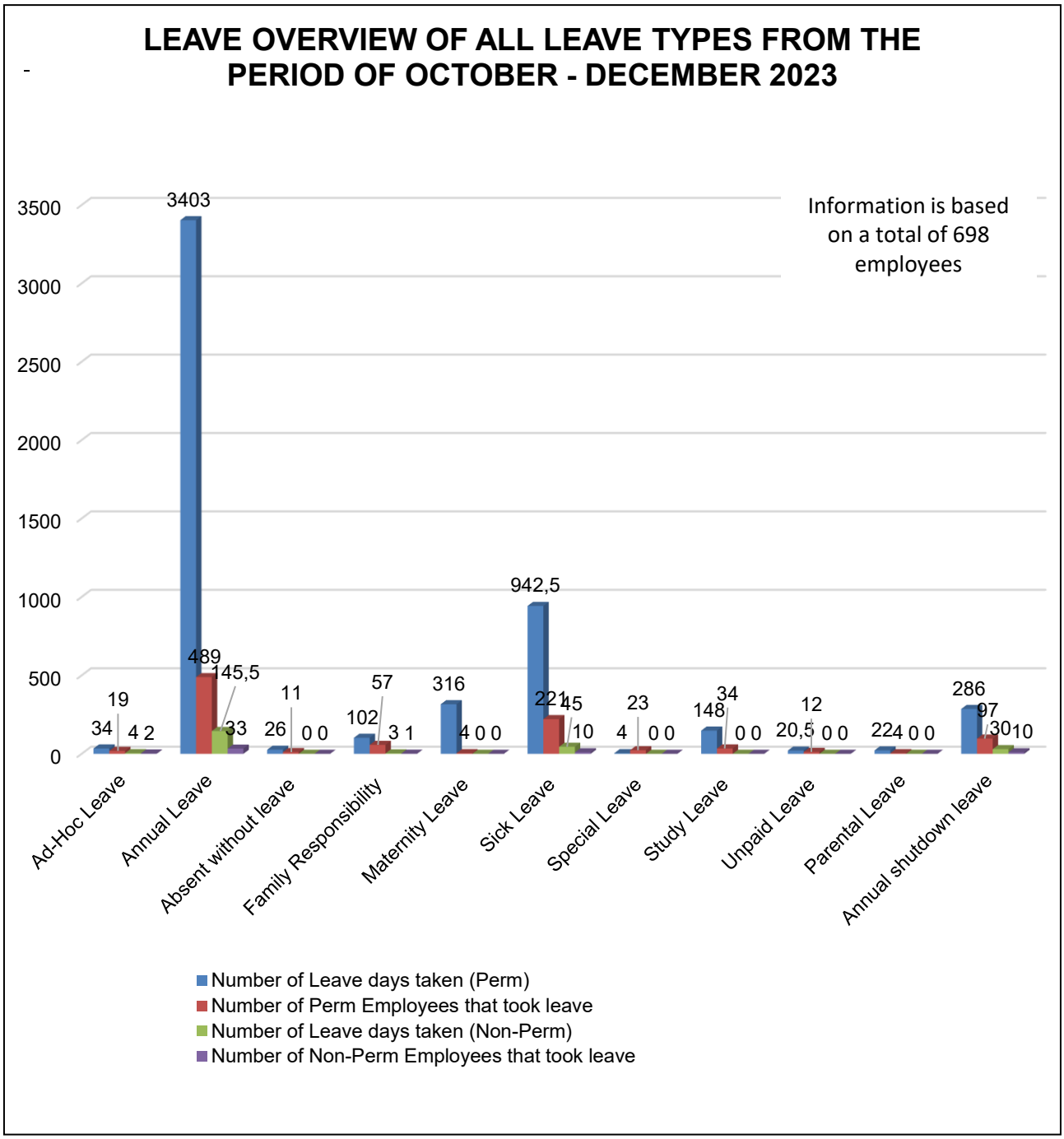
Age Analysis



- Average age as at 12/2023 = 36



4.4 Leave Management



Status Analysis

Total number of employees who took sick leave during the period under review are 221. The total sick leave taken equates to an approximate minimum of 4.26 days per employees.

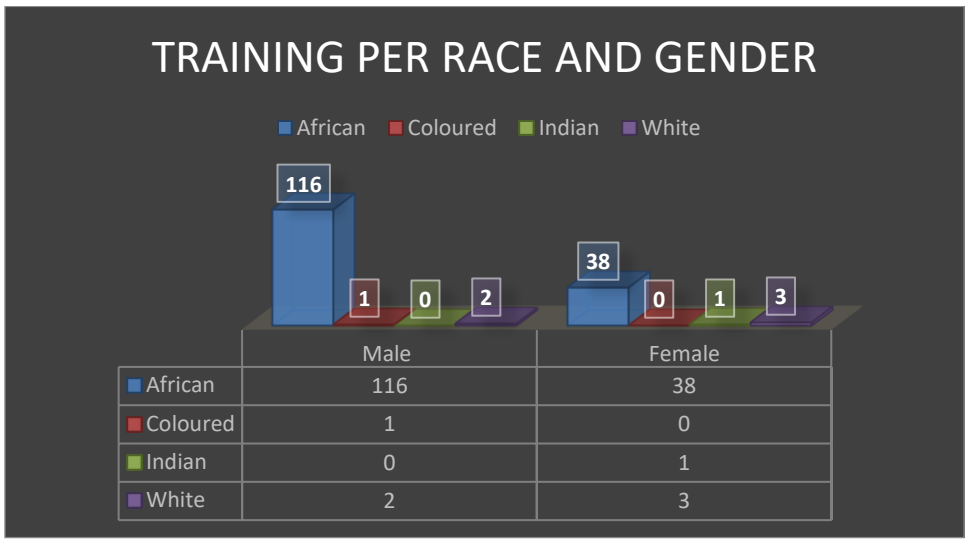
4.5 Overtime Trends

	Quarter 1	Quarter 2	YTD
Total Hours	54 671.80	52 522.75	107 194.55
Total Cost	7 337 932.06	7 311 228.37	14 649 160.43
Budget	8 167 624.25	8 167 624.25	16 335 248.50

Overtime is monitored and approved by management, as per the needs of the various business units.

4.6 Training and Development

The reporting period saw **161 employees** attending various training interventions.



Report on performance in respect of the Skills development plans (narrative).

- 10 Employees started the Advanced Management Development Programme (AMDP) (block 2 and 3) on the 09-13 October and 13-17 November 2023 at Head Office
- 46 Employees attended the SHE Rep Training course on the 06,07 and 08 November 2023

- 58 Employees attended the Basic Fire Fighting Training course on the 29,30 November and 01 December 2023
- 47 Employees attended the Basic First Aid Training course from 04-12 December 2023

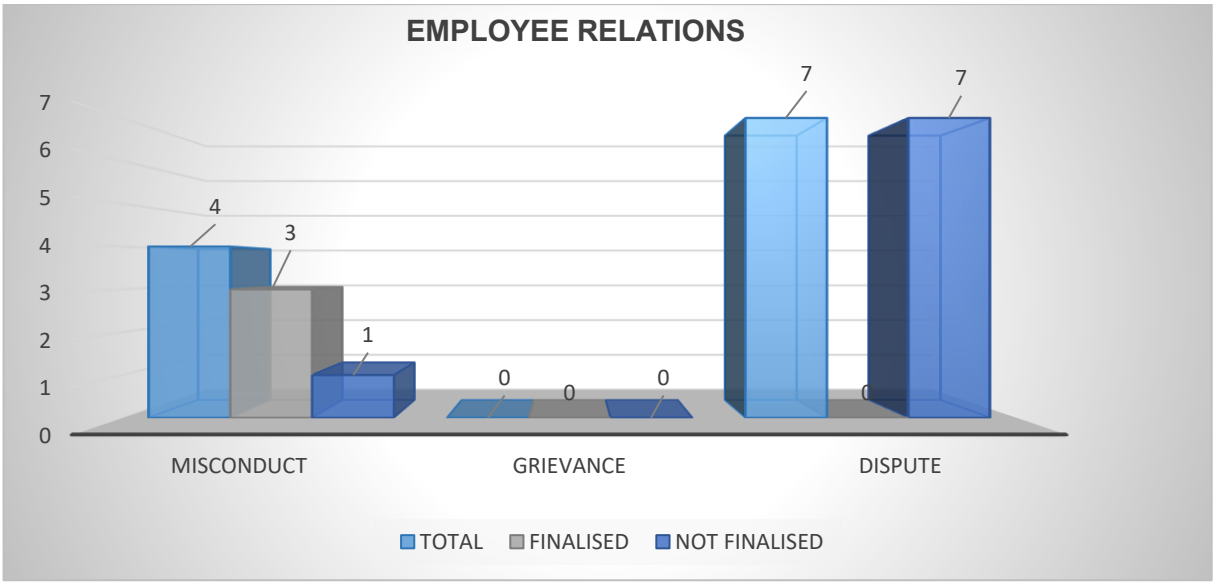
4.7 Performance Management

Status Analysis

Quarter 4 (2022/2023 year-end) evaluation will be completed in Quarter 3 of the 2023/2024 Financial Year.

