WATER SERVICES SYMPOSIUMS 2012

2013 Green Drop Criteria 1, 6, 7, 8 and Bonuses

Department of Water Affairs
Directorate: Water Services Regulation

2013 Green Drop CRITERIA

KPA	Sub-requirement	Weight
1	Process Control, Maintenance and Management Skill	10%
2	Wastewater Monitoring Programme Efficacy	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%
		100%
	Bonuses	***+17% max***
	Penalties	***-5% of total***

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Key Performance Area	***Sub-Requirements***
Process Control, Maintenance and Management Skill 10%	(a) A copy (certified) of **Registration Certificate of Works** displaying Classification (*draft* Regulation 17)
	(a) Copies (certified) of **Registration Certificates of Process Controllers and Supervisors** (*draft* Regulation 17) 1. *Copies of the classification certificates of **all** process controllers/operators and supervisors/superintendents must be uploaded on the GDS* 2. *Compliance with draft Regulation 17 (must comply at least 50% in each of the shifts); WSI must indicate shift patterns or measures in place when no shift work is undertaken* 3. *WSI must indicate process controllers and/or supervisors that are 'shared' across different plants/sites*
	(a) Proof of **Maintenance Team** used for general maintenance work at the plant (both mechanical and electrical) 1. *Information on in-house staff or external contractor/s* 2. *Provide additional proof of competency of team (e.g. Qualification & Experience & Trade-test)* 3. *Provide a site specific operation and maintenance schedule (routine / scheduled)* 4. *Contract or Logbook with maintenance entries will serve as proof of the above aspects*

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Key Performance Area	*Sub-Requirements*
Process Control, Maintenance and Management Skill 10%	**(a) Proof of a 'site-specific' Operation & Maintenance Manual** 1. *O&M manual/s to contain: structural, mechanical, electrical detail of plant, design specifications of plant, reference to drawings, operational schedules, maintenance schedules, process detail and control, instrumentation specification/type, fault finding, monitoring, pump curves, supportive appendices*
	(a) Operational Logbook 1. *A logbook is in place to record all incidents at the water treatment works* 2. *Evidence is presented that the logbook process is being implemented (It is NOT required to be implemented for the entire assessment period)*
	BONUS: **Proof of Process Controllers Being Subjected to relevant training the past 24 months. Provide proof of:** ○ *Names of trainees and signature of attendance* ○ *Date and training subject field* ○ *Training provider and content of training*

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Bylaws (Local Regulation) 5%	**(a) Proof of the Bylaws** providing for the regulation of: ○ industrial (trade) effluent (volumes & quality) discharged into municipal system ○ package plants ○ decentralized systems ○ vacuum tank discharges ○ Spillages into the environment ○ Stormwater connections to sewer system.
	(a) Evidence of Bylaws enforcement by Local Authority ▪ Proof of application of Bylaw clause in practice, supported by written notice/s to offender
	PENALTY: No evidence of any **Industrial influent monitoring.** ▪ There must be proof in form of results to indicate WSA is performing its local regulation function as per Wastewater Services.
	BONUS: **Annual Publication of** wastewater management performance against the requirements of the site-specific License conditions or General Authorisations Name and date of publication, copy of information pertaining to audit question. Note: Communication must include compliance summary

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Wastewater Treatment Capacity 5%	(a) Documented design capacity (**hydraulic and organic**) of the wastewater treatment facility ▪ *Design capacity as Average Dry Weather Flow (ADWF) and COD load to the plant and* (b) Documented daily **receiving flows** over the 12months of assessed period (ideally ≤ than design capacity) ▪ *Evidence of daily flows and subsequent calculated averages. Measurement method to be explained* ▪ *Evidence of peak wet weather flow to plant during rain events (record rain event and flow to plant)* ▪ *Evidence of minimum nightflow (minimum monitoring: monthly)* ▪ *Water services institution is required to provide motivation/proof of accuracy of meter readings.* ▪ Monitoring of outflow volumes (available records).
	(a) Medium to long term planning to ensure sufficient **capacity for treatment system** and to ensure effluent quality compliance; ▪ *Detailed Work-plan which stipulates type of work, associated budget and projected timeframe, as well as the planned output of this work*
	(a) Medium to long term planning to ensure sufficient **capacity for collecting system** ▪ *Detailed Work-plan which stipulates type of work, associated budget and projected timeframe, as well as the planned output of this work* ▪ *Note: When the WSI is motivating that 'no work' is needed, then provide basis for such standpoint (i.e. quantified design versus operational capacity, usage of system, expected housing developments, condition of treatment system)*
	Penalty: Exceeding Capacity

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Wastewater Asset Management 15%	(a) Annual **Process Audit** reporting (evidence required of audit findings and recommendations) on treatment facility efficacy. The audit to include the (design) capability of the plant to meet compliance standards, as well as actual performance of plant. (b) Evidence/plan of **implementation of findings** during year following Audit Report required.
	(a) Site inspection of sewer reticulation network and pump-station/s. Provide evidence in form of capacity and condition assessment and recommendations of system. Report to include flow balance that provides evidence which % of total sewage is received at treatment plant. *Note: both the process audit and sewer network report could serve as baseline to the W_2RAP (may run concurrently with "system description and risk identification/rating)*
	(a) Updated sanitation / wastewater **Infrastructure Asset Register** Proof of Asset Register, evidence to be submitted. Asset register to include movable equipment and immovable infrastructure / assets with matching detail (age, value, condition, etc).
	(a) Operation and maintenance **budget** and comparative **expenditure** detail for: 1 - wastewater treatment (in cents/m^3), and 2 - collection system (R/m^3) *The assessor will require the WSI to explain how these figures compare or are **benchmarked** to determine whether budget is (in)sufficient .*
	(a) Maintenance records of pump-stations Proof of maintenance work done on mechanical, electrical, civil per pump station

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Additional Bonus	**Add 1:** WSI is able to provide evidence of **improvement partnership initiatives** with smaller municipalities **(Cross-pollination).** Green Drop scores will serve as good evidence to measure the outcomes of such initiative/s.
	Add 2: Proof of a **Storm-water management plan** detailing how storm-water entry is quantified, managed and monitored to prevent entry to sewer systems. Evidence of implementation required
	Add 3: Water Demand Management Plan which provides a strategy and/or workplan that identify, quantify, monitor and manage leakages and water losses of any kind that (may) create an artificial water demand due to higher hydraulic loading of wastewater collection and treatment infrastructure. The bonus will be maximised by providing a wastewater flow balance.

THANK YOU!

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