

# GREEN DROP REQUIREMENTS 2015

**Data Assessment Period: 01 July  
2014 to 30 June 2015**

**South African Wastewater Service  
Incentive-based Regulation**

## ***Key Performance Areas***

1. Process Control, Maintenance and Management Skill 10%
2. Wastewater Monitoring 15%
3. Submission of Wastewater Quality Results 5%
4. Effluent Quality Compliance 30%
5. Wastewater Quality Risk Management 15%
6. **Bylaws (Local Regulation) 5%**
7. **Wastewater Treatment Capacity 5%**
8. **Wastewater Asset Management 15%**

# Process Control, Maintenance and Management Skill

- ▶ Registration Certificate of Works displaying Classification - Works
- ▶ Registration Certificates of Process Controllers and Supervisors (bonus for Regulation 17 compliance) - Works
- ▶ Maintenance Team used at the plant, reticulation network & pump-stations for the full scope of servicing: mechanical, electrical, instrumentation and civil - M&E / Design
- ▶ Maintenance Schedules (Routine/Scheduled) - M&E
- ▶ Site-specific Operation & Maintenance Manuals (not all works) - Works / M&E / Design
- ▶ Operational Logbooks - Works

# Wastewater Monitoring

- ▶ Operational Monitoring - Works
- ▶ Compliance Monitoring (For ALL Effluent Discharges) - Works / Scientific Services
- ▶ Lab Sampling Schedules (Routine & Outfall) + Sampling chain of custody - Scientific Services
- ▶ Laboratory used - Scientific Services
- ▶ Analytical Quality Control (*Certificate of Accreditation*) - Scientific Services
- ▶ Sampling point location (GPS, aerial photography) - Works / GIS

# Submission of Wastewater Quality Results

- ▶ Data submission to DWS (*12 months of data submitted to DWS on the GDS*) -  
**Scientific Services**

# Effluent Quality Compliance

- ▶ **Copy of Authorisation** detailing Authorisation Number, Date, Effluent Quality Standards - **Works**
- ▶ **Effluent Quality** (Micro, Chemical and Physical compliance) - **Works**
- ▶ **Green Drop Improvement Plan (GDIP)** with evidence of implementation - **Works**
- ▶ **Sludge monitoring / pond desludging schedule** - **Works**

# Wastewater Quality Risk Management

- ▶ Updated Wastewater Risk Abatement Plan (W2RAP) with evidence of implementation of previous plan - **Works**
- ▶ Wastewater Incident Management Protocol (FIRM / Incident registers) - **Works**

## Bylaws (Local Regulation)

- ▶ Proof of the **Bylaws** (industrial trade effluent, package plants, decentralized systems, vacuum tank discharges and spillages into the environment, storm-water connections to sewer system) - **Pollution and Environment**
- ▶ Evidence of **Bylaw enforcement** - **Pollution and Environment**
- ▶ Publication of WWTW compliance - **Works**



# Wastewater Treatment Capacity

- ▶ **Design capacities** (hydraulic and organic) - **Works**
- ▶ **Flow monitoring and measurement** (PWWF, flow reports, calibration certificates, **night hourly flows, outflow monitoring/measurement**) - **Works**
- ▶ **Medium to long term planning** to ensure sufficient capacity for **treatment system** and to ensure effluent quality compliance - **Works / Planning**
- ▶ **Medium to long term planning** to ensure sufficient capacity for **collecting system** - **Wastewater Network / Planning**

# Wastewater Asset Management

- ▶ **Annual Process Audit** reporting and implementation of findings - **Works / Process Engineering Services**
- ▶ Site inspection of sewer reticulation network and pump-stations. Provide evidence in form of **capacity and condition assessment reports** and provide proof of implementation of recommendations - **Wastewater Network**
- ▶ **Maintenance records** of pump-stations - **M&E / Wastewater Network**
- ▶ Complete wastewater Infrastructure **Asset Register** - **Asset Manager**
- ▶ **O&M Unit cost** for wastewater treatment (in cents/kl) and collection system (in R/km or m<sup>3</sup>) - **Works / Wastewater Network / Finance**

# Additional Bonus

- ▶ **Partnership initiatives** with other public (e.g. municipalities) or private institutions whereby shared learning (**Cross-pollination**) has occurred – **Office of the Head**
- ▶ **Energy unit costs** and energy demand projections (consumption and cost) - 3 years - **Works / Planning / Finance**
- ▶ **Storm-water management plan** - **Wastewater Network/Storm-water Management**
- ▶ **Sludge (Waste) Management Plan** - **Planning**
- ▶ **Water Demand Management Plan** which provides a Water Balance and Work plan - **Planning**

Thank you

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side of the frame, creating a modern, layered effect against the white background.