4.8 Employee Relations

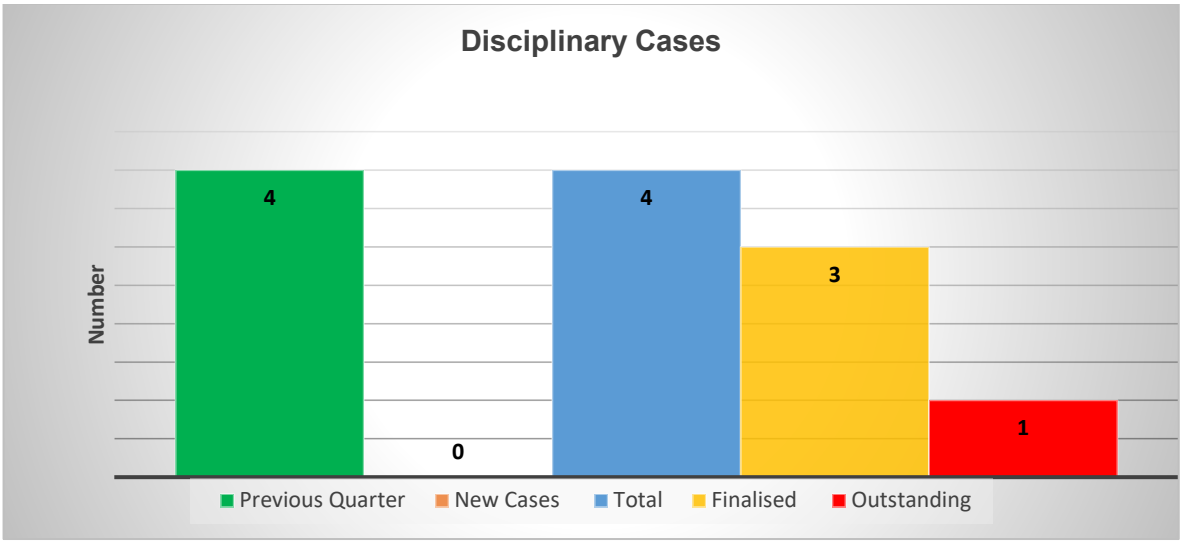
The HR department, has received, recorded and administered the following processes for the reporting quarter, below is the statistical data of all cases and the analysis thereof.



4.8.1. Disciplinary Cases

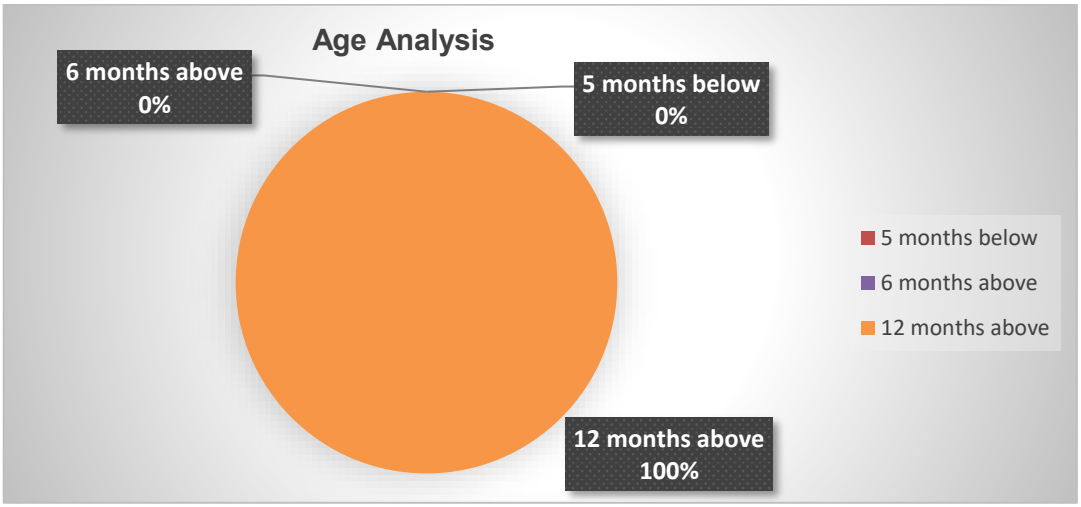
- Four (4) cases were not concluded in the previous quarter hence brought forward.

- No new cases were received; the total for all disciplinary cases is four (4). Total cases finalized is three (3) with a remaining balance of one (1) case outstanding.



4.8.2. Age Analysis of Disciplinary cases

- The age analysis of the one (1) case outstanding, 0% are below five (5) months, 0% above six (6) months and 100% are above twelve (12) months old.

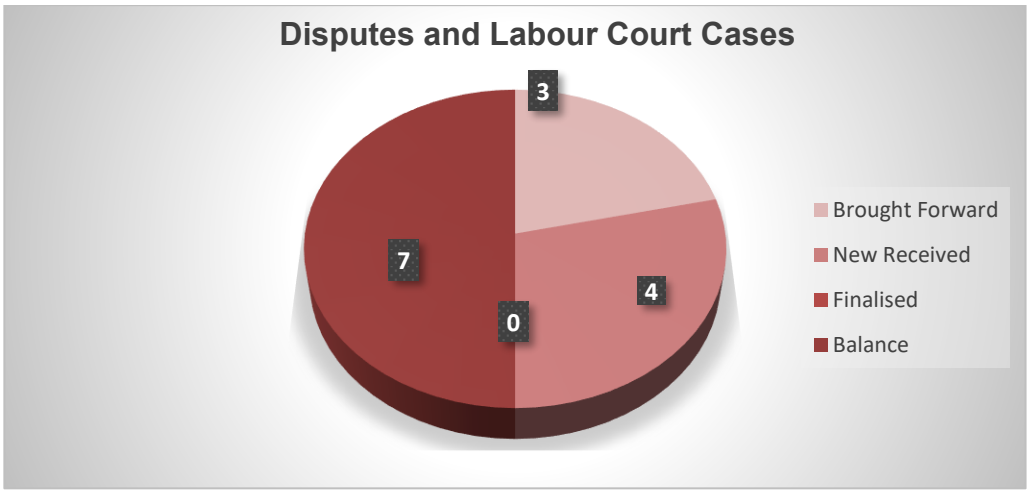


The age analysis of the one (1) outstanding case is as follows:

- Cases that are less than one (1) month old =0
- Cases that are more than twelve (12) months old=1

4.8.3. Disputes, Arbitrations & Labour Court Cases

- Total cases brought forward three (3) as at end of previous quarter.
- Four new cases were received.
- No case has been finalised.
- In respect of disputes at the bargaining Council and Labour Court cases, ERWAT is sitting at seven (7) cases.
- The above case is pending adjudication at the appropriate forums.



The graph illustrates the statistical data of disputes at the Bargaining Council and Labour Court, as at the end of Q2, with seven (7) cases still pending.

4.8.4. Grievances

Total grievances outstanding is zero (0).

4.8.5. Suspensions

There is only one suspension for the period under review.

4.9 Percentage of Salary to OPEX

	Quarter 1	Quarter 2	YTD - Actual
Total Manpower Cost	104 583 197,00	107 362 055,00	211 945 252,00
Total Operational Expenditure	234 879 393,49	289 421 140,66	524 300 534,15
% of Salary to OPEX	**45%**	**37%**	**40%**

5. Procurement Practices, Job Creation and Mainstreaming

1. BEE spend in respect of supplier and contractor (PDIs) – No new tenders/contracts were concluded during Quarter 2.

2. Job creation is encouraged by including a provision for locally situated bidders within the set criteria in the functionality section where it could be broken down further where bidders could be scored for indicating in the supporting documents and tables their intention to employ new staff from the areas, they will be operating from in the event that they are awarded a tender. This is however included on a case-by-case basis where it is practically implementable. No new tenders/contracts were concluded during Quarter 2.

3. ERWAT is not in a position to utilise the EPWP program due to being and Entity and cannot apply directly to National Treasury for this grant through the Division of Revenue Act. Going forward, ERWAT will during its budget cycle identify potential projects where the EPWP can be included and utilised. ERWAT will require access and training on the respective EPWP portal for registration of projects and reporting.

