

Provincial Best Performer

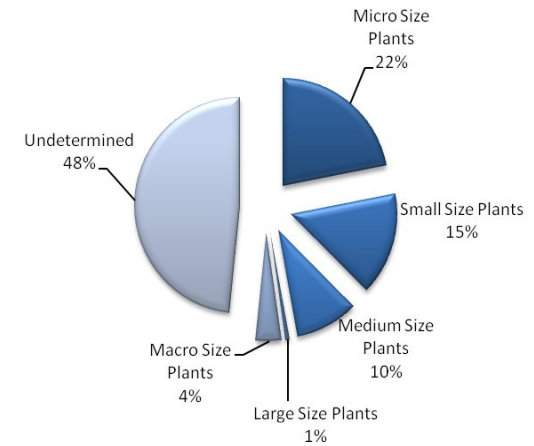
Frances Baard District Municipality is the best performing municipality in Northern Cape Province:

- ✓ 95% Municipal Blue Drop Score

Introduction

Water services delivery is performed by thirty one (31) Water Services Authorities in Northern Cape via 155 drinking water supply systems

Distribution of Water Supply Systems in Northern Cape



A total design capacity of 577.5 is available for drinking water supply in Northern Cape Province, distributed over 155 supply systems. Operational data is not available for all systems, however the existing data indicates average operating capacities between 44 and 81%. This result in an average output volume (final water) of 402.1 Ml/day

	MICRO SIZE <0.5 Mℓ/day	SMALL SIZE 0.5-2 Mℓ/day	MEDIUM SIZE 2-10 Mℓ/day	LARGE SIZE <10-25 Mℓ/day	MACRO SIZE >25 Mℓ/day	Undeter- mined	Total
No of Water Supply Systems	34	24	15	1	6	75	155
System Design Volume (Mℓ/day)	10.5	21.5	76.4	18.0	451.2	NI	577.5
Average Operating Capacity (%)	77.6	70.3	74.9	44.0	81.3	NI	69.6
Output volume (Mℓ/day)	8.2	15.1	57.2	7.9	366.8	NI	402.1

N/A = Not Applicable
NI = No Information

Provincial Blue Drop Analysis

Analysis of the Blue Drop assessments and site inspection results indicate that performance vary from excellent to good. A total of **100% municipalities** were assessed during the 2010/11 Blue Drop Certification.

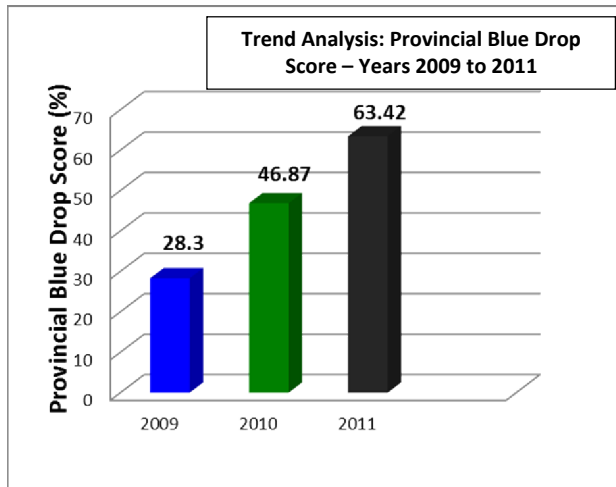
BLUE DROP COMPARATIVE ANALYSIS				
Performance Category	2009	2010	2011	Performance trend
Incentive-based indicators				
Number of municipalities assessed	19 (of 27) (70.3%)	31 (of 31) (100%)	31 (of 31) (100%)	→
Number of water systems assessed	85	136	155	↑
Number of Blue Drop scores ≥50%	16 (18.82%)	43 (31.61%)	79 (50.96%)	↑
Number of Blue Drop scores <50%	69 (81.17%)	93 (68.38%)	76 (49.04%)	↓
Number of Blue Drop awards	1	1	2	↓
PROVINCIAL BLUE DROP SCORE	28.3%	46.87%	62.07%	N/A

N/A = Not applied

↑ = improvement, ↓ = digress, → = no change

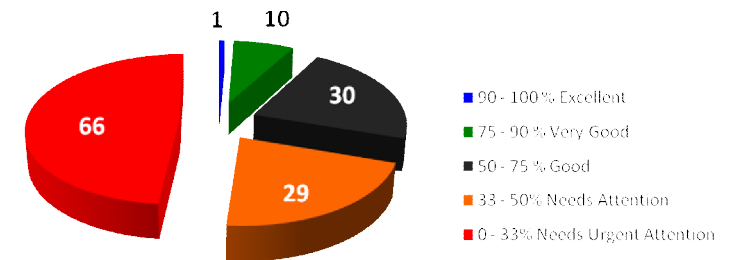
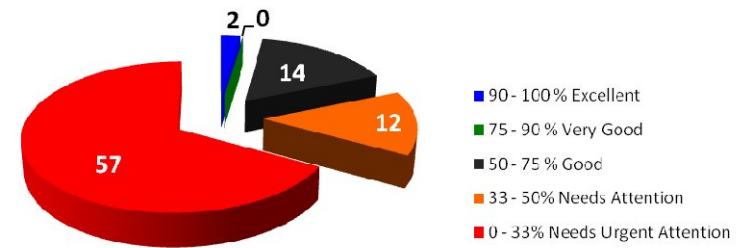
The 100% assessment coverage serves to affirmation the continued commitment by Northern Cape

municipalities, whereby Blue Drop assessments of 155 systems took place in the 2011 BDC cycle. The results are evident of this dedicated effort to manage the supply and quality of water with great care in this water sensitive region. A continued increase is noted started from 2009 and still continuing with a Provincial Blue Drop score of 62% in 2011. This trend represents one of the more progressive inclines in Blue Drop performance in the country, and the Department is encouraged by the quality of evidence that has been submitted by a number of municipalities. Unfortunately, the province is still lagging slightly behind, and no Blue Drop scores have been attained during the current assessment cycle.

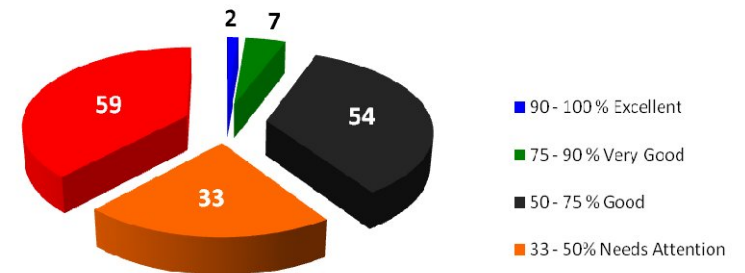


From the results, it is clear that a watershed has been reached with 50% of systems bordering on the 50% Blue Drop score. This is already a welcome change from only 31% systems which achieved >50% Blue Drop scores in the 2010 cycle.

Blue Drop Assessment 2009



Blue Drop Assessment 2011



When comparing 2011 Blue Drop results with 2009 and 2010, the following trends are observed:

- ✓ 155 systems are assessed in 2011 compare to only 85 (2009) and 136 (2010)
- ✓ No systems achieved Blue Drop Certification, however 2 systems achieved scores between 90 and 95%
- ✓ 40.6% systems scored in the categories of excellent, very good and good (2011), compared to 30% in 2010
- ✗ The number of systems that need attention has decreased drastically from 2010 (70%) to 2011 (59%).

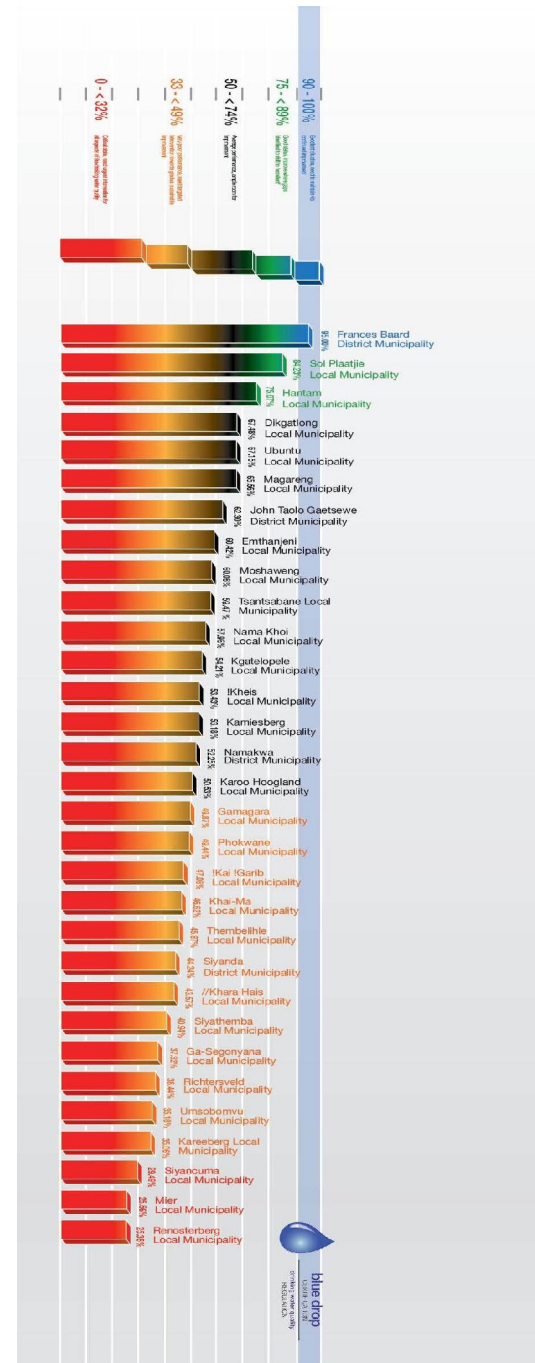
Readers need to be mindful that Blue Drop Certification follows a regulation strategy that facilitates **gradual and sustainable improvement**.... Thereby, Blue Drop requirements become more stringent with every assessment cycle. Municipalities who merely ‘maintained’ their water on same levels year in and out, is likely to achieve reduced Blue Drop scores, whilst municipalities that drive ‘continuous’ improvement, are likely to be awarded with improved Blue Drop scores with each assessment cycle.

Conclusion

The Blue Drop results for 2011 indicate that municipal drinking water quality management in Northern Cape vary from excellent to good, with 4 systems that need attention, as indicated in the Provincial Performance Log. The overall business of drinking water supply and quality management is satisfactory, however areas of concern are raised where improvement is required. Northern Cape is taking a position amongst the lower performing provinces in the country.

Two Blue Drop Certificates are awarded in the Province of Northern Cape.

- ◆ 1 Blue Drop : Frances Baard District Municipality / Sedibeng Water
- ◆ 1 Blue Drop : Kgatelopele Local Municipality



Municipal Blue Drop Score 2011: **67.48%**

Performance Area	Systems	Barkley West	Delportshoop ^a	Longlands ^a
Water Safety Planning Process & Incident Response Management		0	50	31
Process Control, Maintenance & Management Skills		7	68	65
Monitoring Programme		36	68	69
Credibility of Sample Analyses		37	100	55
Submission of Results		50	100	75
Drinking Water Quality Compliance		20	84	83
Performance Publication		25	75	75
Asset Management		0	43	23
Bonus Scores		6.8	2.6	8.9
Penalties		0	0.2	0.2
Blue Drop Score (2011)		23.87% (↑)	72.78% (↑)	63.39% (↑)
Blue Drop Score (2010)		73.75%	87.13%	85.50%
System Design Supply Capacity (MI/d)		NI	36.4	36.4
System Operational Capacity		NI	100%	100%
Population Served by System		36 179	10 000	3 000
Ave. Daily Consumption per Capita (l)		-	364	>500
Microbiological Compliance (12 months)		88.33% (11 months)	100.00%	100.00%
Chemical Compliance (12 months)		99.48% (10 months)	No data; WSP: 100%	No data; WSP: 100%

Regulatory Impression

It is unfortunate that the performance of Dikgatlong municipality is not up to standard, and that an overall downward trend is evident. The apparent lack of ownership and commitment to drinking water quality management prevented the following systems from being subjected to a complete Blue Drop assessment: Gong-Gong (95.24%), Holpan (81.8%), Longlands Clinic (83.3%), Pniel (87.5%), Pniel Estates (75%), Stilwater (88.9%), Ulco Mine (100%) and Windsorton (93.9%). (The scores in brackets present microbiological compliance scores recorded on the BDS for the reporting period.)

The partnership with Sedibeng Water ensured excellent compliance with the national standard in both Delportshoop and Longlands but unfortunately the lack of adhering to management and monitoring commitments by the water services authority prevented an even more impressive score.

Findings:

The following shortcomings are to be prioritised:

1. The appointment of adequately skilled process controllers for the Barkley West plant (especially) should be prioritised to ensure the continuous supply of safe water in this area. Should there be process controllers appointed; they should be registered as per Regulation 2834 requirements with the Department soonest.
2. The Water Services Authority should either commence with the implementation of an effective monitoring programme (which includes relevant chemical determinands), or agree with current service delivery partners to extend their current monitoring to include the

reticulation system. A service level agreement should detail this responsibility as well, should this be agreed upon.

3. The Water Services Authority must ensure that it obtains relevant information at a regular frequency to ensure effective drinking water quality management.

