

WATER AND SANITATION

The role of Standardization in driving Sustainable
Businesses
Head BI: Mario Carelse

02 JUNE 2022

Making progress possible. Together.

A DECADE OF QUALITY











Why Standards matter?

Our Benchmarks

- Standards make an enormous and positive contribution to most aspects of our Utilities.
- Standards ensure desirable characteristics of products and services such as quality, environmental friendliness, safety, reliability, efficiency and at an economical cost.
- When products and services meet our expectations, we tend to take this for granted and be unaware of the role of standards. However, when standards are absent, we soon notice. We soon care when products turn out to be of poor quality, do not fit, are incompatible with equipment that we already have, are unreliable or dangerous.
- When products, systems, machinery and devices work well and safely, it is often because they meet standards. And the organization responsible for many thousands of the standards which benefit the world is ISO.

 Our Standards















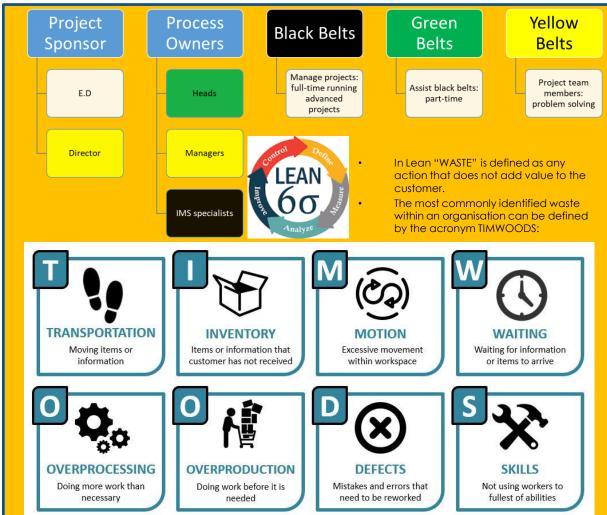
How Are We Meeting SDGs?





PROCESS: CONTINUAL IPROVEMENT/LEAN SIX SIGMA







PEOPLE: **OHSMS/ISO 45001**



(9 02 Nov

Denel munitions plant safety questioned following explosion

news24 Nicole McCain







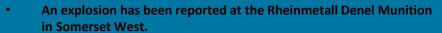












- No injuries have been reported.
- In 2018, eight people died in an explosion at the same site.











PRODUCT: **ISO 22000** Water Safety Plans



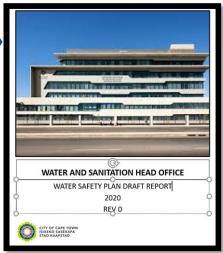


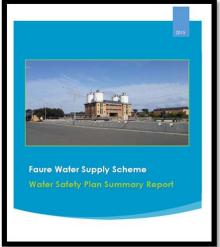


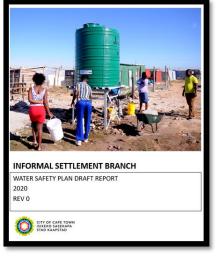




6 CLEAN WATER AND SANITATION

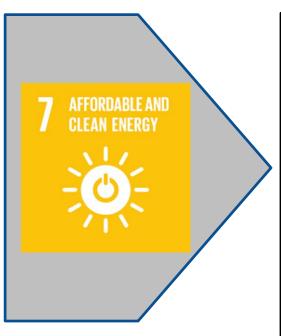


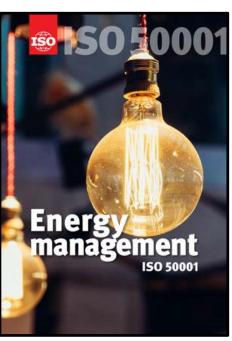






POWER: Energy Management System ISO 50001









MINUTES OF EnMS Roadmap Meeting, HELD ON 8 March 2019 IN Bellville WWTW BDRM, Bellville from 12:00PM to 13:30PM

Attendees:

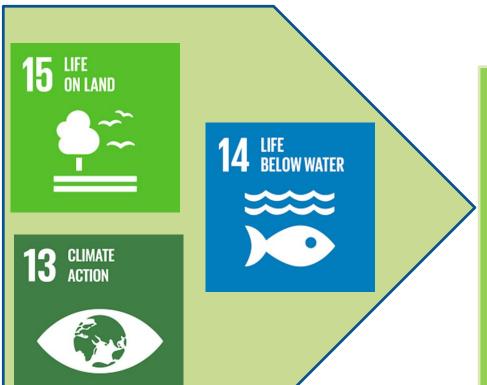
NAME	INITIAL	DESIGNATION
Mario Carelse	MC	Head: Business Improvement (WDM & Strategy)
Oliver Stotko	OS	SPO: Generation Dev. & Municipal Efficiency
Judy Josephs	JJ	Senior Process Controller: Bellville WWTW
Mzwandile Mkhize	MM	Technician: Water Demand Management & Strat.
Mushirah Rehman	MR	Student: Water Demand Manage. & Strategy
Sue-Ann Muller	SM	Student: Water and Sanitation
Tasneem Adams	TA	Technician: Energy & Climate Change Directorate
Damien Fortuin	DF	Learner Technician: E&CC Directorate
Darrin McComb	DM	External Consultant: Resource Innovations
Denis van Es	DvE	External Consultant
Jesper Vauvert	JV	Energy Efficiency Advisor (GIZ)