4. GEYODI: No new tenders/contracts were concluded during Quarter 2.

6. Risk Management

SUMMARY OF RISKS

The department is faced with uncertainty on the achievement of the strategic and performance objectives as set out in this business plan. The uncertainty arises from various internal and external factors and sources. This uncertainty, if not responded to, may lead to the non-achievement of set objectives and failing to take advantage of any opportunities that may be realised in the pursuit of the achievement of objectives.

The management of uncertainty, otherwise known as risk management, is the basis of effectively responding to uncertainty and maximizing opportunities. Risk management is one of the cornerstones of sound and responsible municipal governance, and it is as an indispensable element of all planning, execution and monitoring activities.

The benefits of responding to risk are:

- Proactive response to performance threats;
- Better quality decisions;
- Increased efficiency, effectiveness and economy of operations;
- Reduced losses;
- Enhanced compliance with laws, regulations and standards;
- Continuity of operations;
- Higher level of assurance on the achievement of objectives.

The department has identified the risks that are associated with its strategic objectives and the inherent nature of its business. The process was in line with the City's Enterprise Risk Management Policy and Framework. The key elements of the process involve the:

(i) The identification of risks;
(ii) The evaluation of risks against drivers and the impact thereof;
(iii) Assessment of risks to determine the residual risk levels;
(iv) Deciding on the appropriate response to risk based on priority; and
(v) Implementing the risk response measures

ERWAT Strategic Risks

The summarised profile of the risks of the department is tabled below

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
ERW 1	Inadequate Infrastructure to treat wastewater	CF1.1	Inadequate integrated planning between CoE and ERWAT	CF 1.1	Service Delivery Agreement between the CoE and ERWAT	High	RAP 1.1	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
		CF1.2	Lack of participation in key decision-making forums established by the City such as Capital Investment Forum	CF 1.2	City Committees (MMC Senior Management meetings, Technical Cluster)		RAP 1.2	Request the H.O.D of the City Planning to invite ERWAT to the Capital Investment Forum meeting	A request was sent to the City for ERWAT to attend the annual Capital Investment Forum meeting. Action plan completed	Action plan completed.
		CF1.3	'a) Outdated, aging and inadequate infrastructure to treat high strength industrial effluent due to lack of budget to implement capacity related projects.	CC 1.3.1	Grant Funding (Urban settlement development grant)		RAP 1.3.1	Investigate other potential sources of funding for the upgrading of infrastructure to increase capacity- Go out into the market to source/borrow additional funding for expansion	Request for Infrastructure funding has been submitted to both DBSA and IDC. Awaiting response and further engagement	In progress - Both DFIs have expressed interest in supporting ERWAT's sustainable initiatives projects and acknowledged the alignment of ERWAT's initiative with their funding priorities. The requested amount is R750 million, which will be utilized for the

REF	Risk Title	Contributing Factors	Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
		Current Capacity (14 WCWs operating above 100% capacity, 3WCWs operating at 80+ to 100% and only 2 WCWs operating below 80%)							implementation of Solar Panels and Capacity expansion project. The requested funds will be allocated as follows: • R350 Million for the Solar Panel project • R400 Million for the Capacity upgrade project. "
			CC 1.3.2	'MTERF Capex Budget Allocation 2023/2024		RAP 1.3.2.1	Implementation the 2023/2024 Capex plan	"The total Capex budget for 2023/24 FY is R127 million. - The target for Quarter 1 is R44.68 million, which is 35% of the total Capex budget. The actual capital expenditure for Quarter 1 of 2023/24 FY is R19.00 million, which is 14.89%. The target for the quarter has not been achieved with a negative variance of -20.11%."	2023/2024FY Approved Budget is R127,6 million Quarter 2 Spending 40,08% = (R51.15 million) Q2 target 60%= R 76,5 million Q2 Variance of -19.92% (Negative Variance)
						RAP 1.3.2.2	Plant Optimisation Modelling	Facility Development Plans (FDPs) for all WCWs to be developed by the end of 2025/26 financial year. The Water Care Works Process Modelling and	In progress - Facility Development Plan draft report for Hartebeestfontein and Olifantsfontein WCW is completed, currently

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
									Optimization Program plan has been approved by EXCO. A draft report for Hartebeestfontein WCW FDP is available.	undergoing reviewing and sign-off.
				CC 1.3.3	Development & Engineering Contribution Policy		RAP 1.3.3	Review the Development & Engineering Contribution Policy to include a clause on upfront payment	Development & Engineering Contribution (DC) policy document under review. The current ERWAT policy is to be bench marked with the latest approved C.o.E policy. The upfront payment clause is now included in the Development application's response letters.	In progress - CoE Development Contribution Policy was approved in March 2023. ERWAT is in process to align the ERWAT DC policy with COE. For Financial Year 2023-2024 the ERWAT DC engineering rate charge has increased to R18 009.20 (R/Kl/day) from R13 526.76 (R/Kl/day) due to the assessment & valuation conducted by COE.
				CC 1.3.4	Wastewater conveyance and treatment systems regionalisation and 50-year master plan		RAP 1.3.4	Five (5) Turnkey Capital Project – 50 Year Master Plan through the City (progress report) 1. Watervaal 2. Olifantsfontein 3. Vlaakplaats 4. Anchor	1. Watervaal - Refurbishment and Expansion for an additional 250 megalitres. Stage 1 Complete & Stage 2 in progress 2. Olifantsfontein - Upgrade from the current regraded	1. Waterval - Refurbishment and Expansion for an additional 250 MLD: Stage 1 Completed & Stage 2 in progress. 2. Olifantsfontein - Refurbish and upgrade from the current regraded capacity of 65

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
								5. Welgedacht	capacity of 65ML/D to 105 ML/D. Stage 1 Complete & Stage 2 in progress 3. Vlaakplaats - Refurbish and upgrade the existing infrastructure of the Vlakplaats Water Care Works to unlock and make available 26 Ml/day of treatment capacity so that the WCW can be rerated and discharge its original 83 Ml/day of effluent for which it is licensed. Stage 1 Complete, awaiting approval to proceed to Stage 2; Waterval WCW 4. Anchor - resuscitate the plant from the current capacity of 15Ml/D to the original design capacity of 35 Ml/D by means of the refurbishment. Anchor WCW: Stage 1 Complete & Stage 2 in progress;	MLD to 105 MLD and expansion for and additional 50 MLD: Stage 1 Completed & Stage 2 in progress. 3. Vlakplaats - Refurbish and upgrade from the current regraded capacity of 55 MLD to 183 MLD: Stage 1 Completed, awaiting approval to proceed to Stage 2. 4. Ancor - Refurbish and upgrade from the current regraded capacity of 15 MLD to 35 MLD and expansion for and additional 15 MLD: Stage 1 Completed & Stage 2 in progress. 5. Welgedacht - Refurbishment and Expansion for an additional 60 MLD: Stage 1 Completed & Stage 2 Completed, Stage 3 in progress.

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
									5. Welgedacht - Refurbishment, Upgrading of the existing modules and the Construction of additional 60 Mℓ/d module for the Welgedacht Water Care Works. Stage 1 Complete & Stage 2 Complete, Stage 3 in progress	
			'b) Outdated, aging and inadequate technology to treat high strength industrial effluent due to lack of budget to implement newer technologies (OPS).	CC 1.3.5	Wastewater Risk Abatement Plans		RAP 1.3.5	Review the Wastewater Risk Abatement Plans every 2nd year (2023)	Review of Waste Water Risk Abatement Plans(WRAPs) commenced in August 2023 with the physical identification of risk for the 19 care works and will be completed in quarter 3 with the finalisation of the reports.	Wastewater Risk Abatement Plans are still in the review in phase. The process will be completed at the end of quarter3 of the 23/24 financial year.
				CC 1.3.6	Wastewater Research and Development Program		RAP 1.3.6	Organic testing of industrial effluent	Organic profiling has been completed on 553 industrial source scans (316 for North East Region and 237 for South West Region). Industries exceeding by laws limits are being screened monthly.	In progress - Organic profiling has been completed on 583 industrial source scans (325 for North East Region and 258 for South West Region). Industries exceeding by