Municipal Blue Drop Score 2011: **60.42%**

Performance Area	Systems	Britstown	De Aar	Hanover
Water Safety Planning Process & Incident Response Management		91	91	91
Process Control, Maintenance & Management Skills		75	75	75
Monitoring Programme		70	70	70
Credibility of Sample Analyses		88	88	88
Submission of Results		50	50	50
Drinking Water Quality Compliance		96	16	85
Performance Publication		100	100	100
Asset Management		10	10	10
Bonus Scores		5.3	5.3	3.0
Penalties		0.2	0.2	0.5
Blue Drop Score (2011)		78.11% (↑)	56.72% (↓)	75.10% (↑)
Blue Drop Score (2010)		68.35%	68.35%	68.35%
System Design Supply Capacity (MI/d)		0.74	7.67	1.04
System Operational Capacity		77%	74%	48%
Population Served by System		4 000	26 000	2 700
Ave. Daily Consumption per Capita (l)		142	218	185
Microbiological Compliance (12 months)		97.22% (11 months)	84.34% (11 months)	96.88% (11 months)
Chemical Compliance (12 months)		100.00% (1 month)	100.00% (1 month)	100.00% (1 month)

Regulatory Impression


The overall improvement of Emthanjeni's performance is encouraging and holds promise of improved drinking water quality management. This performance is noteworthy considering the fact that this is a small municipality with limited resources. The on-site technical inspection confirmed another impressive observation; the responsible officials strive to operate within a culture of sound asset management. This is confirmed by the condition of the assets as well as operation patterns.

There however remains room for improvement, with regards to the findings below:

Findings:

1. The chemical monitoring is limited and could be improved according to the risk determination of the water safety planning process. At the time of the assessment it was found that municipal management is yet to approve the developed plan.
2. The relatively high daily consumption recordings could be accounted to high water losses. This requires a dedicated programme to limit water loss to ensure that water is being used efficiently but also to eradicate the risk of secondary contamination at leakage points.

Municipal Blue Drop Score 2011: **95.00%**

Performance Area	Systems	Koopmansfontein 
Water Safety Planning Process & Incident Response Management		87
Process Control, Maintenance & Management Skills		90
Monitoring Programme		93
Credibility of Sample Analyses		45
Submission of Results		95
Drinking Water Quality Compliance		100
Performance Publication		100
Asset Management		90
Bonus Scores		0.5
Penalties		0
Blue Drop Score (2011)		95.00% (↑)
Blue Drop Score (2010)		83.75%
System Design Supply Capacity (MI/d)		36.4
System Operational Capacity		100%
Population Served by System		148
Ave. Daily Consumption per Capita (l)		>500
Microbiological Compliance (12 months)		100.00% (11 months); WSP: 100.00%
Chemical Compliance (12 months)		93.10% (10 months); WSP: 98.25%

Regulatory Impression

The joint impressive performance of Frances Baard District Municipality and Sedibeng Water justifies the allocation of Blue Drop status to the system of Koopmansfontein. This would be the smallest system yet to obtain this prestigious award but serves as example what is possible should all parties concerned adhere to the stringent criteria set.

Sedibeng Water needs special mentioning in this regard since operations and laboratory work at the Vaal Gamagara plant impressed the Blue Drop inspectors tremendously. This contributed significantly to this Blue Drop certification.

The District Municipality is encouraged to improve on its monitoring programme in order to sustain this certification. It was found that not 12 months monitoring was done while the chemical programme was also found to be scant. With minor adjustments towards monitoring improvements the Blue Drop can be sustained.

Municipal Blue Drop Score 2011: **37.32%**

Performance Area	Systems	Bankhara	North WMA ^a	West WMA ^a	Kuruman Borehole & Wrenchville
Water Safety Planning Process & Incident Response Management		0	72	72	0
Process Control, Maintenance & Management Skills		16	8	5	5
Monitoring Programme		35	63	63	26
Credibility of Sample Analyses		63	100	100	63
Submission of Results		0	100	100	0
Drinking Water Quality Compliance		80	20	36	1
Performance Publication		20	50	25	20
Asset Management		0	23	23	0
Bonus Scores		0	0	0	0
Penalties		0.4	0	0	0.2
Blue Drop Score (2011)		34.18% (↑)	42.25% (↑)	44.30% (↑)	8.55% (↓)
Blue Drop Score (2010)		23.13%	27.63%	27.63%	23.13%
System Design Supply Capacity (MI/d)		NI	NI	NI	NI
System Operational Capacity		NI	3.5	2.1	NI
Population Served by System		4 000	36 461	20 805	8 000
Ave. Daily Consumption per Capita (l)		-	-	-	-
Microbiological Compliance (12 months)		100% (6 months)	91.38%	94.9%(11 months)	87.10% (6 months)
Chemical Compliance (12 months)		100% (6 months)	99.84% (7 months)	100% (7 months)	97.01% (6 months)

Regulatory Impression

The performance of Ga-Segonyana Local Municipality is certainly not up to standard. With exception of the Bankhara system, water supplied in other systems does not consistently comply with the national standard. This was also reflected in the unsatisfactory preparation levels of municipal officials for the Blue Drop assessment; the inspectors were left with the impression that commitment levels are not what it is supposed to be.

Yet is it really encouraging noting the improvement since the previous reporting cycle. Most noteworthy would be the commencement of the implementation of a water safety planning process. Even though this might not be perfect as yet, it certainly is a bold step in the right direction.

Findings:

1. The absence of proper abstraction patterns and relevant information on pumping needs to be addressed soonest to prevent a situation where a key asset such as the aquifer is not effectively utilised.
2. There is the need to optimise disinfection processes since the microbiological compliance in at least two of the systems are not within acceptable norms.

Municipal Blue Drop Score 2011: **49.87%**

Performance Area	Systems	Dibeng (Boreholes)	Dingleton ^a	Kathu ^a	Olifantsfontein ^a
Water Safety Planning Process & Incident Response Management		0	57	22	25
Process Control, Maintenance & Management Skills		0	25	33	75
Monitoring Programme		37	51	86	84
Credibility of Sample Analyses		10	39	45	64
Submission of Results		0	25	100	85
Drinking Water Quality Compliance		5	78	88	78
Performance Publication		0	10	50	75
Asset Management		0	12	40	9
Bonus Scores		6.8	6.1	7.2	9.1
Penalties		0.3	0.5	0	0.5
Blue Drop Score (2011)		12.40% (↓)	51.51% (↓)	67.01% (↑)	68.35% (↑)
Blue Drop Score (2010)		25.81%	54.31%	45.81%	60.33%
System Design Supply Capacity (MI/d)		NI (yield)	36.4(SW)	5	NI
System Operational Capacity		NI	NI	100%	NI
Population Served by System		4 000	4 000	25 000	9 000
Ave. Daily Consumption per Capita (l)		-	-	200	-
Microbiological Compliance (12 months)		100% (9 months)	100% (9 months); WSP: 100.00%	98.67%; WSP: 100.00%	100% (7 months); WSP: 100.00%
Chemical Compliance (12 months)		100% (6 months)	100% (6 months); WSP: 100.00%	100% (10 months); WSP 100.00%	97.62% (10 months); WSP: 100.00%

Regulatory Impression

Except for the Dibeng system, the Gamagara Local Municipality performed fairly well during this reporting cycle. Again the commitment of Sedibeng Water contributed significantly towards these good scores. In fact the water board ensured that all required information is available prior to the assessment date on the Blue Drop System (BDS) which allowed the Department to prepare adequately for the assessment. A joint effort with shared responsibilities between the water services authority and provider will ensure that even further improvement is achieved during the next reporting cycle.

Findings:

The following shorts are to be prioritised:

1. The Municipality must ensure that a portfolio of evidence is build regarding all the implementation of Blue Drop requirements.
2. Dibeng must be prioritised urgently for management and operations enhancement.

Municipal Blue Drop Score 2011: **75.07%**

Performance Area	Systems	Brandvlei	Calvinia	Loeriesfontein
Water Safety Planning Process & Incident Response Management		92	92	92
Process Control, Maintenance & Management Skills		55	53	53
Monitoring Programme		78	78	78
Credibility of Sample Analyses		77	91	92
Submission of Results		100	100	100
Drinking Water Quality Compliance		55	85	55
Performance Publication		80	80	80
Asset Management		55	55	55
Bonus Scores		0	0	0
Penalties		0.5	0.5	0.5
Blue Drop Score (2011)		68.69% (↓)	78.12% (↑)	69.16% (↑)
Blue Drop Score (2010)		76.25%	69.81%	64.88%
System Design Supply Capacity (MI/d)		1.15	6.69	1.44
System Operational Capacity		25%	52%	16%
Population Served by System		2 500	8 459	2 404
Ave. Daily Consumption per Capita (l)		115	411	95
Microbiological Compliance (12 months)		100.00%	100.00%	100.00%
Chemical Compliance (12 months)		80.17% (10 months)	97.22% (9 months)	88.31% (10 months)

Performance Area	Systems	Middelpos	Nieuwoodtville
Water Safety Planning Process & Incident Response Management		92	92
Process Control, Maintenance & Management Skills		53	53
Monitoring Programme		78	78
Credibility of Sample Analyses		92	91
Submission of Results		100	100
Drinking Water Quality Compliance		15	85
Performance Publication		80	80
Asset Management		55	55
Bonus Scores		0	0
Penalties		0.5	0.5
Blue Drop Score (2011)		57.16% (↑)	78.16% (↑)
Blue Drop Score (2010)		48.60%	68.10%
System Design Supply Capacity (MI/d)		0.36	0.624
System Operational Capacity		5%	38%
Population Served by System		152	4 396
Ave. Daily Consumption per Capita (l)		118	54
Microbiological Compliance (12 months)		95.45%	100.00%
Chemical Compliance (12 months)		90.00% (10 months)	97.40% (10 months)

Regulatory Impression

Subsequent to the 2010 assessment, Hantam Local Municipality showed further improvements to the comprehensive water safety plan under development for the municipality. DWA takes pleasure to note that the plan, which covers a vast area, is individualised to cater for risks in each of the registered supply systems. Management should still show their support to implementation of the programme by making budget available to address risks identified. Roles and responsibilities, as well as deadlines to implement control measures should be clearly indicated and used as a measure to evaluate execution.

Hantam receives the applause of DWA for adhering to the request in 2010 to implement chemical monitoring in all the supply systems. Although microbiological compliance confirms that water in most of the supply systems are safe from risks of a microbial nature (disinfection in Middelpos should however improve to prevent the water quality becoming unacceptable), overall chemical compliance in Brandvlei, Loeriesfontein and Middelpos infer that the water poses an unacceptable risk of infection following prolonged exposure. The water contains varying levels of Arsenic, Cadmium and Fluoride in excess of the South African standard for drinking water (SANS 241). Sporadic occurrence of the chemicals also occurred in the Calvinia and Nieuwoodtville waters.

Considering the permanent nature of health effects associated with chemical determinands, Hantam has to investigate further treatment to ensure compliance of the drinking water quality (DWQ) with national standards. DWA should be provided with a plan of action within 90 days delineating how the non-compliances will be addressed over time.

Findings:

1. Process control staff should be shown adequate / competent to maintain all the treatment systems over the vast distance. Although cognisance was taken of the municipal maintenance team, all staff should be verified competent.
2. Although DWA still requires proof that operational and compliance monitoring occurs according to the findings of the risk assessment, submission of DWQ data confirms that Hantam maintains the monitoring programmes registered per supply system. In terms of Blue Drop System (BDS) credibility, the data per system differ according to level of credibility. This implies varying degrees of information per system had been loaded to ensure traceability of the data (date of analyses, laboratory performing the analyses, method of analyses).
3. DWA advises the municipality to monitor free available chlorine to ensure that drinking water in all the supply systems remains free of microbial pollution.

Municipal Blue Drop Score 2011: **60.08%**

Performance Area	Systems	Bothetheletsa	Bothithong	Churchill	Dithakong
Water Safety Planning Process & Incident Response Management		18	18	18	18
Process Control, Maintenance & Management Skills		80	80	75	80
Monitoring Programme		48	48	48	48
Credibility of Sample Analyses		100	100	100	100
Submission of Results		50	50	50	50
Drinking Water Quality Compliance		100	20	20	44
Performance Publication		35	35	35	35
Asset Management		70	70	55	55
Bonus Scores		7.5	11.3	11.3	11.3
Penalties		0	0	0	0
Blue Drop Score (2011)		74.33% (↑)	54.13% (↑)	51.39% (↑)	59.08% (↑)
Blue Drop Score (2010)		37.13%	37.13%	37.13%	37.13%
System Design Supply Capacity (MI/d)		NI	NI	NI	NI
System Operational Capacity		NI	NI	NI	NI
Population Served by System		2 646	10 920	7 446	8 273
Ave. Daily Consumption per Capita (l)		-	-	-	-
Microbiological Compliance (12 months)		100% (11 months)	82.76% (11 months)	66.67% (10 months)	93.10% (11 months)
Chemical Compliance (12 months)		100% (11 months)	100% (11 months)	100% (10 months)	100% (11 months)

Performance Area	Systems	Gasehunelo	Gasese	Heiso	Kikahela
Water Safety Planning Process & Incident Response Management		18	18	18	18
Process Control, Maintenance & Management Skills		80	80	80	80
Monitoring Programme		48	48	48	48
Credibility of Sample Analyses		100	100	100	0
Submission of Results		50	50	50	50
Drinking Water Quality Compliance		20	100	20	85
Performance Publication		35	35	35	35
Asset Management		55	70	70	70
Bonus Scores		11.3	7.5	11.3	11.3
Penalties		0	0	0	0
Blue Drop Score (2011)		51.88% (↑)	74.33% (↑)	50.63% (↑)	68.90% (↑)
Blue Drop Score (2010)		37.13%	37.13%	37.13%	37.13%
System Design Supply Capacity (MI/d)		NI	NI	NI	NI
System Operational Capacity		NI	NI	NI	NI
Population Served by System		3 804	1 746	1 272	183
Ave. Daily Consumption per Capita (l)		-	-	-	-
Microbiological Compliance (12 months)		100% (10 months)	100% (10 months)	46.15% (11 months)	100% (9 months)
Chemical Compliance (12 months)		100% (10 months)	100% (10 months)	100% (11 months)	100% (9 months)