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
										laws limits are being screened monthly.
				CC 1.3.7	CoE Schedule A Bylaws Analysis of samples by ERWAT		RAP 1.3.7	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
				CC 1.3.8	Incident management protocol (IMP).		RAP 1.3.8	Tracking of incidents and on a quarterly to assist in planning to build operational resilience and improving compliance	1453 Job Cards were loaded on the CMMS for equipment breakdown incidents, 770 or 53% were closed.	Q2 290 Job Cards were loaded on the CMMS and total of 309 were closed. Translate to 106% closed
		CF1.4	'Asset Care Plans inadequately resourced to fully implementation maintenance plans leading to unavailability of equipment	CC 1.4.1	Asset Management Policy & Asset Management Strategy		RAP 1.4.1	Review the Asset Management Policy and Strategy	The Assets Management Policy was approved by the board in July 2023 – Action plan completed	Action plan completed
				CC 1.4.2	Asset Care Plans, limited available budget		RAP 1.4.2	Implementation of the Maintenance Plan for 2023/2024	The expenditure year to date is R 15 574 183,73 against the target of R 38 953 466.50 for Quarter 1	The expenditure target is as follows for maintenance Q2 Target – 50% R 38 953 466.50 (Quarterly budget) R 155 813 866.00 (Annual Budget)
				CC 1.4.3	Implementation of the 2022/2023 Maintenance Plan					

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
										Actual - 25.17% R 23 651 046. 27
		CF1.5	Delays in bringing back equipment to services due to long lead time of spares of spares sourced overseas and inadequate service master contracts	CC 1.5.1	ERWAT Operational Procurement Plan		RAP 1.5.1	Create a Centralised Spares Store to reduce down-time and increase efficiency	Action Plan not yet started	Maintenance has conducted an assessment and 3D drawings designs for the Centralised Spares Stores has been completed.
				CC 1.5.2	'Equipment Operating Manuals		RAP 1.5.2	Develop/Review the Maintenance & Operations Standard Operating Procedures	Approved Standard Operating Procedures: 1. Safe Operation & Maintenance Procedure for Medium Voltage Systems 2. Isolation-Lock-Uot-Tag-Out Procedure 3. Safe Operation & Maintenance Procedure for Low Voltage System SOP's Under Review: 2. Asset Scrapping Movement Security & Safe Storage Procedure (SOP subject to review - asset decommissioning and asset transfer	The following Standard Operating Procedures were drafted and still to be signed off 1. Draft MS-SOP-SA-003 Incident Management Procedure (002) 2. Draft MS-SOP-SA-003.1 Incident CLASSIFICATION GUIDELINE 3. Incident Notification and Reporting Forms. 4. Process Flow Incident Reporting

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
									procedures to be added on) 3. Work Order Lifecycle Procedure	
		CF1.6	Storm water ingress contributing to the water levels in the plant	CC 1.6	No current control - Storm water is managed at City level		RAP 1.6	The entity has no control over storm water ingress it is within the boundary of the City	There will be no reporting for the period under review.	There will be no reporting for the period under review.
		CF1.7	Rapid population and industrial growth within CoE	CC 1.7	Wastewater conveyance and treatment systems regionalisation and 50-year master plan		RAP 1.7	Request additional Capex funding to implement capacity related project	Request for Infrastructure funding has been submitted to both DBSA and IDC. Awaiting response and further engagement	In progress - Both DFIs have expressed interest in supporting ERWAT's sustainable initiatives projects and acknowledged the alignment of ERWAT's initiative with their funding priorities. The requested amount is R750 million, which will be utilized for the implementation of Solar Panels and Capacity expansion project. The requested funds will be allocated as follows: • R350 Million for the Solar Panel project • R400 Million for the Capacity upgrade project. "

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
ERW 2	Inadequate preparedness in the event of an emergency /natural disaster.	CF2.1	Some plants of the 19 Wastewater Care Works do not have wastewater bypassing systems and emergency dams	CC 2.1	Water Bypass System for some Wastewater Care Works and emergency dams	High	RAP 2.1	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
		CF2.2	Some of the Infrastructure built on dolomitic areas	CC 2.2	Geo tech studies conducted(annually upon availability of funds)		RAP 2.2	Conduct Geotechnical studies	Action plan closed. Any Geotechnical Investigations will be reported under the 5	Action plan completed.
		CF2.3	Inadequate Business Continuity Management Program	CC 2.3.1	Business Continuity Management Policy		RAP 2.3.1	Develop an ERWAT Disaster Management Framework	Action Plan not yet started.	In progress - ERWAT Disaster Management Framework is still under development.
				CC 2.3.2(a)	Business Continuity Management Risk Assessments for Water Care Works and Support Services		RAP 2.3.2	Review of Business Recovery Plans for the Core Business	Action Plan not yet started.	In progress – BCM identified as a Key Performance Indicator for the Managing Director. The first phase to review of the Business Impact Analysis will start in quarter 3.
				CC 2.3.2(b)	BCM Business Impact Analysis					

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
				CC 2.3. 2(c)	Business Recovery Plans					
				CC 2.3. 3	BCM Steering Committee		RAP 2.3.3 (a)	Raise awareness on Business Continuity Management through quarterly news flash	Action Plan yet started.	In progress - BCM Flash titled 'Elements of a high-functioning Business Continuity Management (BCM) Plan' was communicated to the business on the 30th of October 2023
							RAP 2.3.3 (b)	Training of BCM Co-ordinators	Action plan not yet started	Action plan has not yet started
				CC 2.3. 4	BCM Infrastructure Condition Assessments		RAP 2.3.4	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
				CC 2.3. 5	ICT Disaster Recovery Plan		RAP 2.3.5	Move ERWAT Disaster Recovery Site to a location far from Head Office in line with best practice	Draft specification in progress	Action plan not yet started The upgrading of the operating system is dependent on the server infrastructure replacement with is currently at the Bid Evaluation Stage"

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
ERW 3	Potential loss of the ISO 17025 accreditation	CF3.1	Aging instrumentation, scarcity of spares and discontinuation of instruments could result in loss of the approved testing methods impacting on service delivery both internally and externally	CC 3.1 (a)	Scheduled maintenance in accordance with ERWAT's Instrumentation maintenance Plan	High	RAP 3.1(a)	Scheduled Instrumentation Maintenance Plan	Instrumentation serviced /calibrated as per schedule.	Instrumentation serviced /calibrated as per schedule
				CC 3.1 (b)	Use of obsolete scrapped equipment spares		RAP 3.1(b)	Capex 2 items: 2 x Flow injection analysers GC-MS equipment	The tender is at Bid Specification process.	In progress - FIA's discontinued was looking at new Nutrient analysers on market, tender will go to BSC in Jan 24. GC-MS purge and trap will be advertised 15 Jan 2024
		CF3.2	Lack of budget for planned maintenance of the laboratory building	CC 3.2	Ad-hoc minor maintenance by the Maintenance Department on a daily, weekly and monthly basis.		RAP 3.2	Implementation of building maintenance plans including power supply loads, building/ roof leaks, etc.	Draft design and specification in progress	Building Maintenance was moved to the Operations Department in quarter 2. The Specifications of the Building Maintenance will be finalised by the Operations Department.
		CF3.3	Lack of control of the laboratory internal environmental temperature resulting in	CC 3.3 (a)	UPS at the Laboratory on certain instruments and central generator at Head office		RAP 3.3	Develop Head Office Maintenance Plan (replacement of UPS batteries and scheduled maintenance on the batteries)	Faulty batteries were replaced but additional Capex is required to replace the whole battery bank	Action plan not yet started - The UPS batteries were not replaced. Risk of losing instrument runs.
		CF3.4	Power and water supply disruption due	CF 3.4	Storage tanks for de-ionised water.		RAP 3.4	The current mitigation controls are deemed to be	There will be no reporting for the period under review.	There will be no reporting for the period under review.

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
			to load shedding and unstable water supply					adequate. Therefore, no further risk action plan to be implemented.		
ERW 4	Inadequate preparedness in the event of total grid collapse resulting in extended blackouts	CF4.1	Load shedding challenges facing the South African government	CC 4.1	No current control	High	RAP 4.1	No further action plan due to the network configuration	There will be no reporting for the period under review.	There will be no reporting for the period under review.
		CF4.2	Thirty-Six (36) Gensets to power critical processes and UPS for the Laboratory	CC 4.2	Gensets and UPS for a few		RAP 4.2	Do a feasibility study on alternative energy such as Hydropower, Solar etc	Action plan not yet started	In progress - Solar Polar has been identified as the alternative energy for ERWAT. An application for funding has been made and • R350 Million will be allocated for the Solar Panel project
		CF4.3	Gen-sets do not generate enough to power to operate the entire wastewater care works by its design				RAP 4.3(a)	Repair all non-operational Gensets	The tender to repair all non-operational generators is at the Bid Evaluation stage.	The tender to repair all non-operational generators Generator tender contract at Bid Adjudication Committee stage
							RAP 4.3(b)	Procurement of additional Gensets to increase the flee	A contractor for the installation of the new Gensets appointed in September.	•Project Description : 1.Installation of Generators at various WATER CARE WORKS.