Performance Area	Systems	Laxey	Maipeng	Mamatwan / Hotazel	Mayeding A
Water Safety Planning Process & Incident Response Management		18	18	18	18
Process Control, Maintenance & Management Skills		80	80	80	80
Monitoring Programme		48	48	48	48
Credibility of Sample Analyses		100	100	100	100
Submission of Results		50	20	50	50
Drinking Water Quality Compliance		20	100	20	100
Performance Publication		35	35	35	35
Asset Management		70	70	70	66
Bonus Scores		11.3	11.3	11.3	7.6
Penalties		0	0	0	0
Blue Drop Score (2011)		54.13% (↑)	73.17% (↑)	54.13% (↑)	73.81% (↑)
Blue Drop Score (2010)		37.13%	37.13%	37.13%	37.13%
System Design Supply Capacity (MI/d)		NI	NI	NI	NI
System Operational Capacity		NI	NI	NI	NI
Population Served by System		10 836	6 976	1 656	2 808
Ave. Daily Consumption per Capita (l)		-	-	-	-
Microbiological Compliance (12 months)		93.75% (11 months)	100% (9 months)	90.9% (11 months)	100% (11 months)
Chemical Compliance (12 months)		100% (11 months)	100% (6 months)	100% (11 months)	100% (11 months)

Performance Area	Systems	Manyeding	Metsetswaneng	Tsineng	Heuningvlei
Water Safety Planning Process & Incident Response Management		18	18	18	18
Process Control, Maintenance & Management Skills		80	80	80	80
Monitoring Programme		48	48	48	48
Credibility of Sample Analyses		100	100	100	100
Submission of Results		20	0	50	0
Drinking Water Quality Compliance		20	20	20	60
Performance Publication		35	35	35	35
Asset Management		70	70	70	70
Bonus Scores		11.3	11.3	11.3	11.3
Penalties		0	0	0	0
Blue Drop Score (2011)		52.63% (↑)	51.63% (↑)	54.13% (↑)	63.09% (↑)
Blue Drop Score (2010)		37.13%	37.13%	37.13%	37.13%
System Design Supply Capacity (MI/d)		NI	NI	NI	NI
System Operational Capacity		NI	NI	NI	NI
Population Served by System		5 460	5 411	6 022	11 022
Ave. Daily Consumption per Capita (l)		-	-	-	-
Microbiological Compliance (12 months)		81.82% (10 months)	71.43% (7 months)	90.4% (11 months)	95.83% (6 months)
Chemical Compliance (12 months)		100% (9 months)	100% (6 months)	100% (11 months)	100% (6 months)

Regulatory Impression

The Blue Drop performance of the Joe Morolong Local Municipality ranges from good to impressive; especially noting the constraints experienced. Impressively a score of more than 50% was obtained for every single system and this is remarkable. In addition to this, the strategic approach to compartmentalise water supply systems according to the water resource management strategy for this area is commendable. However there remain sufficient room for improvement as indicated by the report card above.

The Municipality is required to give urgent attention to the microbiological compliance of the systems of Bothihong, Churchill, Heiso, Manyeding and Metsetwaneng. The fact that no disinfection is applied clearly compromises the ability of the municipality to comply with the national standard. The communities in these areas are at risk.

Findings:

Note the following findings:

1. In spite of having an excellent Incident Management Protocol in place, the municipality is encouraged to register all incidents to ensure that repetitive shortcomings are recorded and addressed by management.
2. The lack of flow measurement compromises effective management (and planning). The municipality must take care of its most important asset which is the aquifer from which water is being sourced. Without proper measurement abstraction might exceed the yield, thus being at risk of over-abstraction.
3. Since groundwater sources are predominantly being used, the municipality must improve chemical monitoring since the current two determinands (Fluoride and Sulphate) is inadequate. Additional parameters are required to be monitored as to be informed by a proper risk determination (including a full SANS 241 analysis).

Municipal Blue Drop Score 2011: **62.30%**

Performance Area	Systems	Black Rock ^a	Hotazel ^a	Mc Carthy's Rus Boreholes	Middelputz Boreholes
Water Safety Planning Process & Incident Response Management		59	59	66	66
Process Control, Maintenance & Management Skills		100	84	0	0
Monitoring Programme		83	75	24	24
Credibility of Sample Analyses		88	88	75	75
Submission of Results		100	100	100	100
Drinking Water Quality Compliance		100	20	93	20
Performance Publication		25	25	25	25
Asset Management		100	100	0	0
Bonus Scores		0	0	0	0
Penalties		0	0	0.1	0
Blue Drop Score (2011)		83.94% (↑)	57.59% (↑)	51.24% (↑)	29.49% (↓)
Blue Drop Score (2010)		76.63%	53.63%	40.13%	40.13%
System Design Supply Capacity (MI/d)		NI	NI	NI (yield)	NI (yield)
System Operational Capacity		NI	NI	NI	NI
Population Served by System		2 000	1 500	200	400
Ave. Daily Consumption per Capita (l)		-	-	-	-
Microbiological Compliance (12 months)		100.00%	96.67%	100.00%	83.33% (11 months)
Chemical Compliance (12 months)		100.00%	100.00%	100.00%	100% (10 months)

Performance Area	Systems	Severn Boreholes	Severn School Boreholes	Van Zylrus Boreholes
Water Safety Planning Process & Incident Response Management		66	66	66
Process Control, Maintenance & Management Skills		0	0	78
Monitoring Programme		24	24	36
Credibility of Sample Analyses		75	75	75
Submission of Results		100	100	100
Drinking Water Quality Compliance		20	20	93
Performance Publication		25	25	25
Asset Management		0	0	53
Bonus Scores		0	0	0
Penalties		0	0	0.1
Blue Drop Score (2011)		29.49% (↓)	29.49% (↓)	68.19% (↑)
Blue Drop Score (2010)		40.13%	40.13%	57.25%
System Design Supply Capacity (MI/d)		NI (yield)	NI (yield)	0.5 (yield)
System Operational Capacity		NI	NI	38%
Population Served by System		150	250	2 900
Ave. Daily Consumption per Capita (l)		-	-	66
Microbiological Compliance (12 months)		80.00%	84.62%	100.00%
Chemical Compliance (12 months)		100.00%	100.00% (11 months)	100.00%

Regulatory Impression

DWA is encouraged to note increased Blue Drop scores in most of the supply systems. Although sufficient room exists for improvement in the borehole systems, the increase in registered supply systems imply that the municipality refined their approach towards drinking water quality (DWQ) management. The focussed approach is regarded a step in the right direction, it allows for system specific problem identification which could be managed with more refined site specific control measures.

Water supplied to residents in the Middelputz, Severn and Severn School borehole systems posed a risk of infection. John Taolo Gaetsewe must improve disinfection as control measure at the treatment systems, free available chlorine monitoring should thereafter be maintained at a much higher frequency to confirm continuous treatment efficacy. Roles and responsibilities, identified as a shortcoming in the water safety plan presented again by the WSA for their areas of sole responsibility, should account for the management of the identified risks. Information should also be made available to confirm identification of all risks following a full SANS 241 (South African drinking water standard) analyses.

Improvement to the water safety planning process should furthermore allow alignment with processes maintained by Sedibeng Water within the Balck Rock and Hotazel supply systems. Further deterioration in the water quality from treatment plant to points of use within the Hotazel system will be more easily prevented with a combined effort from the WSA and WSP. Asset management and process control are other areas of concern that needs to be highlighted by the municipality for address.

Municipal Blue Drop Score 2011: **53.18%**

Performance Area	Systems	Garies	Honderklip-baai ^a	Kamasies	Kamieskroon
Water Safety Planning Process & Incident Response Management		19	19	19	19
Process Control, Maintenance & Management Skills		43	40	40	28
Monitoring Programme		74	59	59	59
Credibility of Sample Analyses		88	88	88	88
Submission of Results		100	100	100	100
Drinking Water Quality Compliance		15	78	55	55
Performance Publication		80	80	80	80
Asset Management		48	40	40	40
Bonus Scores		0	0	0	0
Penalties		0.6	0.4	0.6	0.6
Blue Drop Score (2011)		43.44% (↑)	59.31% (↑)	52.56% (↑)	51.31% (↑)
Blue Drop Score (2010)		24.48%	24.48%	26.48%	26.48%
System Design Supply Capacity (MI/d)		NI (yield)	NI (yield)	NI (yield)	NI (yield)
System Operational Capacity		NI	NI	NI	NI
Population Served by System		2 000	800	446	1 000
Ave. Daily Consumption per Capita (l)		-	-	-	-
Microbiological Compliance (12 months)		95.83%	100.00%	100.00%	100.00%
Chemical Compliance (12 months)		0.00% (4 months)	100% (4 months)	50.00% (4 months)	33.33% (3 months)
Performance Area	Systems	Kharkams	Khies	Klipfontein	Koingnaas ^a
Water Safety Planning Process & Incident Response Management		19	19	19	19
Process Control, Maintenance & Management Skills		40	63	63	28
Monitoring Programme		70	59	59	59
Credibility of Sample Analyses		88	88	88	88
Submission of Results		100	100	100	100
Drinking Water Quality Compliance		20	55	55	78
Performance Publication		80	80	80	80
Asset Management		40	55	55	40
Bonus Scores		0	6	6	0
Penalties		0	0.6	0.6	0.4
Blue Drop Score (2011)		43.19% (↑)	62.86% (↑)	62.86% (↑)	58.06% (↑)
Blue Drop Score (2010)		26.48%	32.75%	32.25%	NA
System Design Supply Capacity (MI/d)		NI (yield)	0.12	0.1	NI
System Operational Capacity		NI	NI	NI	NI
Population Served by System		1000	1080	434	34
Ave. Daily Consumption per Capita (l)		-	-	-	-
Microbiological Compliance (12 months)		91.67%	100.00%	100.00%	100.00%
Chemical Compliance (12 months)		83.33% (3 months)	25.00% (4 months)	66.67% (3 months)	100% (4 months)

Performance Area	Systems	Leliefontein	Lepelfontein	Nourivier	Paulshoek
Water Safety Planning Process & Incident Response Management		19	19	19	19
Process Control, Maintenance & Management Skills		40	63	40	40
Monitoring Programme		59	59	59	59
Credibility of Sample Analyses		88	88	88	88
Submission of Results		100	100	100	100
Drinking Water Quality Compliance		20	20	55	20
Performance Publication		80	80	80	80
Asset Management		40	55	40	40
Bonus Scores		0	6.8	0	0
Penalties		0	0	0.6	0
Blue Drop Score (2011)		42.06% (↑)	53.31% (↑)	52.56% (↑)	42.06% (↑)
Blue Drop Score (2010)		30.00%	32.25%	31.88%	31.88%
System Design Supply Capacity (MI/d)		NI (yield)	0.07	NI (yield)	NI (yield)
System Operational Capacity		NI	NI	NI	NI
Population Served by System		1 500	285	333	1 223
Ave. Daily Consumption per Capita (l)		-	-	-	-
Microbiological Compliance (12 months)		83.33%	81.82%	100.00%	83.33%
Chemical Compliance (12 months)		0.00% (3 months)	66.67% (3 months)	0.00% (4 months)	0.00% (4 months)
Performance Area	Systems	Rooifontein	Soebatsfontein	Spoegrivier	
Water Safety Planning Process & Incident Response Management		19	19	19	
Process Control, Maintenance & Management Skills		40	60	60	
Monitoring Programme		59	59	59	
Credibility of Sample Analyses		88	88	88	
Submission of Results		100	100	100	
Drinking Water Quality Compliance		55	20	78	
Performance Publication		80	80	80	
Asset Management		40	55	55	
Bonus Scores		0	6.8	5.1	
Penalties		0.6	0	0.4	
Blue Drop Score (2011)		52.56% (↑)	53.06% (↑)	68.48% (↑)	
Blue Drop Score (2010)		29.63%	29.63%	31.88%	
System Design Supply Capacity (MI/d)		NI (yield)	0.06	0.10	
System Operational Capacity		NI	NI	NI	
Population Served by System		242	279	410	
Ave. Daily Consumption per Capita (l)		-	-	-	
Microbiological Compliance (12 months)		100.00%	91.67%	100.00%	
Chemical Compliance (12 months)		75.00% (4 months)	100.00% (4 months)	100.00% (4 months)	

System not assessed: Tweerivier

Regulatory Impression

Evidently the Kamiesberg Local Municipality, with De Beers as Water Services Provider in Honderklipbaai and Koiingnaas, is improving drinking water quality (DWQ) management services. Sufficient room for improvement however remains. It is encouraging to note that a more significant overall improvement (since the marginal 2009 improvement) was recorded at all 15 systems. While management processes are commendable, actual water quality compliance requires significant improvement.

Consumers in Kharkams, Leliefontein, Lepelfontein, Paulshoek and Soebatsfontein are at risk of contracting diarrhoeal diseases following the detection of a number of microbiological non-compliances against the South African national standard for drinking water (SANS 241). Garies is also at risk of being classified with water of unacceptable microbiological quality.

The number of fluoride failures, detected in Garies, Kamasies, Kamieskroon, Kharkams, Khies, Klipfontein, Leliefontein, Lepelfontein, Nourivier, Paulshoek and Rooifontein is of serious concern. The municipality should increase chemical compliance monitoring, but more importantly, the WSA should investigate how long people have been exposed to the elevated concentrations of fluoride. Action plans, clearly indicating implementation of control measures to prevent further exposure to elevated levels of fluoride, should be submitted to DWA within 30 days. Municipal management, accountable for provision of safe drinking water, should note the urgency to address the microbiological and chemical non-compliances. Consumers in Kamiesberg, in general, are at risk of short term health effects most commonly noted as diarrhoeal diseases. The duration of fluoride failures will determine the risk for manifestation of long-term, irreversible health effects.

On a more positive note, the Department congratulates the municipality for ensuring availability of data to monitor DWQ in each of the supply systems, maintaining microbiological monitoring for 12 months, while also conducting a more complete SANS 241 analyses in the Kharkams system as part of the risk assessment.

Findings:

1. The WSA should evaluate the appropriateness of the Water Safety Plan presented for the 2011 evaluation. Reference was made to a number of treatment technologies not believed to be applicable at any of the borehole and desalination plants. Attention should be given to the identification of control measures, roles and responsibilities to implement control measures should be system specific, clearly stating contact details. Management should show commitment towards implementation by allocating budget.
2. Kamiesberg should improve process control. This includes classification of all treatment systems as required under Regulation 2834, while process control staff is linked per treatment system on the Blue Drop System (BDS). The latter will allow for evaluation of staff compliance. DWA noted that the municipality commenced registration of treatment systems and staff, the WSA should however ensure that the DWA is furnished with all the required information to ensure correct classifications of all the staff and treatment systems.

Municipal Blue Drop Score 2011: **35.06%**

Performance Area	Systems	Carnarvon	Van Wyksvlei	Vosburg
Water Safety Planning Process & Incident Response Management		26	26	26
Process Control, Maintenance & Management Skills		22	22	32
Monitoring Programme		50	52	52
Credibility of Sample Analyses		5	5	5
Submission of Results		0	0	0
Drinking Water Quality Compliance		65	65	65
Performance Publication		25	25	25
Asset Management		8	16	0
Bonus Scores		0	0	0
Penalties		0.3	0.3	0.3
Blue Drop Score (2011)		34.59% (↓)	35.99% (↓)	34.60% (↓)
Blue Drop Score (2010)		64.4%	61.4%	61.4%
System Design Supply Capacity (MI/d)		0.5	NI	0.5
System Operational Capacity		130%	NI	NI
Population Served by System		6 100	3 200	2 100
Ave. Daily Consumption per Capita (l)		82	-	-
Microbiological Compliance (12 months)		100.00% (8 months)	100.00% (10 months)	88.89% (9 months)
Chemical Compliance (12 months)		100.00% (1 month)	100.00% (2 months)	100.00% (2 months)

Regulatory Impression

Unfortunately the Blue Drop performance of Kareeberg Local Municipality worsened since the previous reporting cycle and this is cause for serious concern. Even though the compliance measures rather favourably with the national standard, the implementation of the monitoring programme is completely inadequate.

Nevertheless it is evident that those responsible for drinking water quality management and operations are working hard to comply with the stringent requirements. However, unfortunately they did not adapt to the requirement to generally improve quality control and to implement water safety planning and this compromised overall scoring significantly. The Department is confident that the municipality has the ability to ensure improvement over the next year. This year's performance should be used to motivate for the required resources to facilitate improvement.

Findings:

The following shortcomings must be given prioritised attention:

1. An amendment to the current monitoring programme is required to ensure that more (relevant) determinands are included as regular chemical sampling. This should be informed by the risk determination that would stem from the required water safety planning process. The municipality must ensure that sufficient samples are taken at regular frequency and reported on a monthly basis to the Department.

2. The asset management component also needs improvement. The asset register lacks key information such as current condition, expected remaining life and replacement value. This will allow both technical and financial staff to be more proactive regarding asset management.

Municipal Blue Drop Score 2011: **50.53%**

Performance Area	Systems	Fraserburg	Sutherland	Williston
Water Safety Planning Process & Incident Response Management		50	60	50
Process Control, Maintenance & Management Skills		58	58	58
Monitoring Programme		69	73	69
Credibility of Sample Analyses		78	78	78
Submission of Results		0	0	0
Drinking Water Quality Compliance		50	65	65
Performance Publication		80	80	80
Asset Management		0	0	0
Bonus Scores		0	0	0
Penalties		0.6	0.5	0.5
Blue Drop Score (2011)		47.00% (↑)	53.39% (↑)	51.50% (↑)
Blue Drop Score (2010)		39%	39%	39%
System Design Supply Capacity (MI/d)		0.5	0.5	0.5
System Operational Capacity		NI	NI	NI
Population Served by System		4 000	3 800	4 000
Ave. Daily Consumption per Capita (l)		-	-	-
Microbiological Compliance (12 months)		100.00% (5 months)	100.00% (8 months)	100.00% (8 months)
Chemical Compliance (12 months)		80.00% (3 months)	100.00% (3 months)	100.00% (3 months)

Regulatory Impression

The improved Blue Drop performance of Karoo Hoogland holds promise of greater things to come regarding the management of drinking water quality. Most commendable would be the commencement of disinfection of water supply which had a huge improvement on the microbiological compliance in all 3 systems. The municipality is encouraged to continue on this path.

The scores are indicative of the remaining room for improvement in most areas; especially the erratic monitoring (or submission) of drinking water quality needs to be improved drastically. Due to the logistical challenges the municipality is encouraged to implement a “presence-absence” microbiological monitoring programme to augment the compulsory conventional monitoring.

Findings:

1. The Municipality must improve its asset management practice especially that of its ground water supply, by implementing abstraction patterns that will preserve its sub-surface sources. The assessment revealed that the borehole yields are unknown.
2. The lack of a proper risk management process (water safety planning) needs to be addressed to ensure that public health is secured on a continuous basis. This is undeniably an invaluable investment demanded by the municipality’s responsibility to its constituency.

Municipal Blue Drop Score 2011: **54.21%**

Performance Area	Systems	Danielskuil	Idwala Boreholes	Lime Acre De Beers ^a
Water Safety Planning Process & Incident Response Management		96	8	75
Process Control, Maintenance & Management Skills		93	0	98
Monitoring Programme		90	66	76
Credibility of Sample Analyses		88	63	86
Submission of Results		92	0	85
Drinking Water Quality Compliance		100	20	100
Performance Publication		100	0	100
Asset Management		86	0	65
Bonus Scores		1.8	0	1.8
Penalties		0	0	0
Blue Drop Score (2011)		95.00% (↓)	16.90% (→)	90.69% (→)
Blue Drop Score (2010)		97.43%	NA	NA
System Design Supply Capacity (MI/d)		2.67 (yield)	NI (yield)	NI
System Operational Capacity		47%	NI	NI
Population Served by System		12 582	260	1 740
Ave. Daily Consumption per Capita (l)		99	-	-
Microbiological Compliance (12 months)		96.91%	90.00% (6 months)	No data; WSP 100%
Chemical Compliance (12 months)		100.00%	100.00% (6 months)	No data; WSP 100%

Performance Area	Systems	Lime Acre PPC	Owendale
Water Safety Planning Process & Incident Response Management		8	8
Process Control, Maintenance & Management Skills		0	0
Monitoring Programme		0	0
Credibility of Sample Analyses		0	0
Submission of Results		0	0
Drinking Water Quality Compliance		0	0
Performance Publication		0	0
Asset Management		0	0
Bonus Scores		0	0
Penalties		0	0
Blue Drop Score (2011)		01.20% (→)	01.20% (→)
Blue Drop Score (2010)		NA	NA
System Design Supply Capacity (MI/d)		NI (yield)	NI (yield)
System Operational Capacity		NI	NI
Population Served by System		700	300
Ave. Daily Consumption per Capita (l)		-	-
Microbiological Compliance (12 months)		No data	No data
Chemical Compliance (12 months)		No data	No data

Regulatory Impression

The Blue Drop performance of Kgatelopele Local Municipality during 2010 was both exceptional and extremely poor. This is indicative of a concerted effort to maintain excellence in one system unfortunately at the cost of completely neglecting the management of drinking water quality in other systems. The Department however wish to congratulate the municipality in maintaining Blue Drop status as well as the excellent performance of Sedibeng Water in the Lime Acres system. As second Blue Drop was within reach but due to a lack of evidence available from the mine/municipality on elements such as the water safety plan, compliance monitoring, asset management, etc. this achievement evaded Lime Acres.

However the Blue Drop inspectors noted the intension of De Beers and PPC Mines to contribute and participate in drinking water quality management process in the next cycle. This holds promise of great achievements in this part of the Northern Cape.

A concerted effort is required to improve drinking water quality management in Idwala, Lime Acres PPC and Owendale. The performance in Danielskuil leaves the impression that the Municipality is equipped with the skills to duplicate this performance in other systems as well.

Findings:

1. The Department notes that the full SANS 241 was done late and expects that the monitoring programme will be amended to include high risk parameters or monitoring pattern to cater for critical control points. The chemical monitoring programme is found to be very limited currently.
2. It was found that the municipality is monitoring both E-coli and Faecal Coliforms with significant differences at times. Consolidation of these two programmes might be beneficial.
3. To reveal "No Information" is a compromising position to be in. The municipality is required to obtain information on important elements such as borehole yields and pumping rates in order to manage their aquifers more effectively.

Municipal Blue Drop Score 2011: **46.62%**

Performance Area	Systems	Pofadder / Aggeneys / Pelladrift ^a	Onseepkans / Melkbosrand	Onseepkans (RK Sending)	Witbank
Water Safety Planning Process & Incident Response Management		0	0	0	0
Process Control, Maintenance & Management Skills		25	20	20	20
Monitoring Programme		78	36	38	29
Credibility of Sample Analyses		64	54	46	54
Submission of Results		100	0	0	0
Drinking Water Quality Compliance		85	55	55	55
Performance Publication		50	25	25	25
Asset Management		0	0	0	0
Bonus Scores		0	0	0	0
Penalties		0.3	0.3	0.3	0.3
Blue Drop Score (2011)		49.01% (↑)	27.24% (→)	27.06% (↓)	26.62% (↓)
Blue Drop Score (2010)		30.00%	NA	36.50%	36.50%
System Design Supply Capacity (MI/d)		12.5	NI	0.32	NI
System Operational Capacity		80%	NI	NI	NI
Population Served by System		10200	1825	480	900
Ave. Daily Consumption per Capita (l)		<500	NI	NI	NI
Microbiological Compliance (12 months)		100.00%	100% (8 months)	100% (9 months)	100% (5 months)
Chemical Compliance (12 months)		100.00%	No data	No data	No data

Regulatory Impression

The Khai-Ma Local Municipality performed unsatisfactory and below expectation during the 2011 Blue Drop assessment, indicating that drinking water quality management services are not being managed according to the proposition of the regulatory programme. The performance of Phella Water Board, Water Services Provider for the Pofadder / Aggeneys / Pelladrift supply system, on the other hand showed improvement on the 2010 status (noting that more stringent criteria applied for the 2011 assessment, the WSP improved on a number of performance indicators).

The Department is encouraged to note that all the drinking water complied with the microbiological standards for drinking water (SANS 241). Unfortunately, Khai-Ma has yet to implement a risk-based chemical monitoring programme to confirm chemical compliance of drinking water within the systems managed solely by the WSA. If not for the full SANS 241 analyses performed by Phella Water Board on the Pofadder / Aggeneys / Pelladrift supply, no information would have been available to assume that the water in the other WSA systems also pose no risk of irreversible health effects commonly associated with chemical determinands.

DWA noted the water safety plan developed for Khai-Ma, the WSA should continuously ensure that all risks have been identified and are included in the routine operational and compliance monitoring programmes for each of the supply systems. A collaborative effort between the WSA and WSP should also ensue to ensure a catchment to consumer water safety plan for the Pofadder / Aggeneys / Pelladrift system. DWA advises the WSA and WSP to commence free available chlorine monitoring to confirm that the last treatment barrier, disinfection, safeguards the water to the point of consumption. Municipal management should agree to improve and implement the findings of the risk assessment, budget needs to be available to improve DWQ management performance.

Findings:

1. The most prominent gaps in the current performance include the lack of an Incident Management Protocol and Incident Management Register, operations & maintenance manuals for each of the treatment systems (including boreholes with disinfection) as well as asset management information (facility inspections and evidence of implementation of findings, municipal asset register and design versus operating capacities / groundwater yield versus abstraction volumes).
2. The lack of 12 months of data on the Blue Drop System (BDS) per WSA supply system indicates that systems and resources are not yet fully in place to efficiently fulfil the municipal function of drinking water quality monitoring.
3. To ensure a full data audit trail, the municipality has to provide information related to the date of sampling and analyses, name of the laboratory performing the analyses and the method of analyses for each data set. Only when the WSA and WSP provided all the information will data be classified as 100 % BDS certified.