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
										Physical Progress: 70% Financial progress: 68,5% 2.Installation of Pumps at various WATER CARE Physical Progress: 80% Financial progress: 54,92%
ERW 5	Inability to spend in accordance with the allocated budget	CF5. 1	High vacancy rate due to the backlog caused by the previous monotorium	CC 5.1	ERWAT 2023/24 Recruitment Plan	Med	RAP 5.1	Implementation of the 2023/24 recruitment plan	In progress. The following appointments have taken place during the Quarter: Senior Process Controllers Executive Manager Maintenance Executive Manager Commercial Business Executive Manager Strategy, Monitoring and Evaluation Executive Manager IPAP	In progress. The following appointments have taken place: General Worker (1 individual), Executive Manager Operations (02 October 2023), Tea Lady (1 individual), and Works Manager (02 October 2023). The following positions are at offers stage: Tea Ladies, Drivers, General Worker (Lab and HR) and District Manager."
		CF5. 2	Decline in bulk purchases; Electricity costs due to load shedding	CC 5.2	ERWAT Procurement Plan		RAP 5.2	Enhance the process by having additional chemical suppliers (Ops)	The tender for Aluminium sulphate is at BEC stage	In progress- Tender was a non-award, will review the tender specifications and submit to BSC in Jan. 2024.

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
		CF5.3	Unavailability of chemicals in the market (Unavailability of fuel)	CC 5.3	Variance report (budget vs actual spent)		RAP 5.3	Enhance the budget variance process by sending variance reports to user departments	Budget variance reports are sent to user departments monthly	Budget variance reports are sent to user departments monthly
		CF5.4	Non award of tenders	CC 5.4	Bid Specification Committee in place		RAP 5.4	User department to ensure that they conduct a proper market research analysis and provide proof thereof	The requirement is on the SCM bid checklist. It is required with new works and not with recurring tenders.	Action plan completed - The requirement is on the SCM bid checklist. It is required with new works and not with recurring tenders.
		CF5.5	Poor Contracts Management	CC 5.5.1	Contracts Management Policy		RAP 5.5.1	Implementation of the Contracts Management policy (reporting and reviewing of the contract register)	Contract management policy was approved on 14/03/2023.The contracts register is reviewed and reports continuously tabled at EXCO. The tracking of contracts an agenda item for EXCO and a Section 32 Report submitted to the City on a quarterly basis for monitoring. In progress	Action plan completed - The contracts register is reviewed and reports continuously tabled at EXCO
				CC 5.5.2	Contractor performance assessments		RAP 5.5.2	Report(monthly) on monitoring of contractor performance	Reporting on monitoring of contracts performance takes place during Executive Committee meetings. Last report was tabled on 12/09/2023	Reporting on monitoring of contracts performance takes place during Executive Committee meetings. Last report was tabled on 12/09/2023
				CC 5.5.3	Contracts register					

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
		CF5.6	Delays in the processing of purchase orders	CC 5.6.1	Adherence to SOP14 Turnaround time and control administrative measures		RAP 5.6	SCM workshop on procurement of products and services(quarterly)	SCM Department organised a Bid Committee Training which was conducted by National Treasury on the 17/08/2023.	In progress - No training was conducted during quarter 2 due to the Annual Auditor General audit process. Workshops to be conducted during Q3 and Q4
				CC 5.6.2	Confirmation of budget prior to processing of purchase orders					
				CC 5.6.3	SCM checklist for approval/contracts purchase orders in place					
ERW 6	Inadequate revenue generation to supplement the approved budget	CF6.1	Inability to secure new business due to overhead costs that are higher than that of competitors. (Such as Manpower, laboratory, etc.)	CC 6.1.1	Pricing Model. (Scientific Services Price Schedule)	Med	RAP 6.1.1	Review of the Pricing Model.	The review of the Pricing Model is depended on the finalisation of the Financial Model by Finance.	In progress - The review of the Pricing Model is depended on the finalisation of the Financial Model by Finance.
				CC 6.1.2	Manually Costing Per Project.		RAP 6.1.2	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
				CC 6.1.3	Quarterly Business reviews		RAP 6.1.3	The current mitigation controls are deemed to be adequate.	There will be no reporting for the period under review.	There will be no reporting for the period under review.

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
								Therefore, no further risk action plan to be implemented.		
				CC 6.1.4	Sourcing clients from the networks that ERCOM has built over the years		RAP 6.1.4	Development of sales strategy and market penetration plan	The Tender was Re-advertised – it is at Bid Evaluation Committee stage	In progress - The Tender is withdrawn. Dept will submit the strategy to Exco.
		CF6.2	Loss of existing business through insourcing and companies closing down or reducing costs	CC 6.2	Customer Satisfaction Survey		RAP 6.2	Appointment of an independent service provider to conduct annual customer survey	The project is still at Bid Specification Committee stage	In progress - The tender to be advertised in quarter 2.
		CF6.3	Inability to retain clients because there is no flexibility in price increment	CC 6.3	Revised Commercial Business Policy		RAP 6.3	Review of the Commercial Business Policy to include continuous improvement of policy conditions	The policy is still within its validity period. Next policy review is due in November 2025. Action completed	Action plan completed
		CF6.4	Business requirements limiting of entry to new market (Level of BBB-EE Compliance)	CC 6.4	BBB-EE Task team in place		RAP 6.4	Planning of all activities related to the requirements of the BBB-EE score card Annual review of BBB EE Compliance.	Committee members already identified, request that the project be allocated to the SME department.	In progress - Committee members already identified, request that the project be allocated to the SME department.

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
		CF6.5	Expiry of existing customer contracts/non-renewal of expired contracts	CC 6.5	Negotiations are scheduled prior to expiry date		RAP 6.5	Develop a tracking sheet for early negotiation of contracts	Committee members already identified, request that the project be allocated to the SME department.	Action plan completed.
		CF6.6	Long lead times from the city to initiate and implement PPP projects	CC 6.6	No current control		RAP 6.6	Tracking of the progress of the projects approvals	Committee members already identified, request that the project be allocated to the SME department.	In progress - Committee members already identified, request that the project be allocated to the SME department
ERW 7	Failure to meet capital expenditure set target	CF7.1	Delays in Supply Chain processes. (Including the effect of the Pandemic)- IPAP	CC 7.1.1	Annual CAPEX Plan with projected cash flows for each project	Med	RAP 7.1.1	Implementation of the 2023-2024 CAPEX Plan	"The total Capex budget for 2023/24 FY is R127 million. - The target for Quarter 1 is R44.68 million, which is 35% of the total Capex budget. The actual capital expenditure for Quarter 1 of 2023/24 FY is R19.00 million, which is 14.89%. The target for the quarter has not been achieved with a negative variance of -20.11%."	2023/2024FY Approved Budget is R127,6 million Quarter 2 Spending 40,08% = (R51.15 million) Q2 target 60%= R 76,5 million Q2 Variance of -19.92% (Negative Variance)
				CC 7.1.2	Standard Operating Procedure 14 Turn Around Time		RAP 7.1.2	The current mitigation controls are deemed to be adequate. Therefore, no	There will be no reporting for the period under review.	There will be no reporting for the period under review.

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
								further risk action plan to be implemented.		
		CF7.2	Late payment of contractors due to USDG Invoices being paid late	CC 7.2.1	Usage of ERWAT funds to pay contractors		RAP 7.2.1	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
				CC 7.2.2	Constant communication with CoE		RAP 7.2.2	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
		CF7.3	Members of the community and the local business forums demanding to be sub-contracted in the project.	CC 7.3	Supply Chain Management Policy (Sub-contracting)		RAP 7.3	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
		CF7.4	Potential disruptions such as Contractor employees going on strike and/or any other disruption caused by contractor	CC 7.4	Service Level Agreement		RAP 7.4	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
		CF7.5	Denial of contractor's access to ERWAT sites due to labour unrest	CC 7.5	Disciplinary Procedure		RAP 7.5	Disciplinary processes to be taken for illegal strikes as and when they arise	No disciplinary process took place during Quarter 1	There were no illegal strikes in quarter 2 and therefor there was no disciplinary process that took place relating to strikes.
		CF7.6	Denial of contractor's access to ERWAT sites due to community unrest	CC 7.6.1	Community Liaison Officer Appointed through ward councillors to assist with community engagement.		RAP 7.6.1	Engage CSR office prior to commencement of construction project. (CSR plan to include Projects)	There were no new projects for the period under review	There were no new projects for the period under review
				CC 7.6.2	Sub-contracting to local business on projects that requires less technical skills.		RAP 7.6.2	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
		CF7.7	Tender offer declined by the winning bidder	CC 7.7	Supply Chain Management Policy		RAP 7.7	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
		CF7.8	Termination of contract due to poor performance of the contractor and unexpected withdrawal from projects by the contractor	CC 7.8	Invoke penalties for poor performance in line with the Supply Chain Management Policy and related Service Level Agreements		RAP 7.8	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
ERW 8	Potential loss of key skills	CF8.1	Unexpected loss of key employees due to the resignation, retirement, death etc.	CC 8.1.1	Recruitment Policy	Med	RAP 8.1.1	Review the recruitment policy to include a section on the recruitment of foreign nationals and compulsory entry and exit medicals		In progress - All HR Policies including the Recruitment Policy are under review and will be submitted to Board for approval.
				CC 8.1.2	ERWAT Recruitment Plan		RAP 8.1.2	Implementation of the 2023/24 Recruitment Plan	In progress. The following appointments have taken place during the Quarter: Senior Process Controllers	In progress - The following appointments have taken place: General Worker (1 individual), Executive Manager Operations (02 October 2023), Tea