Water Services Authority: //Khara Hais Local Municipality
 Water Services Providers: //Khara Hais Local Municipality

Municipal Blue Drop Score 2011: **43.57%**

Performance Area	Systems	AH September	Karos	Lambrechts-drift	Leerkrans
Water Safety Planning Process & Incident Response Management		53	0	0	0
Process Control, Maintenance & Management Skills		55	25	25	25
Monitoring Programme		43	61	63	63
Credibility of Sample Analyses		48	64	54	54
Submission of Results		100	50	100	100
Drinking Water Quality Compliance		55	78	35	58
Performance Publication		0	0	0	0
Asset Management		15	0	0	0
Bonus Scores		0	0	0	0
Penalties		0.6	0.4	0.6	0.4
Blue Drop Score (2011)		43.96% (↑)	37.51% (↓)	26.97% (↑)	33.72% (↑)
Blue Drop Score (2010)		37.88%	42.25%	30.25%	28.50%
System Design Supply Capacity (MI/d)		80	0.28	0.28	0.28
System Operational Capacity		69%	39%	25%	50%
Population Served by System		68283	1362	854	1313
Ave. Daily Consumption per Capita (l)		>500	80	82	106
Microbiological Compliance (12 months)		97.81%	100% (11 months)	96.00%	96.15%
Chemical Compliance (12 months)		No data	100% (3 months)	92.31% (3 months)	100% (3 months)

Performance Area	Systems	Leseding	Louisvale	Ntsikelelo	Raaswater
Water Safety Planning Process & Incident Response Management		0	0	0	0
Process Control, Maintenance & Management Skills		25	25	25	25
Monitoring Programme		63	63	63	63
Credibility of Sample Analyses		61	53	54	54
Submission of Results		100	100	100	100
Drinking Water Quality Compliance		55	38	55	20
Performance Publication		0	0	0	0
Asset Management		0	0	0	0
Bonus Scores		0	0	0	0
Penalties		0.6	0.4	0.6	0
Blue Drop Score (2011)		33.28% (→)	27.63% (↓)	32.94% (→)	22.44% (↓)
Blue Drop Score (2010)		NA	34.63%	NA	46.63%
System Design Supply Capacity (MI/d)		0.28	0.28	0.28	0.57
System Operational Capacity		57%	64%	71%	54%
Population Served by System		1 309	1175	929	2 334
Ave. Daily Consumption per Capita (l)		122	153	214	132
Microbiological Compliance (12 months)		100.00%	95.65%	100.00%	81.25%
Chemical Compliance (12 months)		91.67% (3 months)	100% (3 months)	92.86% (3 months)	100% (3 months)

Regulatory Impression

Regrettably, the //Khara Hais Local Municipality again performed poorly during the 2011 Blue Drop assessment, indicating ineffective management of drinking water quality (DWQ) and that the expectations of the regulation programme are largely not being met. It is a concerning factor that the quality of drinking water in almost all the supply systems show non-compliance to national legislation (SANS 241) and thereby pose a significant risk of infection. The situation demands the attention of the municipal administration and governance, the Regulator trusts that the risks to public health will motivate the municipality to rectify the non-compliances without further hesitation or excuse.

Consumers in Raaswater, to some extent Louisvale and if the situation does not improve, at Lambrechtsdrift and Leerkrans, are at risk of contracting diarrhoeal diseases following the detection of a number of microbiological non-compliances against SANS 241. With minimal chemical compliance monitoring for aluminium, fluoride, nitrate and nitrite, as well as sulphate, aluminium failures in Lambrechtsdrift and Ntsikelelo, fluoride failures in Leseding verify that 3 of the 7 monitored systems also pose the risk for consumers to contract long-term irreversible health effects. Consumers in 6 of the 8 water supply systems are at risk.

Poor compliance to maintain monitoring against the required frequency for chemical and microbiological monitoring, also noting the absence of chemical monitoring in the larger AH September system, are some of the other factors of concern to the Department.

Findings:

1. While it is concerning to note that various legislative requirements are not being met, //Khara Hais also ignores best practice guidelines to improve performance. A Water Safety Plan, found to address only the AH September system, had been presented during the confirmation session. The municipality on own admission however confirmed to not follow the inherent procedures internationally proven to improve DWQ management practices.
2. The incompleteness of the document is evident by the classification of mostly low risks. Continued supplies of drinking water of unacceptable quality, as well as the lack of full SANS 241 analysis in the supply systems to verify identification of all risks, confirm that the municipality developed a document not reflective of the situation and aimed at improving performance.
3. Failure to provide evidence of implementation of the findings of the risk assessment and dedicated budget to improve performance, indicate that municipal management are not committed to efficiently fulfil this very important municipal service function.
4. The lack of an incident register detailing procedures to address failures, the lack of information to confirm credibility of actual DWQ data, as well as the dismal approach towards asset management further prevents the Department from having confidence that the municipality takes responsibility for DWQ management.

Water Services Authority:	!Kai !Garib Local Municipality
Water Services Providers:	!Kai !Garib Local Municipality

Municipal Blue Drop Score 2011: **47.08%**

Performance Area	Systems	Alheit	Aughrabies	Bloemsmond	Cillie
Water Safety Planning Process & Incident Response Management		29	29	29	29
Process Control, Maintenance & Management Skills		25	25	25	25
Monitoring Programme		74	74	74	74
Credibility of Sample Analyses		52	53	42	55
Submission of Results		50	50	50	50
Drinking Water Quality Compliance		80	100	100	20
Performance Publication		40	40	40	40
Asset Management		0	0	0	0
Bonus Scores		0	0	0	0
Penalties		0	0	0	0
Blue Drop Score (2011)		47.30% (↑)	53.35% (↑)	52.78% (↑)	29.41% (↑)
Blue Drop Score (2010)		NA	NA	NA	NA
System Design Supply Capacity (MI/d)		0.432	0.432	0.432	0.432
System Operational Capacity		94%	94%	94%	94%
Population Served by System		1 200	3 000	1 000	1 600
Ave. Daily Consumption per Capita (l)		338	135	406	254
Microbiological Compliance (12 months)		96.67%	97.22%	100.00%	84.62%
Chemical Compliance (12 months)		100.00%	100.00%	100.00%	100% (11 months)

Performance Area	Systems	Currieskamp	Kakamas	Kiesmoes	Kenhardt BH supply
Water Safety Planning Process & Incident Response Management		29	29	29	29
Process Control, Maintenance & Management Skills		25	25	25	13
Monitoring Programme		72	74	74	60
Credibility of Sample Analyses		34	53	51	36
Submission of Results		50	50	50	0
Drinking Water Quality Compliance		100	100	100	85
Performance Publication		40	40	40	40
Asset Management		0	0	0	0
Bonus Scores		0	0	0	0
Penalties		0	0	0	0.3
Blue Drop Score (2011)		52.18% (↑)	53.35% (↑)	53.26% (↑)	42.84% (↔)
Blue Drop Score (2010)		NA	42.63%	NA	NA
System Design Supply Capacity (MI/d)		0.432	0.432	0.432	0.432
System Operational Capacity		94%	94%	94%	94%
Population Served by System		1 000	12 000	8 000	3 000
Ave. Daily Consumption per Capita (l)		406	34	51	135
Microbiological Compliance (12 months)		100% (11 months)	100.00%	100.00%	100% (9 months)
Chemical Compliance (12 months)		100.00%	99.80%	100.00%	100% (11 months)

Performance Area	Systems	Lennertsville	Lutzburg	Marchand	Soverby
Water Safety Planning Process & Incident Response Management		29	29	29	29
Process Control, Maintenance & Management Skills		35	25	25	25
Monitoring Programme		63	68	74	74
Credibility of Sample Analyses		49	54	51	35
Submission of Results		50	0	50	50
Drinking Water Quality Compliance		20	85	100	100
Performance Publication		40	40	40	40
Asset Management		0	0	0	0
Bonus Scores		0	0	0	0
Penalties		0	0.3	0	0
Blue Drop Score (2011)		29.09% (->)	45.74% (->)	53.21% (↑)	52.45% (↑)
Blue Drop Score (2010)		NA	NA	NA	NA
System Design Supply Capacity (MI/d)		0.432	0.432	0.432	0.432
System Operational Capacity		94%	94%	94%	94%
Population Served by System		1 400	1 200	1 500	800
Ave. Daily Consumption per Capita (l)		290	338	271	>500
Microbiological Compliance (12 months)		81.82% (7 months)	100% (9 months)	100.00%	100.00%
Chemical Compliance (12 months)		100.00%	100% (11 months)	100.00%	100.00%

Regulatory Impression

In a commendable effort, !Kai !Garib presented 12 water supply systems for the 2011 evaluation compared to the 1 system assessed last year. The increase in registered supply systems allowed for a more focussed, system specific assessment. Additionally, the more focussed approach of the municipality to drinking water quality (DWQ) management per supply system will improve identification of area-specific problems requiring the immediate attention of the municipality.

Credit was given for the municipal efforts, supported by a DWA Regional office funded service provider to develop a water safety plan for the area of supply under jurisdiction of !Kai !Garib. Improvement in DWQ management performance can be expected should municipal management support implementation of the plan through allocation of budget. Although commendable monitoring occurs in all the supply systems, a detailed analysis of the results and risks could provide valuable information to revise more cost-effective, sustainable monitoring programmes.

The benefit of maintaining the comprehensive monitoring programmes is however that the larger quantity of data allows DWA to express with more confidence that drinking water supplied to most residents within !Kai !Garib are of excellent microbiological and chemical quality. The municipality is advised to optimise disinfection to ensure that the microbiological water quality continuously remains exceptional to the point of consumption. Water in the Cillie and Lennertsville supply system were found to pose a risk of microbial infection. The WSA should address the non-compliances, providing the Department with information within 60 days to confirm a continued supply of safe drinking water.

Findings:

1. Process control staff should be shown adequate / competent to maintain all the treatment systems over the vast distance. As per Regulation 2834, !Kai !Garib should link process control staff to each treatment systems on BDS (Blue Drop System). Although cognisance was taken of the municipal maintenance team, all staff is still to be verified competent.

2. Considering the risks to human health posed by unsafe drinking water, procedures to maintain optimum treatment should be available at all times, at all the treatment sites. The importance of user-friendly O&M manuals that allow staff to maintain good functioning of treatment shouldn't therefore be underestimated. !Kai !Garib provided little information to confirm availability of site-specific manuals, DWA however noted that the documents are being drafted. !Kai !Garib should continue, confirming site-accuracy.
3. Data submission does not confirm that !Kai !Garib adheres 100% to the operational and compliance monitoring programmes registered on BDS, the municipality should confirm correctness of the risk-based, supply system specific monitoring programmes. 12 months' microbiological data submission was confirmed for most of the supply systems, failure of the WSA to provide DWA with hard copy data-sheets to confirm correctness of the data, unfortunately resulted in the allocation of a partial penalty.
4. BDS data credibility appears low, the municipality should therefore ensure upload per supply system of all information to allow data traceability (date of analyses, laboratory performing the analyses and method of analyses amongst others).
5. !Kai !Garib should improve asset management – the department was provided with little information to access the latter. Information needs to be readily available on the condition and functioning of the assets, while financial records should show expenditure to maintain DWQ management performance.

Municipal Blue Drop Score 2011: **53.43%**

Performance Area	Systems	Brandboom	Gariep	Groblershoop
Water Safety Planning Process & Incident Response Management		40	40	40
Process Control, Maintenance & Management Skills		53	53	53
Monitoring Programme		58	40	61
Credibility of Sample Analyses		61	78	69
Submission of Results		20	0	50
Drinking Water Quality Compliance		78	68	78
Performance Publication		80	80	80
Asset Management		0	0	0
Bonus Scores		0	0	0
Penalties		0.3	0.4	0.4
Blue Drop Score (2011)		52.40% (↑)	47.35% (↔)	54.50% (↑)
Blue Drop Score (2010)		45.88%	NA	45.88%
System Design Supply Capacity (MI/d)		0.53	0.1	2.4
System Operational Capacity		NI	NI	NI
Population Served by System		3 000	2 500	5 500
Ave. Daily Consumption per Capita (l)		-	-	-
Microbiological Compliance (12 months)		100.00% (10 months)	100.00% (1 month)	100.00% (11 months)
Chemical Compliance (12 months)		100.00% (10 months)	100.00% (2 months)	100.00% (8 months)
Performance Area	Systems	Grootdrink	Topline	Wegdraai
Water Safety Planning Process & Incident Response Management		40	40	40
Process Control, Maintenance & Management Skills		53	53	53
Monitoring Programme		58	58	56
Credibility of Sample Analyses		65	63	67
Submission of Results		20	20	0
Drinking Water Quality Compliance		78	78	78
Performance Publication		80	80	80
Asset Management		0	0	0
Bonus Scores		0	0	0
Penalties		0.4	0.4	0.4
Blue Drop Score (2011)		52.60% (↑)	52.51% (↑)	51.47% (↑)
Blue Drop Score (2010)		45.88%	45.88%	45.88%
System Design Supply Capacity (MI/d)		0.36	0.44	0.36
System Operational Capacity		NI	NI	NI
Population Served by System		2 616	2 470	2 260
Ave. Daily Consumption per Capita (l)		-	-	-
Microbiological Compliance (12 months)		100.00% (10 months)	100.00% (10 months)	100.00% (9 months)
Chemical Compliance (12 months)		100.00% (9 months)	100.00% (10 months)	100.00% (9 months)

Regulatory Impression

Unfortunately, the performance of !Kheis Local Municipality during the 2011 Blue Drop assessment does not allow for much praise since most systems showed little improvement. On the positive, the increase in registered supply systems and compliance data to evaluate drinking water quality (DWQ) per supply system are evidence of positive improvements in the DWQ management approach of !Kheis. The more focussed approach per supply system allows for improved identification of area-specific problems requiring immediate attention.