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
									Executive Manager Maintenance Executive Manager Commercial Business Executive Manager Strategy, Monitoring and Evaluation Executive Manager Infrastructure Planning and Projects.	Lady (1 individual), and Works Manager (02 October 2023). The following positions are at offers stage: Tea Ladies, Drivers, General Worker (Lab and HR) and District Manager.
				CC 8.1.3	ERWAT Progression Framework		RAP 8.1.3	Review of existing Progression Framework to include other departments	Operations progression table has been reviewed. Core business Progression Frameworks to be submitted to newly appointed Executives for input in Quarter 2.	In progress - Operations and Scientific Services Framework was submitted for feedback by the Executive Managers. Maintenance Framework will be updated, once the structure changes have been finalised.
				CC 8.1.4	Skills Audit		RAP 8.1.4	Implementation of the skills Audit a plan for the gaps identified in the skills audit	Tender process has commenced, and training is planned to commence in Quarter 3.	In progress - Tender in Evaluation stage. Tender closed on 09 November 2023"
				CC 8.1.5	Covid 19 Standard operating procedure		RAP 8.1.5	Develop an ERWAT Epidemic/Pandemic policy	The policy to be tabled at the Remuneration and Ethics Committee on the 20th of October 2023	In progress - All HR Policies are currently under review and will be submitted to Board.

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
				CC 8.1.6	Covid 19 Risk Assessment		RAP 8.1.6	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
				CC 8.1.7	6-year Training and Development Plan		RAP 8.1.7	Implementation of 2023/24 Annual Training Plan	Disciplinary hearing training has been completed as well as the first block for Advanced Management Development Programme has been completed.	In progress - "Second and third block of Advanced Management Development Programme has been completed. 2nd block (10 Learners) 09-13 October 2023 3rd Block (10 Learners) 13-17 November 2023 First Aid (50 Learners) 20 Nov- 05 Dec 2023 SHE Rep (50 Learners) 06-08 November 2023 Fie Fighting (50 Learners) 13-16 November 2023 has been completed."
		CF8.2	Dissatisfaction in the Working Environment (e.g. not fitting in with the organisation's	CC 8.2.1	Medical Aid Policy		RAP 8.2.1	Review the Medical Aid policy to include pension	Draft Employee Benefits Policy has been finalised. Reviewed policy to be circulated to Management in Quarter 2 for input.	In progress – The draft Employee Benefits Policy circulated to management for comments and the closing date for all

REF	Risk Title	Contributing Factors	Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
		culture and inadequate working resources)							comments was 22nd December 2023.
			CC 8.2.2	Employee climate survey		RAP 8.2.2	Conduct an Employee Climate Survey	Action plan not yet started	In progress - Organisational Development Services Tender document has passed BSC.
			CC 8.2.3	Psychosocial support		RAP 8.2.3	Implementation of the 2023/24 Employee Wellness Support Programmes	Tender process has commenced. Briefing session was held on the 21/09/2023. Tender closes on 13 October 2023. Will report feedback in Q2. Presently counselling done in-house by the Occupational Health Nurse Practitioner (OHNP)	The tender is at Bid Evaluation stage. Tender closed on 09 November 2023
			CC 8.2.4	Wellness workplace programmes		RAP 8.2.4	Implementation of the 2023/24 Wellness Program	Tender process has commenced. Briefing session was held on the 21/09/2023. Tender closes on 13 October 2023. Will report feedback in Q2. Presently counselling done in-house by the Occupational Health Nurse Practitioner (OHNP)	The Tender is at Bid Evaluation Committee phase. Presently counselling done in-house by the Occupational Health Nurse Practitioner (OHNP)

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
				CC 8.2.5	Human Resource Management Roadshows		RAP 8.2.5	Go on a Human Resources Road Show to raise awareness on Human Resource activities	Action plan not yet started	In progress - Roadshow has commenced. Benoni and Rynfield (16 November 2023), JP and Jan Smuts (28 November 2023), CG and HB (29 November 2023), Vlakplaats and Rondebult (06 December 2023) has been visited.
		CF8.3	Individuals not coping with the work challenges, expectations on individuals not met and career advancement	CC 8.3.1	Personal Development Plans		RAP 8.3.1	Review of Personal Development Plans for the 2023/24 Financial Year	Personal Development Plans for DD3, DD4,DD5, DD6 for the 2023/24 FY has been completed	Action plan completed. Information from PDP's has been consolidated into the six-year Training Plan.
				CC 8.3.2	Exit Interview as and when a need arise		RAP 8.3.2	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
ERW 9	Potential delays in the supply and delivery of critical goods and services as	CF9.1	Late commencement of bid processes by user department and discrepancies	CC 9.1.1	Supply Chain Management Policy	High	RAP 9.1.1	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.

REF	Risk Title	Contributing Factors	Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
	a result of procurement challenges	around specifications	CC 9.1.2	SOP14 Turn Around Time		RAP 9.1.2	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
			CC 9.1.3	ERWAT Procurement Plan		RAP 9.1.3	Review the 2022/23 Procurement Plan for the 2023/2024 Financial Year	The Procurement Plan signed by the CFO. Currently at OoMD for final approval.	In progress - Procurement plan were concluded and signed by the AO on 11/09/2023 and 02/10/2023 respectively.
			CC 9.1.4	BID Committees		RAP 9.1.4	Appointment of Probity Committee to assist the Accounting Officer with compliance.	Probity committee has been appointed and sittings effective from 01/06/2023 and ending 31/12/2023. Action plan completed	Action plan completed
			CC 9.1.5	BID Committee Charters		RAP 9.1.5	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
				CC 9.1.6	SCM Document Movement Control Tracking Register implemented		RAP 9.1.6	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
		CF9.2	Inadequate monitoring of contract term by the user department	CC 9.2 (a)	Contract Management Policy		RAP 9.2	Implementation of the Contracts Management Policy (reporting and reviewing of the contract register)	Contract management policy was approved on 14/03/2023.The contracts register is reviewed and reports continuously tabled at EXCO	Action plan completed
				CC 9.2 (b)	Contracts Management Register					
		CF9.3	Long lead time to deliver goods/ services due to external factors such as Pandemics, Rise in Logistics Cyber Attacks, Shortage of supplies & Consumables etc.	CC 9.3	Service Master Contracts for Maintenance		RAP 9.3	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
ERW 10	Potential Loss of, and Unauthoris	CF10.1	Aging ICT infrastructure leading to higher	CC 10.1	Asset Management Policy, Strategy and Disaster	High	RAP 10.1(a)	Replacement of server infrastructure	The Specification for appointment of a service provider has	In progress - The Bid submission is at the Bid Evaluation Committee phase

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
	ed Access Critical Information		hardware failure (80%-85%) of the Server Hardware has reached end of life support, leading to difficulties in procuring replacement spare, warranties, etc)		Recovery Plan (Cloud back-up)				been approved at BSC on the 21/03/2023.	
							RAP 10.1(b)	Upgrade unsupported operating systems	Action plan not yet started. The upgrading of the operating system is dependent on the server infrastructure replacement	Action plan not yet started the upgrading of the operating system is dependent on the server infrastructure replacement with is currently at the Bid Evaluation Stage"
		CF10.2	Inadequate cyber security awareness and behaviour	CC10.2	ICT security awareness programs: (News Flash, Induction, Cyber security surveys, Mimecast)		RAP 10.2	Raise awareness Cyber-Security through quarterly news flash	Quarter 1 Flash on Cyber Security was issued on the 28 September 2023	In progress - Quarter 2 Flash on Cyber Security was issued on the 13 December 2023
		CF10.3	Inadequate Information Security Controls	CC10.3.1	ICT Security Policy and Procedures		RAP 10.3.1	Develop a User Access Review Standard Operating Procedure	Action plan not yet started Progress to be reported in Q2	In progress - User Access Review Standard Operating Procedure still in draft to be signed off in quarter 3
				CC10.3.2	Access control policy		RAP 10.3.2	Develop a back-up and restoration Standard Operating Procedure	Action plan not yet started.	Back-up and Restoration Standard Operating Procedure in a draft format, to be signed off by in quarter 3