Credit was given for the municipal efforts, supported by a service provider funded by the DWA Regional office to develop a water safety plan for the entire area of supply. The municipality is encouraged to incorporate the principles of water safety planning in their DWQ management business. It is imperative to ensure identification of all risks, implementation of control and compliance monitoring as per findings of the risk assessment. DWA noted that that municipality is in the process of obtaining councillor approval, endeavours should confirm that budget becomes available to instigate improvements. Conducting a full SANS 241 analyses in all the supply systems, has been planned for this financial year, is imperative as evidence to confirm that all risks had been identified.

Findings:

1. !Kheis showed poor compliance to maintain monitoring within all the supply systems. As per legal requirement, microbiological monitoring occurred for less than 12 months in all the supply systems. Chemical compliance and operational monitoring also occurred less frequent than indicated per the system registered monitoring programmes.
2. Information is still outstanding to ensure BDS credibility of all DWQ data. BDS data credibility implies that the municipality supplied DWA with all the information needed to confirm the accuracy of results. This implies amongst others, date of analyses, laboratory performing the analyses and method used to obtain the result. !Kheis should also ensure that all data is linked to a laboratory of analyses.
3. Process control is non-compliant with Regulation 2834 at most of the treatment systems. The municipality should ensure opportunities to improve the capacity of the appointed staff, this also includes ensuring that all responsible for implementing control measures as per the water safety plan, understands what is expected of them. Staff attending the confirmation session showed some uncertainties regarding the content and their roles to ensure optimal implementation of the water safety plan.
4. O&M manuals should be in use at all the treatment sites, operational monitoring should be registered on BDS, log sheets will serve as evidence that monitoring actually occurs.
5. Furthermore, the lack of asset management, financial data and planning information is notably absent or insufficient

Municipal Blue Drop Score 2011: **65.56%**

Performance Area	Systems	Warrenton
Water Safety Planning Process & Incident Response Management		71
Process Control, Maintenance & Management Skills		45
Monitoring Programme		70
Credibility of Sample Analyses		100
Submission of Results		100
Drinking Water Quality Compliance		73
Performance Publication		0
Asset Management		78
Bonus Scores		0
Penalties		0
Blue Drop Score (2011)		65.56% (↑)
Blue Drop Score (2010)		54.00%
System Design Supply Capacity (MI/d)		8.4
System Operational Capacity		90%
Population Served by System		20 855
Ave. Daily Consumption per Capita (l)		362
Microbiological Compliance (12 months)		96.10%
Chemical Compliance (12 months)		No data

Regulatory Impression

The consistent improvement of this municipality's Blue Drop performance is noteworthy and impressive. The Blue Drop inspectors were left impressed with the municipal officials' dedication in spite of various challenges. Other commendable activities would be the fact that 12 months of data was submitted to DWA in spite of computer access challenges, as well as the thorough asset register presented.

However there remain sufficient room for improvement as described below:

Findings:

1. The monitoring programme must be improved to be informed by a proper risk determination which will include a full SANS 241 analyses. Critical chemical determinands must be included in the monitoring programme.
2. The registration of process controllers should be prioritised.

Municipal Blue Drop Score 2011: **25.56%**

Performance Area	Systems	Andriesvale	Askam	Loubos	Mier Boorgate
Water Safety Planning Process & Incident Response Management		29	29	29	29
Process Control, Maintenance & Management Skills		20	20	20	20
Monitoring Programme		26	30	34	34
Credibility of Sample Analyses		75	69	75	75
Submission of Results		0	100	50	50
Drinking Water Quality Compliance		10	10	10	10
Performance Publication		0	0	0	0
Asset Management		24	24	24	24
Bonus Scores		3.3	3.3	3.4	3.4
Penalties		0	0	0	0
Blue Drop Score (2011)		22.61% (↓)	27.72% (↑)	25.96% (→)	25.96% (↑)
Blue Drop Score (2010)		25.10%	25.10%	25.10%	25.10%
System Design Supply Capacity (MI/d)		NI	NI	NI	NI
System Operational Capacity		NI	NI	NI	NI
Population Served by System		795	567	1 129	1 208
Ave. Daily Consumption per Capita (l)		-	-	-	-
Microbiological Compliance (12 months)		50.00% (7 months)	85.71%	91.67% (11 months)	91.67% (11 months)
Chemical Compliance (12 months)		No data	No data	No data	No data

Performance Area	Systems	Noenieput	Philandersbron	Rietfontein	Welkom
Water Safety Planning Process & Incident Response Management		29	29	29	29
Process Control, Maintenance & Management Skills		20	20	20	20
Monitoring Programme		32	32	36	34
Credibility of Sample Analyses		75	67	69	71
Submission of Results		20	20	100	50
Drinking Water Quality Compliance		10	10	10	10
Performance Publication		0	0	0	0
Asset Management		24	24	24	24
Bonus Scores		3.4	3.4	3.4	3.4
Penalties		0	0	0	0
Blue Drop Score (2011)		24.24% (↓)	29.88% (↑)	32.94% (↑)	22.44% (↓)
Blue Drop Score (2010)		25.10%	25.10%	25.10%	25.10%
System Design Supply Capacity (MI/d)		NI	NI	NI	NI
System Operational Capacity		NI	NI	NI	NI
Population Served by System		159	1 102	2 544	689
Ave. Daily Consumption per Capita (l)		-	-	-	-
Microbiological Compliance (12 months)		70.00% (10 months)	81.82% (10 months)	85.71%	75.00% (11 months)
Chemical Compliance (12 months)		No data	No data	No data	No data

Regulatory Impression

Credit was given for the municipal efforts, supported by a DWA Regional office funded service provider to develop a water safety plan for the area of supply under jurisdiction of the municipality. Mier is urged to take ownership of the plan, confirming management commitment at the same time through the allocation of budget. The risk assessment must be shown covering all aspects of concern, ensuring that future operational and compliance monitoring includes all risks and control measures.

Submission of drinking water quality (DWQ) data indicates poor monitoring against the registered operational and compliance monitoring programmes on the Blue Drop System (BDS). While DWA commended the municipality following the 2010 assessment with faithful data submission, only the Askam and Rietfontein system presented this assessment cycle with the required 12 months' of data. Site selection as indicated by the number of samples per population, also reflected poor monitoring coverage of the various supply systems.

Measured against the available data, drinking water in all the supply systems poses an unacceptable risk of infection to consumers. 7 153 people are at risk of contracting diarrhoeal diseases. Since past communication has already instructed Mier to optimise disinfection, DWA requires proof within 30 days that the microbiological non-compliances are being addressed. Action plans must furthermore state how the municipality intends on implementing risk-based chemical water quality monitoring.

Municipal management should note that failure to provide people with safe water could manifest in serious health effects. Municipal management should therefore immediately improve DWQ management practices to prevent any negative effect on human health.

Findings:

1. Process control requires urgent attention. It is the responsibility of Mier to attain assistance from DWA to finalise classification according to Regulation 2834 of all their treatment systems (including boreholes with disinfection). Unmapped process control staff on BDS should be linked to the respective treatment systems, only then can DWA evaluate staff compliance against R2834. DWA requires proof of adequate supervision.
2. DWA could not verify comprehensive maintenance at all the treatment systems, information should be made available to confirm adequate maintenance, while the WSA also provide DWA with information to access asset management. The lack of site-specific O&M manuals further concerns the Department.
3. Mier provided no information on publication of DWQ performance, and while the municipality still develops an Incident Management Protocol, DWA is concerned that affected users are not advised to boil their drinking water.

Water Services Authority:	Nama Khoi Local Municipality
Water Services Providers:	Nama Khoi LM; Sedibeng Water^a; Namakwa Water^b

Municipal Blue Drop Score 2011: **57.96%**

Performance Area	Systems	Buffelsrivier	Goodhouse	Kommagas
Water Safety Planning Process & Incident Response Management		25	25	25
Process Control, Maintenance & Management Skills		70	70	60
Monitoring Programme		37	29	35
Credibility of Sample Analyses		69	69	70
Submission of Results		50	0	0
Drinking Water Quality Compliance		45	20	65
Performance Publication		80	80	80
Asset Management		70	70	70
Bonus Scores		0	0	0
Penalties		0.6	0	0.6
Blue Drop Score (2011)		52.37% (↑)	41.55% (↑)	51.72% (↑)
Blue Drop Score (2010)		27.50%	11.25%	26.75%
System Design Supply Capacity (MI/d)		0.4 (yield)	NI	NI (yield)
System Operational Capacity		NI	NI	NI
Population Served by System		672	250	2 104
Ave. Daily Consumption per Capita (l)		-	-	-
Microbiological Compliance (12 months)		100.00% (11 months)	71.43% (6 months)	100.00% (9 months)
Chemical Compliance (12 months)		No data	93.33% (1 month)	0.00% (1 month)
Performance Area	Systems	Rooiwal	Violsdrift	Namakwa Water Board ^{a,b}
Water Safety Planning Process & Incident Response Management		25	25	25
Process Control, Maintenance & Management Skills		70	70	30
Monitoring Programme		35	39	35
Credibility of Sample Analyses		80	75	75
Submission of Results		20	100	100
Drinking Water Quality Compliance		85	10	70
Performance Publication		80	80	80
Asset Management		70	70	70
Bonus Scores		0	0	0
Penalties		0.3	0	0.3
Blue Drop Score (2011)		63.21% (↑)	44.87% (↑)	58.47% (↑)
Blue Drop Score (2010)		25.75%	25.00%	25.50%
System Design Supply Capacity (MI/d)		NI	NI	18
System Operational Capacity		NI	NI	44%
Population Served by System		300	299	40 000
Ave. Daily Consumption per Capita (l)		-	-	-
Microbiological Compliance (12 months)		100.00% (10 months)	73.68%	100.00%
Chemical Compliance (12 months)		100.00% (1 month)	No data	90.00% (2 months)

Regulatory Impression

It is evident that the municipality consolidated its drinking water quality (DWQ) management approach across its entire area of jurisdiction. The improved 2011 Blue Drop performance confirms that this is a step in the right direction. DWA however notes that the consolidated Namakwa Water Board supply system on BDS (Blue Drop System) does not state all the systems presented in 2010 for evaluation. Nama Khoi is therefore requested to confirm that the latter system also include Henkries, Fonteintjie, Bergsig and Matjieskloof.

Efforts such as the development of a water safety plan before the assessment are noted and serve as promise of the municipality's commitment to improve. The plan however still requires considerable attention. Following completion of a full SANS 241 analyses, all risks should be confirmed identified per supply system. DWA noted the "copy – pasting" of risks between systems, as well as reference to Free State and Eastern Cape identified risks in the first draft, only ownership of the process will ensure site applicability. As part of further work, roles and responsibilities needs to be clarified, control measures stated, while only budget will serve as proof that municipal management commits to implementation.

In general, monitoring should improve since Nama Khoi showed poor compliance to maintain monitoring for 12 months in all the supply systems. DWA is encouraged to note that chemical analyses for a number of determinands were performed in 3 systems, poor to no chemical compliance monitoring unfortunately occurred in some of the other systems. DWA received no evidence that findings of the risk assessment influenced the monitoring programmes. Operational monitoring still needs to be registered on BDS.

While actual DWQ showed improvement from last year, from a microbiological perspective, water in Goodhouse and Vioolsdrift pose a risk to public health. Chemical failures in Kommagas render drinking water in the latter system unacceptable. Fluoride failures in the Namakwa Water Board system, calculated from data submitted by the municipality and service provider, also render water unsuitable for consumption in this system representative of a large municipal area. While the municipality improves monitoring to confirm sampling coverage of the Namakwa Water Board system, corrective measures should be put in place at areas of water quality failures. Information needs to be submitted to the DWA within 60 days to confirm address of the water quality non-compliances. Municipal management should be aware that failing to comply increases the risks that consumers are exposed to.

Findings:

1. Process control should improve to ensure availability of staff at all the treatment systems. One process controller can't be responsible for continued optimum operation at Buffelsriver, Goodhouse, Rooiwal and Vioolsdrift. Other systems showed no process control staff, classification of treatment systems as per Regulation 2834 also needs to be finalised. The importance of maintenance to ensure treatment efficacy should not be underestimated, Nama Khoi should assure competence and availability of teams to maintain the function.
2. Information is still outstanding to ensure BDS credibility of all DWQ data. BDS data credibility implies that the municipality supplied DWA with all the information needed to confirm the accuracy of results. This implies amongst others, date of analyses, laboratory performing the analyses and method used to obtain the result.

Municipal Blue Drop Score 2011: **52.25%**

Performance Area	Systems	Swartkop Boreholes
Water Safety Planning Process & Incident Response Management		43
Process Control, Maintenance & Management Skills		75
Monitoring Programme		70
Credibility of Sample Analyses		57
Submission of Results		100
Drinking Water Quality Compliance		50
Performance Publication		85
Asset Management		0
Bonus Scores		0
Penalties		0.6
Blue Drop Score (2011)		52.25% (↑)
Blue Drop Score (2010)		38.13%
System Design Supply Capacity (Ml/d)		NI (yield)
System Operational Capacity		NI
Population Served by System		200
Ave. Daily Consumption per Capita (l)		-
Microbiological Compliance (12 months)		100.00%
Chemical Compliance (12 months)		66.67% (2 months)

Regulatory Impression

The regulator is most optimistic regarding the continued improvement of the drinking water quality (DWQ) management performance of the municipality. The improvement from a 5% baseline (2009) to 38.13% in 2010, to a current level of 52.25% is evident of continuous enhancement and engraining of best practice systems. DWA encourages Namakwa to uphold the steady improvement, focussing in future on asset management (technical inspections and evidence of implementation of findings, municipal asset register and groundwater yield versus abstraction volumes).

DWA acknowledged the water safety plan in development for Namakwa, the WSA should confirm desktop identification of risks with site verifications to ensure that all risks have been identified, control measures should thereafter be stated to address each risk. Roles and responsibilities should be clearly denoted, also linking a timeframe to implementing each control measure. The appointment of any future service providers should not deter continued implementation of the findings, management should therefore avail funds for the service provider to maintain the good practices put in place by the District Municipality.

Although the water supply was again confirmed safe for use from a microbiological perspective, chemical monitoring revealed unacceptable levels of fluoride. Due to both samples analysed showing levels of fluoride that exceeds the South African national standard (SANS 241), the overall chemical quality of water within Swartkop was evaluated to pose a risk of infection.

While DWA is mindful that the WSA still awaits the results of a recent full SANS 241 analyses, the WSA should increase fluoride monitoring, at the same time ensuring that their compliance monitoring include all determinands with the potential to negatively affect the health of consumers. Treatment options should also be investigated.

The WSA is furthermore advised to provide outstanding information on the Blue Drop System to allow for full data-set traceability.

Municipal Blue Drop Score 2011: **49.44%**

Performance Area	Systems	Ganspan	Hartswater	Jan Kempdorp
Water Safety Planning Process & Incident Response Management		12	12	12
Process Control, Maintenance & Management Skills		0	44	44
Monitoring Programme		0	78	66
Credibility of Sample Analyses		0	58	58
Submission of Results		0	0	50
Drinking Water Quality Compliance		0	20	20
Performance Publication		0	0	0
Asset Management		0	0	0
Bonus Scores		0	0	0
Penalties		0	0	0
Blue Drop Score (2011)		1.84% (↓)	22.83% (↓)	24.21% (↓)
Blue Drop Score (2010)		22.33%	50.88%	50.88%
System Design Supply Capacity (MI/d)		NI	5	7
System Operational Capacity		NI	NI	NI
Population Served by System		16 476	5 098	22 497
Ave. Daily Consumption per Capita (l)		-	-	-
Microbiological Compliance (12 months)		No data	89.47% (7 months)	87.50% (11 months)
Chemical Compliance (12 months)		No data	100.00% (2 months)	100.00% (2 months)

Performance Area	Systems	Mogogong	Pampierstad ^a
Water Safety Planning Process & Incident Response Management		12	91
Process Control, Maintenance & Management Skills		0	100
Monitoring Programme		0	85
Credibility of Sample Analyses		0	100
Submission of Results		0	100
Drinking Water Quality Compliance		0	100
Performance Publication		0	100
Asset Management		0	26
Bonus Scores		0	2.0
Penalties		0	0
Blue Drop Score (2011)		01.84% (↓)	89.48% (↑)
Blue Drop Score (2010)		22.33%	22.33%
System Design Supply Capacity (MI/d)		NI	9.6
System Operational Capacity		NI	NI
Population Served by System		40	29 695
Ave. Daily Consumption per Capita (l)		-	-
Microbiological Compliance (12 months)		No data	100.00%
Chemical Compliance (12 months)		No data	100.00%

Regulatory Impression

An overall poor Blue Drop performance is recorded since 4 out of the 5 systems scored less than 30%. The Pampierstad system, managed by Sedibeng Water, scored exceptionally well due to effective operations and management noticed during the assessment. Below standard asset management caused this system to miss out on Blue Drop certification.

The Municipality should urgently plan to improve its approach to drinking water quality management since a delay would contribute to the current compromising of public health in Ganspan, Jan Kempdorp, Hartswater and Mogogong. The urgent implementation of monitoring programmes in Ganspan and Mogogong should be prioritised together with process optimisation at Jan Kempdorp and Hartswater (in order to improve microbiological compliance).

Water Services Authority:	Renosterberg Local Municipality
Water Services Providers:	Renosterberg Local Municipality

Municipal Blue Drop Score 2011: **25.36%**

Performance Area	Systems	Petrusville	Phillipstown	Vanderkloof
Water Safety Planning Process & Incident Response Management		35	35	35
Process Control, Maintenance & Management Skills		30	8	20
Monitoring Programme		71	41	65
Credibility of Sample Analyses		0	1	0
Submission of Results		0	50	0
Drinking Water Quality Compliance		0	10	75
Performance Publication		0	0	0
Asset Management		5	5	5
Bonus Scores		0	0	0
Penalties		0.3	0	0.3
Blue Drop Score (2011)		16.05% (↓)	16.34% (↓)	36.88% (↑)
Blue Drop Score (2010)		25.00%	36.00%	25.00%
System Design Supply Capacity (MI/d)		2.5	0.6048 (yield)	2.5
System Operational Capacity		80%	99%	80%
Population Served by System		4 500	3 500	1 500
Ave. Daily Consumption per Capita (l)		444	>500	>500
Microbiological Compliance (12 months)		87.50% (9 months)	62.50% (11 months)	100.00% (9 months)
Chemical Compliance (12 months)		100.00% (6 months)	100.00% (6 months)	100.00% (6 months)

Regulatory Impression

Sadly Renosterberg Local Municipality made no progress since the 2010 Blue Drop assessment leaving drinking water quality management in its all of its three systems compromised. The assessment process was handicapped due to a general lack of information. The municipality failed to submit information on the Blue Drop system (BDS) as required and this prevented an improved showing.

The compliance levels Petrusville but especially Phillipstown indicates that treatment improvement in these towns should be prioritised. The quality of tap water in these two towns is certainly not up to standard.

Encouraging would be the fact that an effort was made to adopt the water safety planning process since this will assist in improving the understanding all risks to water treatment and distribution. However the current risk assessment is found to be too generic in nature to have the desired effect. This is nevertheless a step in the right direction.

Municipal Blue Drop Score 2011: **36.44%**

Performance Area	Systems	Eksteenfontein	Kuboes	Lekkersing
Water Safety Planning Process & Incident Response Management		19	19	19
Process Control, Maintenance & Management Skills		13	13	13
Monitoring Programme		36	32	36
Credibility of Sample Analyses		46	50	44
Submission of Results		100	20	100
Drinking Water Quality Compliance		60	10	57
Performance Publication		20	20	20
Asset Management		46	46	46
Bonus Scores		3.4	3.4	3.4
Penalties		0.3	0	0.6
Blue Drop Score (2011)		45.28% (↑)	26.03% (↑)	44.09% (↑)
Blue Drop Score (2010)		25.87%	25.87%	26.63%
System Design Supply Capacity (MI/d)		NI (yield)	NI (yield)	NI (yield)
System Operational Capacity		NI	NI	NI
Population Served by System		800	1 094	680
Ave. Daily Consumption per Capita (l)		-	-	-
Microbiological Compliance (12 months)		100.00%	75.00% (10 months)	100.00%
Chemical Compliance (12 months)		No data	No data	100.00% (1 month)
Performance Area	Systems	Port Nolloth / Alexander Baai	Sanddrift	
Water Safety Planning Process & Incident Response Management		19	19	
Process Control, Maintenance & Management Skills		25	25	
Monitoring Programme		36	36	
Credibility of Sample Analyses		47	46	
Submission of Results		100	100	
Drinking Water Quality Compliance		10	60	
Performance Publication		20	20	
Asset Management		46	46	
Bonus Scores		0	0	
Penalties		0	0.3	
Blue Drop Score (2011)		25.93% (↑)	40.88% (↑)	
Blue Drop Score (2010)		23.63%	26.63%	
System Design Supply Capacity (MI/d)		NI	NI	
System Operational Capacity		NI	NI	
Population Served by System		9 100	1 141	
Ave. Daily Consumption per Capita (l)		-	-	
Microbiological Compliance (12 months)		92.73%	100.00%	
Chemical Compliance (12 months)		No data	No data	

Regulatory Impression

Although DWA acknowledge that work has commenced to improve drinking water quality (DWQ) management performance within the municipality, ample room still exists for improvement. While the microbiological water quality monitoring programmes maintained in each of the systems confirm safe water supplies in the Eksteenfontein, Lekkersing and Sanddrift systems, water provided to residents of Kuboes and Port Nolloth / Alexander Baai poses an unacceptable risk of infection. DWA requires information within 30 days to confirm address of the microbiological water quality non-compliances. Municipal management should ensure that people receive safe drinking water.

The chemical quality of drinking water in all the supply systems remains unknown. DWA received only one data-set on the nitrate / nitrite levels within the Lekkersing system. Even though compliant, the result cannot be deemed representative of the chemical quality of water in all the supply systems, nor can one result represent the concentrations over a year. The municipality provided no other information to confirm analyses of a full SANS 241 in all the supply systems.

Richtersveld is consequently urged to take ownership of the water safety plan developed for them through funds of the DWA Regional office. The risk assessment must be shown thorough, ensuring that future operational and compliance monitoring includes all risks and control measures. The municipality will only receive full recognition for the plan once they take ownership of the document (process), confirming management commitment at the same time through the allocation of budget.

Findings:

1. Process control requires urgent attention. Compliance with Regulation 2834 can only be achieved by Richtersveld first ensuring registration / classification of all the treatment systems (including boreholes with disinfection), thereafter adequate, competent staff should be shown available at each site to maintain operation. The municipality provided almost no information to confirm competency of the maintenance personnel or proof of work. Richtersveld should acknowledge their responsibly towards staff by ensuring opportunities for development. The lack of site-specific O&M manuals further concerns the Department.
2. With efforts to improve monitoring, Richtersveld has to address data credibility on the Blue Drop System (BDS). All data should be confirmed linked to a laboratory responsible for the analyses, date of analyses, method of analyses, etcetera.
3. Asset management requires attention. DWA received little information on the condition and functioning of assets, financial records confirming DWQ related expenditure or availability and use of water.

Municipal Blue Drop Score 2011: **29.49%**

Performance Area	Systems	Campbell	Douglas	Griekwastad	Schmidtsdrift
Water Safety Planning Process & Incident Response Management		0	0	0	0
Process Control, Maintenance & Management Skills		0	0	0	0
Monitoring Programme		70	70	70	70
Credibility of Sample Analyses		89	80	78	80
Submission of Results		0	0	0	0
Drinking Water Quality Compliance		10	75	19	75
Performance Publication		0	0	0	0
Asset Management		0	23	0	0
Bonus Scores		0	0	0	0
Penalties		0	0.3	0.3	0.3
Blue Drop Score (2011)		14.44% (↓)	36.86% (↓)	16.58% (↓)	33.49% (↓)
Blue Drop Score (2010)		44.13%	63.63%	44.13%	36.63%
System Design Supply Capacity (MI/d)		NI (yield)	5	NI (yield)	NI (yield)
System Operational Capacity		NI	NI	NI	NI
Population Served by System		1 632	3 6763	5 739	1 057
Ave. Daily Consumption per Capita (l)		-	-	-	-
Microbiological Compliance (12 months)		100% (7 months)	100% (7 months)	94.12% (8 months)	100% (8 months)
Chemical Compliance (12 months)		No data	100.00% (1 month)	100.00% (1 month)	100.00% (1 month)

Regulatory Impression

In spite of a very good effort by the municipal representatives (EHP and Siyanje Manje representative), Siyancuma Local Municipality's overall Blue Drop performance was measured to be unsatisfactory in spite of the fact that the limited monitoring indicated that the tap water quality complied rather well with the standards set. The current form of operations does not create confidence that all risks posed to the supply of safe drinking water are being managed and contained at a continuous basis. The decline in Blue Drop performance should become an issue for both municipal management and decision makers since this is a public health issue.

The municipality is encouraged to prioritise the supply of safe drinking water by focusing on improving the Blue Drop performance, which will result in a sustainable turn around.

Findings:

1. The Blue Drop inspectors were astonished by the vast lack of information on most aspects of the drinking water quality business. This is deemed as a huge risk to the continued supply of safe drinking water.
2. Special attention is required to improve the monitoring programme to ensure that the water quality is continuously compared to the standard limits. (Legislated Requirement)

Municipal Blue Drop Score 2011: **44.24%**

Performance Area	Systems	Riemvasmaak Sending	Riemvasmaak Vredesvallei	Swartkop Dam
Water Safety Planning Process & Incident Response Management		49	49	49
Process Control, Maintenance & Management Skills		20	20	20
Monitoring Programme		64	66	66
Credibility of Sample Analyses		66	66	67
Submission of Results		0	0	0
Drinking Water Quality Compliance		20	85	55
Performance Publication		40	40	40
Asset Management		16	24	16
Bonus Scores		0	0	0
Penalties		0	0.3	0.6
Blue Drop Score (2011)		31.37% (↓)	52.15% (↑)	42.09% (↑)
Blue Drop Score (2010)		41.38%	37.00%	40.75%
System Design Supply Capacity (MI/d)		0.2	0.38	NI
System Operational Capacity		NI	NI	NI
Population Served by System		1 360	460	150
Ave. Daily Consumption per Capita (l)		-	-	-
Microbiological Compliance (12 months)		66.67% (7 months)	100.00% (8 months)	100.00% (8 months)
Chemical Compliance (12 months)		92.86% (1 month)	100.00% (1 month)	86.67% (1 month)

Regulatory Impression

From a regulatory point of view, drinking water quality (DWQ) management services by Siyanda should improve. Drinking water in the Riemvasmaak Sending supply system was evaluated of unacceptable microbiological quality, consumers are at risk of contracting diarrhoeal diseases. Fluoride failures in both the Riemvasmaak Sending and Swartkop Dam systems infer that water also poses a risk of irreversible health effects after long-term exposure. Monitoring not maintained for 12 months in any of the water supply systems, along with the lack of information to confirm credibility of results, furthermore concerns the Department because it devalues the actual excellent DWQ compliance reported in the Riemvasmaak Vredesvallei system.