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
	Potential injuries to people (personnel, visitors and contractors) and damage to property			CC 10. 3.3	Logical access policy		RAP 10.3. 3	Develop a Cyber-Security policy	Action plan not yet started	Action plan not yet started
		CF1 0.4	Non- adherence to ICT Policies and Procedure	CC 10. 4(a)	Disciplinary Procedure		RAP 10.4	Raise awareness on ICT Policies through quarterly news flash	Quarter 1 Flash was issued on the 29 September 2023	Quarter 2 Flash on Cyber Security was issued on the 13 December 2023
				CC 10. 4(b)	Induction Program					There was no induction of new employees in the period under review.
		CF1 0.5	Inadequate maintenance of Assets that are critical to ICT Environment (e.g. fire equipment in the server room, air conditioning system, UPS, Power Generators, location of server room, etc.)	CC 10. 5	CC10.5 Maintenance of ICT critical equipment TBC (Who is responsible for executing the maintenance function e.g. servicing of fire equipment, ups, generators)		RAP 10.5	Annual Servicing of the Fire Fighting Equipment (Fire Extinguishers & Fire Hydrants)	Actual	Action plan completed - The Servicing of the Fire Extinguishers and Fire Hydrants has been completed for all districts. Next service is due in Novemeber 2024.
		CF1 0.6	Inadequate monitoring of ICT server environment	CC 10. 6(a)	Manually Monitoring of the Environmental Conditions		RAP 10.6	Implementation of an Environmental Monitoring System in the server room	The service provider has been appointed and installation to start on the 04/10/2023.	Action completed - The installation Environmental Monitoring System

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
				CC 10. 6(b)	Temperature Data Logger			to control temperature, humility and power		completed on the 13 December 2023
		CF1 1.1	Non-Compliance/ disregarding (Knowingly or unknowingly) Occupational Health & Safety policies and Standard operating procedures. (e.g. Inappropriate use of PPE;)	CC 11. 1.1	Occupational Health & Safety Policy		RAP 11.1. 1	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
				CC 11. 1.2	Occupational Health & Safety Procedures (SOPs) -MS- SOP-SA002 Health and Safety Representative Procedure -MS- SOP-SA003 Accident Reporting and Investigation Procedure -MS- SOP-SA004 Permit to Work Procedures -MS- SOP-SA005 Confined Space Procedure -MS- SOP-SA006 Excavation		RAP 11.1. 2(a)	Development of Occupational Health Standard Operating Procedures: Employee Assistance Programme	Action plan not yet started. Progress to be reported in Q2	The Employee Assistance Programme Standard Operating Procedure still in development stage. Draft documents will be circulated to the business in Quarter 3 for comments.
							RAP 11.1. 2(b)	Review of Safety Standard Operating Procedures 1. Occupational Health & Safety Procedures (SOPs) 2. MS- SOP-SA002 Health and Safety Representative Procedure 3. MS- SOP-SA003	The following procedures are under review and will be presented at the next Central Safety Committee meeting for adoption and approval: 1. MS- SOP-SA002 Health and Safety Representative Procedure	"The following procedures were presented at the Central Safety Committee meeting on the 01 December for adoption and approval: 1.ERW- SOP-SA002 Health and Safety Representative Procedure

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
					Procedure -MS- SOP-SA007 Wearing of Safety Harness -MS- SOP-SA008 Fall Protection Plan -MS- SOP-SA009 Control of contractors working at ERWAT -MS- SOP-SA0010 HSE Plan			Accident Reporting and Investigation Procedure 4. MS- SOP-SA004 Permit to Work Procedures 5. MS- SOP-SA005 Confined Space Procedure 6. MS- SOP-SA006 Excavation Procedure 7. MS- SOP-SA007 Wearing of Safety Harness 8. MS- SOP-SA008 Fall Protection Plan 9. MS- SOP-SA009 Control of contractors working at ERWAT 10. MS- SOP-SA0010 HSE Plan	2. MS- SOP-SA003 Accident Reporting and Investigation Procedure 3. MS- SOP-SA004 Permit to Work Procedures 4. MS- SOP-SA005 Lock-out Procedure	2. ERW- SOP-SA003 Accident Reporting and Investigation Procedure 3. ERW-SOP-SA-011 Medical Surveillance Procedure 4. ERW-SOP-SA-012 Leadership Procedure The following procedures are being reviewed by Maintenance Department: 1. MS- SOP-SA004 Permit to Work Procedures 2. MS- SOP-SA005 Lock-out Procedure"
				CC 11. 1.3	Occupational Health & Safety Committees (Monthly District Safety Committee, Quarterly Central Safety Committee)		RAP 11.1. 3	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
				CC 11. 1.4	Safety Awareness Program (Toolbox talks)		RAP 11.1. 4(a)	Raise Safety Awareness through quarterly newsflash	Ongoing Safety Awareness through Weekly Flash	Raise Safety Awareness through Weekly Flash and a Safety share at all meetings
							RAP 11.1. 4(b)	Conduct a Safety Drill to increase safety awareness	Safety Drills were conducted in the following plants: Benoni, Hartebeesfontein, Olifantsfontein, Rynfield, Dekema, Rondebult, Vlakplaats	In progress - Safety Drills were conducted at Rondebult on the 21 November 2023 and Head Office Precint on the 18 October 2023.:
				CC 11. 1.5	Safety Induction		RAP 11.1. 5	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
		CF1 1.2	Deteriorating workplace condition due to inadequate maintenance	CC 11. 2.1	2022/2023 Maintenance Plan		RAP 11.2. 1	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
				CC 11. 2.2	Medical Surveillance policy		RAP 11.2. 2	Develop a Medical Surveillance Standard Operating	Action plan not yet started. Progress to be reported in Q2	

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
								Procedure to expand on the baseline and categories of employees		
		CF1 1.3	Unauthorised entry to ERWAT properties with the aim of vandalising, threat to lives, theft, (armed robberies)	CC 11. 3.1	Security Services Policy		RAP 11.3. 1	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.
				CC 11. 3.2	Security Services Standard Operating Procedure -Security Operations Room Procedure -Security Systems Procedure -Trespass procedure -Guarding Procedure -Incident Reporting Procedure -Access control Procedure		RAP 11.3. 2	The current mitigation controls are deemed to be adequate. Therefore, no further risk action plan to be implemented.	There will be no reporting for the period under review.	There will be no reporting for the period under review.

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
					-Security Awareness Procedures					
				CC 11. 3.3	Security Awareness Program (Induction,Newsletters,Flash)		RAP 11.3. 3	Implementation of the Security Awareness Programs for 2023/2024	Security awareness done through internal Flash for quarter 1.	Security awareness sessions were conducted with all Plants during quarter 2,
		CF1 1.4	Unavailability of Fire Detection & Suppression System for the buildings	CC 11. 4	Fire extinguishers and Fire Hydrants		RAP 11.4	Annual Servicing of the Fire Fighting Equipment (Fire Extinguishers & Fire Hydrants)	A Purchase Order was received on Friday (29/09/2023) awarding for the servicing of the fire extinguishers in District Drainage 4 & 5, the supplier is currently structuring the plan to carry out the services. District Drainage 3, Purchase Orders is still outstanding. District Drainage 6, paperwork for advert has been submitted to SCM currently awaiting it to be advertised.	
								Raise Safety Awareness through quarterly newsflash	Ongoing Safety Awareness through Weekly Flash	Ongoing Safety Awareness through Weekly Flash
								Conduct a Safety Drill to increase safety awareness	Safety Drills were conducted in the following plants: Benoni,	Safety Drills were conducted at Rondebult on the 21 November 2023 and Head Office

REF	Risk Title	Contributing Factors		Current Mitigating Controls		RR	Risk Action Plans		Detailed Progress Quarter 1	Detailed Progress Quarter 2
									Hartebeesfontein, Olifantsfontein, Rynfield, Dekema, Vlakplaats	Precint on the 18 October 2023.:

7. Legislative (only if applicable to your department)

Compliance with legislation that applies to the entity is critical to the existence and operations of ERWAT. Management and the board have identified and prioritised seven (7) key legislation for monitoring. Compliance risk management plans are developed to ensure that all the risks are mitigated. Any changes to legislation is aligned with internal policies and processes The Regulatory Landscape consist of the following

1. Companies Act 71 of 2008
2. Municipal Systems Act 32 of 2000
3. National Water Act 36 of 1998
4. National Environmental Management Act
5. Municipal Finance Management 56 of 2003
6. Labour Relations Act 66 of 1995
7. Occupational Health and Safety Act 85 of 1993
8. Disaster Management Act 57 of 2005
9. Personal Protection of Information Act 4 of 2

8.Key Audit Matters and Progress

ERWAT obtained an unqualified audit opinion from the AGSA for the 2021/2022 financial year. Twenty-five (25) findings were included in the Management Report, of which five (5) were audit report items. Of these twenty-five (25) findings, twenty-three (23) have been finalized and two (2) findings have been good – going as planned.