The situation demands the attention of the municipal administration and governance, the Regulator trusts that the poor performance against the Blue Drop evaluation will motivate the municipality to rectify the non-compliances without further hesitation or excuse. Process control and the lack of information on asset management are other areas of concern demanding the immediate attention of the municipality.

Municipal Blue Drop Score 2011: **40.94%**

Performance Area	Systems	Prieska	Marydale	Niekerkshoop
Water Safety Planning Process & Incident Response Management		13	19	19
Process Control, Maintenance & Management Skills		23	13	13
Monitoring Programme		71	63	61
Credibility of Sample Analyses		78	94	95
Submission of Results		50	100	100
Drinking Water Quality Compliance		13	53	73
Performance Publication		90	90	90
Asset Management		48	40	40
Bonus Scores		0	0	0
Penalties		0.2	0.2	0.2
Blue Drop Score (2011)		37.52% (↓)	50.85% (↓)	56.56% (↑)
Blue Drop Score (2010)		52.83%	52.83%	52.83%
System Design Supply Capacity (MI/d)		15	NI	NI
System Operational Capacity		33%	NI (yield)	NI (yield)
Population Served by System		12 250	NI	NI
Ave. Daily Consumption per Capita (l)		>500	-	-
Microbiological Compliance (12 months)		91.67%	95.12%	96.15%
Chemical Compliance (12 months)		100.00% (11 months)	100.00% (5 months)	95.83% (7 months)

Regulatory Impression

The decline in Blue Drop performance of the Prieska water supply system resulted in a significant drop in overall scoring for the Siyathemba Local Municipality. This drop in score is mostly due to the low microbiological compliance, implying that the municipality did not succeed in ensuring a continued supply of safe water supply over the assessment cycle.

The municipal representative impressed the inspector's panel with his knowledge of drinking water quality management but the risk of lack of additional support which is evidently lacking was disconcerting. There however remains confidence in Siyathemba's ability since elements of the Blue Drop requirements implemented serve as reason to believe that adequate commitment levels persist.

Findings:

1. The lack of an operators and maintenance manual magnifies the risk of having only one individual being fully conversant with operations at present. A site specific manual is required.
2. Urgent process audits are required to ensure that treatment optimization recommendations are made for the systems that fail to adequately treat the drinking water.

Municipal Blue Drop Score 2011: **84.23%**

Performance Area	Systems	Riverton	Ritchie
Water Safety Planning Process & Incident Response Management		92	18
Process Control, Maintenance & Management Skills		86	60
Monitoring Programme		89	74
Credibility of Sample Analyses		100	100
Submission of Results		100	100
Drinking Water Quality Compliance		60	44
Performance Publication		100	100
Asset Management		73	40
Bonus Scores		5.0	10.1
Penalties		0	0
Blue Drop Score (2011)		84.74% (↑)	65.28% (↑)
Blue Drop Score (2010)		64.58%	54.58%
System Design Supply Capacity (MI/d)		162	4.42
System Operational Capacity		39%	NI
Population Served by System		250 000	13 626
Ave. Daily Consumption per Capita (l)		156	-
Microbiological Compliance (12 months)		97.73%	93.78%
Chemical Compliance (12 months)		99.90%	100.00%

Regulatory Impression

The Department remains impressed by the continued improvement which stems from the all-round commitment of the Sol Plaatje Local Municipality officials. Attention should be given to the continued disinfection of water supplies, the condition of reservoirs and network to improve microbiological compliance. Achieving Blue Drop status for the Northern Cape capital is imminent should they continue on this path of improvement.

The Ritchie system has much more enhancement required but still achieved a credible score for this reporting cycle. The implementation of a water safety plan process here will ensure the desired improvement.

Findings:

1. During the on-site technical assessment it was found that the filter media at the Riverton works was in need of refurbishment. Signs of uneven blowing, mud-balling and cracks served as indicator of filtration inefficiencies. The municipality however stated that this was due for refurbishment soon. Nevertheless an impressive score of 81.41% was obtained for the plant assessment.

Municipal Blue Drop Score 2011: **45.87%**

Performance Area	Systems	Hopetown	Strydenburg Boreholes
Water Safety Planning Process & Incident Response Management		34	18
Process Control, Maintenance & Management Skills		23	20
Monitoring Programme		85	90
Credibility of Sample Analyses		31	28
Submission of Results		100	100
Drinking Water Quality Compliance		100	20
Performance Publication		40	35
Asset Management		0	0
Bonus Scores		0	0
Penalties		0	0
Blue Drop Score (2011)		54.08% (↓)	29.44% (↓)
Blue Drop Score (2010)		56.28%	52.13%
System Design Supply Capacity (MI/d)		NI	NI (yield)
System Operational Capacity		NI	NI
Population Served by System		10 500	2 500
Ave. Daily Consumption per Capita (l)		-	-
Microbiological Compliance (12 months)		97.78%	88.89% (10 months)
Chemical Compliance (12 months)		100.00%	96.67% (10 months)

Regulatory Impression

The Department has no doubt that adequate commitment exists with those responsible for drinking water quality treatment and supply, since there is ample evidence of dedicated performance amongst those at operational level. This is yet to be augmented at management level since the key criterion in this domain (Asset Management) scored 0%. It is noted with great concern that inadequate planning and asset management is posing the greatest risk to the continued supply of safe drinking water.

The drinking water quality of Hopetown complies well with the national standard; this is testimony of good process control in spite of various shortcomings.

Findings:

1. The attempt to get a water safety plan in place is noted but this process must still be improved significantly. The Risk Assessment (site specific) is an all important foundation of the water safety planning process.
2. Strydenburg water supply is not up to standard and requires treatment improvement.

Municipal Blue Drop Score 2011: **59.47%**

Performance Area	Systems	Postmansburg ^a	Groenwater	Jenn Heaven
Water Safety Planning Process & Incident Response Management		53	48	48
Process Control, Maintenance & Management Skills		55	15	15
Monitoring Programme		87	59	89
Credibility of Sample Analyses		71	56	56
Submission of Results		100	0	0
Drinking Water Quality Compliance		70	85	85
Performance Publication		90	25	25
Asset Management		38	30	30
Bonus Scores		7.6	0	0
Penalties		0.1	0.3	0
Blue Drop Score (2011)		73.81% (↑)	49.79% (↓)	52.81% (↓)
Blue Drop Score (2010)		70.40%	72.08%	70.58%
System Design Supply Capacity (MI/d)		36.4	NI	NI
System Operational Capacity		100%	NI	NI
Population Served by System		30 000	200	120
Ave. Daily Consumption per Capita (l)		121	-	-
Microbiological Compliance (12 months)		100.00% (8 months); WSP: 100%	No data	No data
Chemical Compliance (12 months)		100.00% (8 months); WSP: 100%	No data	No data

Performance Area	Systems	Postdene	Skeyfontein
Water Safety Planning Process & Incident Response Management		48	48
Process Control, Maintenance & Management Skills		15	15
Monitoring Programme		89	89
Credibility of Sample Analyses		55	63
Submission of Results		0	0
Drinking Water Quality Compliance		70	20
Performance Publication		25	25
Asset Management		30	0
Bonus Scores		0	0
Penalties		0.2	0
Blue Drop Score (2011)		48.27% (→)	29.65% (↓)
Blue Drop Score (2010)		NA	70.40%
System Design Supply Capacity (MI/d)		NI	NI
System Operational Capacity		NI	NI
Population Served by System		500	256
Ave. Daily Consumption per Capita (l)		-	-
Microbiological Compliance (12 months)		100.00% (7 months)	75.00% (7 months)
Chemical Compliance (12 months)		100.00% (7 months)	100.00% (7 months)

Regulatory Impression

The performance of Tsantsabane Local Municipality plummeted since the previous reporting cycle and is cause for great concern. A strategic approach towards turn-around is paramount and therefore the intensifying of the water safety planning process must be prioritised.

The municipal representatives were not adequately prepared for the Blue Drop Assessment and this contributed to the less impressive showing. The systems for Skeifontein No.2, Skeifontein No.3, Maremane and Groenwaterstasie were unfortunately not assessed. However the contribution of Sedibeng Water as bulk provider ensured that the Postmasburg system performs very well. The Department wishes to encourage the municipality to duplicate its contribution at this system to other systems where improvement is required.

Findings:

1. The municipality and water board must ensure that their monitoring programmes are integrated in order to ensure that all risk areas are monitored. This need to be agreed upon as per contract/SLA (service level agreement).
2. Inadequate sampling need to be addressed to ensure that the quality compliance is verified on at least a monthly basis. This need to be augmented with daily operational monitoring. The implementation of a full SANS monitoring is regarded as commendable practice though.

Water Services Authority:	Ubuntu Local Municipality
Water Services Providers:	Ubuntu Local Municipality

Municipal Blue Drop Score 2011: **67.15%**

Performance Area	Systems	Hutchinson	Loxton	Merriman
Water Safety Planning Process & Incident Response Management		84	80	66
Process Control, Maintenance & Management Skills		58	58	28
Monitoring Programme		89	89	80
Credibility of Sample Analyses		50	50	50
Submission of Results		75	50	50
Drinking Water Quality Compliance		20	100	60
Performance Publication		90	90	90
Asset Management		50	55	15
Bonus Scores		6.0	3.7	0
Penalties		0	0	0.3
Blue Drop Score (2011)		61.89% (↓)	81.76% (↑)	54.94% (↓)
Blue Drop Score (2010)		67.63%	65.13%	67.63%
System Design Supply Capacity (MI/d)		1.37	NI	NI
System Operational Capacity		NI	NI	NI
Population Served by System		112	1 000	56
Ave. Daily Consumption per Capita (l)		-	-	-
Microbiological Compliance (12 months)		75.00% (7 months)	100.00% (9 months)	100.00% (6 months)
Chemical Compliance (12 months)		No data	93.33% (2 months)	No data
Performance Area	Systems	Richmond	Victoria West	
Water Safety Planning Process & Incident Response Management		66	63	
Process Control, Maintenance & Management Skills		55	55	
Monitoring Programme		93	87	
Credibility of Sample Analyses		50	28	
Submission of Results		100	50	
Drinking Water Quality Compliance		100	70	
Performance Publication		90	90	
Asset Management		70	70	
Bonus Scores		0	0	
Penalties		0	0.3	
Blue Drop Score (2011)		81.69% (↑)	68.44% (↑)	
Blue Drop Score (2010)		67.63%	65.13%	
System Design Supply Capacity (MI/d)		0.27	0.7	
System Operational Capacity		NI	NI	
Population Served by System		4 800	10 000	
Ave. Daily Consumption per Capita (l)		-	-	
Microbiological Compliance (12 months)		100.00%	100.00% (9 months)	
Chemical Compliance (12 months)		95.35% (2 months)	100.00% (1 month)	

Regulatory Impression

Ubuntu Local Municipality showed commitment in improving performance in Loxton to the extent where the Department is encouraged that this water services authority is progressing once again to repeat the excellence shown in 2008 when Blue drop certification was obtained for the mentioned system.

The municipality did well in understanding the Blue drop requirements and is encouraged to advance further in implementing the requirements. Special attention is to be given to process control and asset management since these would be the tow areas where most points were dropped during this assessment cycle.

Water Services Authority:	Umsobomvu Local Municipality
Water Services Providers:	Umsobomvu Local Municipality

Municipal Blue Drop Score 2011: **35.18%**

Performance Area	Systems	Colesberg	Norvalspont	Noupoort
Water Safety Planning Process & Incident Response Management		39	0	0
Process Control, Maintenance & Management Skills		60	0	10
Monitoring Programme		48	36	36
Credibility of Sample Analyses		50	50	50
Submission of Results		85	0	0
Drinking Water Quality Compliance		3	5	5
Performance Publication		50	0	0
Asset Management		0	0	0
Bonus Scores		6.8	0	0
Penalties		0.3	0.5	0.3
Blue Drop Score (2011)		35.81% (↑)	03.13% (↓)	08.63% (↓)
Blue Drop Score (2010)		22.88%	23.13%	24.13%
System Design Supply Capacity (MI/d)		3.54	0.09	NI
System Operational Capacity		112%	8%	NI
Population Served by System		15 000	1 200	8 000
Ave. Daily Consumption per Capita (l)		236	75	-
Microbiological Compliance (12 months)		90.91% (11 months)	56.00% (11 months)	66.67% (11 months)
Chemical Compliance (12 months)		No data	No data	No data

Regulatory Impression

The Department is concerned about the ability and commitment of Umsobomvu Local Municipality regarding drinking water quality management. The 2011 Blue Drop Performance is far from desired and requires significant improvement. This inadequate management of drinking water quality is then also cause for the poor microbiological compliance recorded. No chemical monitoring was performed.

The compliance records for both Norvalspont and Noupoort suggest that the bacteriological quality of the water was not up to standard for long periods in time. This requires a concerted effort to improve this situation from being repeated.

However the Inspection Panel identified the drafting of the water safety plan as a commendable effort which still requires some revision particularly with the implementation of adequate control measures for the high risks identified.

Findings:

The following shortcomings require prioritised attention:

1. It should be ensured that disinfection is applied continuously and that adequate residual is maintained to prevent secondary contamination.
2. The municipality must monitor the quality of water supply continuously and inform the affected communities should the safeness of the drinking water be compromised. This is a requirement by law. Current compliance figures suggest that the municipality is oblivious of this requirement.

3. The relatively high night-flow recorded at Norvalspont should be addressed. A water balance is required together with a concerted effort to minimise water losses.