2021/2022 OPCA

No	Finding Heading	Status	Action Plan
1	Reasonable steps not taken to prevent irregular expenditure	**Finalized**	a. Perform a gap analysis on all SCM matters policies and procedures to ensure compliance with applicable laws and regulations. b. Update, implement and create awareness on the revised SCM policies and procedures. c. Enhance review processes of procurement processes using the checklists to ensure compliance with applicable laws and regulations prior to awards on bids. d. Review SCM structure and role profiles to ensure role clarity and enhance accountability. e. Develop and implement bid committee charters to clarify and enhance bid committee roles and responsibilities. f. Develop and implement a training plan for SCM officials and committee members. g. Monitor the contract register monthly and communicate contract expiry with end users. h. Develop bid evaluation compliance checklist.

No	Finding Heading	Status	Action Plan
			Implement and create awareness about the bid evaluation checklist.
2	B-BBEE points allocated to a bidder who did not submit a valid certificate	**Finalized**	a. Develop bid evaluation compliance checklist. b. Implement and create awareness about the bid evaluation checklist. c. Review and assess B-BBEE certificates/ applicable documents submitted by bidders to claim preferential points submitted to confirm validity. d. Appoint a bid probity function. e. Review bid evaluation process prior to award to ensure compliance with applicable laws and regulations. Independent review either to be performed by the MD committee or an independent person.
3	B-BBEE points allocated to a bidder who did not submit a valid certificate for the sub-contractor	**Finalized**	a. Develop bid evaluation compliance checklist. b. Implement and create awareness about the bid evaluation checklist. c. Review and assess B-BBEE certificates/ applicable documents submitted by bidders to claim preferential points submitted to confirm validity. d. Appoint a bid probity function. e. Review bid evaluation process prior to award to ensure compliance with applicable laws and regulations. Independent review either to be performed by the MD committee or an independent person.

No	Finding Heading	Status	Action Plan
4	Feasibility for sub-contracting not considered for tenders above R30 million	**Finalized**	a. Develop bid evaluation compliance checklist. b. Implement and create awareness about the bid evaluation compliance checklist. c. Appoint a bid probity function. d. Review bid evaluation process prior to award to ensure compliance with applicable laws and regulations. Independent review either to be performed by the MD committee or an independent person. e. Review SCM Policy to include 2022 PP Regulations. f. Standard bid document will be reviewed to include all the mandatory requirements in line with the BSC Compliance checklist including a draft SLA.
5	Amount of the contract awarded is not in line with the CIDB grading requirements	**Finalized**	a. Develop and implement bid evaluation compliance checklist. b. Appoint a bid probity function. c. Review bid evaluation process prior to award to ensure compliance with applicable laws and regulations. d. Perform risk assessment for emerging contractor who is registered on a grade which is one level lower than the required. e. Perform CIDB notification based on the nature of the financial or management support.
6	Misstatements identified in the notes to annual financial statements submitted for audit	**Finalized**	a. Agree the disclosure note to the financial statement to ensure accuracy.

No	Finding Heading	Status	Action Plan
	financial instruments and Fruitless and wasteful expenditure note		b. Enhance review of the disclosure note to the financial statements.
7	Incorrect disclosure of deviations in the note to the financial statements	**Finalized**	a. Enhance the deviation register to align it to Regulation 36. b. Enhance the review of the deviation register note in the financial statement.
8	Misstatements identified in the notes to annual financial statements submitted for audit Related party disclosure note	**Finalized**	a. Agree the disclosure note to the financial statement to ensure accuracy. b. Enhance review of the disclosure note to the financial statements.
9	Disclosure of principal-agent arrangement not in compliance with GRAP 109	**Finalized**	a. Agree the disclosure note to the financial statement to ensure accuracy. b. Enhance review of the disclosure note to the financial statements.
10	Reported performance information not consistent with the approved business plan	**Finalized**	a. Management will consider a dedicated person to conduct quality assurance on SDBIP & Annual Performance Information. b. Management will enhance the reviews to ensure the accuracy, validity and completeness of the performance information reported.
11	The amount of fruitless and wasteful expenditure as per the register submitted for audit does not agree with the amount disclosed in the financial statements	**Finalized**	a. Enhance the fruitless and wasteful expenditure register. b. Enhance the review of the fruitless and wasteful expenditure note in the financial statement.
12	Reasonable steps not taken to prevent fruitless and wasteful expenditure	**Finalized**	a. Perform a gap analysis on all SCM matters policies and procedures to ensure compliance with applicable laws and regulations.

No	Finding Heading	Status	Action Plan
			b. Update, implement and create awareness on the revised SCM policies and procedures. c. Enhance review processes of procurement processes using the checklists to ensure compliance with applicable laws and regulations prior to awards on bids.
13	The amount of irregular expenditure as per the register submitted for audit does not agree with the amount disclosed in the financial statements	**Finalized**	a. Enhance the irregular expenditure register. b. Enhance the review of the irregular expenditure note in the financial statement.
14	Information for losing bidders to tenders awarded has not been provided	**Finalized**	a. Develop and Implement document register, to ensure that all documents movement is accounted for. b. Request hard copy file and electronic bid proposal submission. c. Management will ensure that all bids (unsuccessful) are kept with the external storage (AGS) and proper records are in place.
15	Some information supporting contract management has not been provided	**Finalized**	a. Develop and Implement document register, to ensure that all documents movement is accounted for. b. Request hard copy file and electronic bid proposal submission. c. Management will ensure that all bids (unsuccessful) are kept with the external storage (AGS) and proper records are in place.
16	Site visit observations	**Good – going as planned**	a. Prioritise the implementation of asset replacement to renew of ageing infrastructure on MTREF.

No	Finding Heading	Status	Action Plan
			b. Implement WCWs capacity upgrade and extension projects, to ensure that WCWs operate within their design capacity, to prevent overloading and equipment failure.
17	Compliance with license conditions	**Good – going as planned**	a. Prioritise the implementation of asset replacement to renew of ageing infrastructure on MTREF. b. Implement WCWs capacity upgrade and extension projects, to ensure that WCWs operate within their design capacity, to prevent overloading and equipment failure. c. Renew expired Water Use Licenses
18	Prior period error note 32 has been overstated	**Finalized**	a. Agree the disclosure note to the financial statement to ensure accuracy. b. Enhance review of the disclosure note to the financial statements.
19	Expenditure transactions incorrectly classified	**Finalized**	a. Review the general ledger accounts to ensure that transactions are correctly classified. b. Process correcting entries for errors identified.
20	CIDB Grading requirements advertised in the newspaper is not the same as the requirement per the approved specifications	**Finalized**	a. Develop and implement bid committee Compliance Checklist. b. Bid advertisement will be reviewed and signed off by the SCM Manager prior to placing advertisement.
21	The tender was awarded to a different service provider than the one who was initially recommended by BAC	**Finalized**	a. Develop and implement bid evaluation compliance checklist. b. Appoint a bid probity function. c. Review bid evaluation process prior to award to ensure compliance with applicable laws and regulations.

No	Finding Heading	Status	Action Plan
			d. Develop and implement bid committee charters. e. Appoint bid committee scribers for each committee and ensure that the role of the secretariat is clearly defined.
22	Tender award to the service provider is not economical	**Finalized**	a. Develop and implement bid evaluation compliance checklist. b. Appoint a bid probity function. c. Review bid evaluation process prior to award to ensure compliance with applicable laws and regulations.
23	The winning bidder not disqualified for failing pre-qualifying condition	**Finalized**	a. Develop and implement bid evaluation compliance checklist. b. Appoint a bid probity function. c. Review bid evaluation process prior to award to ensure compliance with applicable laws and regulations.
24	Incomplete contracts register and RFQ register	**Finalized**	a. Review and update the contracts register to ensure completeness of the register. b. Implement the contract management policy.
25	Tender awarded to a supplier who submitted a partially completed bid document	**Finalized**	a. Develop and Implement document register, to ensure that all documents movement is accounted for. b. Request hard copy file and electronic bid proposal submission. c. Management will ensure that all bids (unsuccessful) are kept with the external storage (AGS) and proper records are in place.