Discussion on Existing ISO9001 System at Bellville WWTW	
3 4444	
a) MM presented on the ISO9001 system which was certified to the 2015 latest version of the standard by the South African Bureau of Standards. The last system internal audit took place in October 2018 at Bellville WWTW. The certification was for the Bellville WWTW but the long term approach to obtain an organisational certification (this will take time as in this case the potential weakness of one plant will affect the certification of the whole organisation so all sites will have to be standardised before this approach taken). JJ is the designated QM Representative for the Bellville WWTW. b) DM and DVE highlighted the framework similarities	
between ISO9001:2015 and ISO50001:2018 both	Os to purchase copy of
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ENVIRONMENT: EMS ISO 14001









ASSETS: AMS/ISO 55001











PARTNERSHIPS: SCM/Enterprise and Supplier Development and Investment





Organisation, or any authority accredited or recognised by the South African National Accreditation System with which the equipment or material or

 Bid specifications shall, where possible, be described in terms of performance required rather than in terms of descriptive characteristics for design.

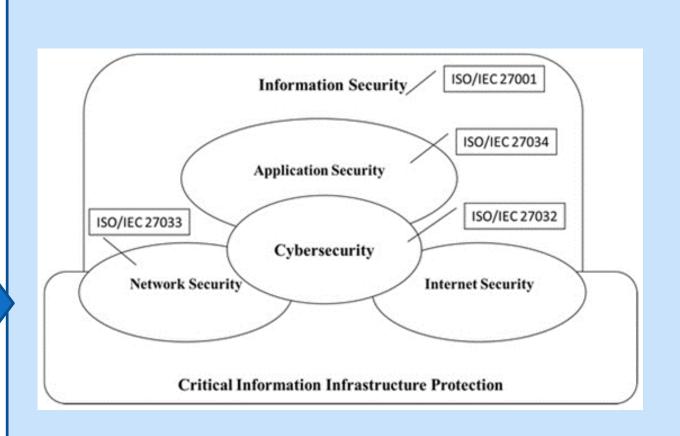
workmanship should comply.













PEOPLE:

The main purpose behind this celebration to raise the level of quality awareness in our department and to recognize the efforts and contributions of our Quality Super Woman.





⊘ ISO/TS 24522:2019

Event detection process: Guidelines for water and wastewater utilities

Stage: Published (90.20) TC: ISO/TC 224 ICS: 03.080.30, 13.060.20, 13.060.30

Sustainable Development Goal(s): 11, 6 Edition: 1

⊘ ISO 24516-1:2016

Guidelines for the management of assets of water supply and wastewater systems — Part 1: Drinking water distribution networks

Edition: 1 Stage: Published (90.60) TC: ISO/TC 224 ICS: 13.060.01, 13.060.20

⊘ ISO 24523:2017

Service activities relating to drinking water supply systems and wastewater systems — Guidelines for benchmarking of water utilities

Stage : Published (90.20) TC : ISO/TC 224 ICS : 03.080.30, 13.060.20, 13.060.30

Sustainable Development Goal(s) : 11, 6 Edition : 1

⊘ ISO 24518:2015 Activities relating to

Activities relating to drinking water and wastewater services — Crisis management of water utilities

Edition: 1 Stage: Published (90.60) TC: ISO/TC 224 ICS: 03.080.30, 13.060.01

Sustainable Development Goal(s): 6, 11, 3

⊘ ISO 24527:2020

Service activities relating to drinking water supply, wastewater and stormwater systems — Guidelines on alternative drinking water service provision during a crisis

Edition: 1 Stage: Published (60.60) TC: ISO/TC 224 ICS: 03.080.30, 13.060.20 Sustainable Development Goal(s): 10, 11, 3, 6

⊘ ISO 20760-2:2017

Water reuse in urban areas — Guidelines for centralized water reuse system — Part 2: Management of a centralized water reuse system

Edition: 1 Stage: Published (60.60) TC: ISO/TC 282/SC 2 ICS: 13.060.01

Sustainable Development Goal(s): 6, 11

⊘ ISO 20760-1:2018

Water reuse in urban areas — Guidelines for centralized water reuse system — Part 1: Design principle of a centralized water reuse system

Edition: 1 Stage: Published (60.60) TC: ISO/TC 282/SC 2 ICS: 13.060.01

Sustainable Development Goal(s): 6, 11

⊘ ISO 24528:2021

Service activities relating to drinking water supply, wastewater and stormwater systems — Guideline for a water loss investigation of drinking water distribution networks

Edition: 1 Stage: Published (60.60) TC: ISO/TC 224 ICS: 13.060.01, 13.060.20

⊘ ISO/TR 14073:2017

Environmental management — Water footprint — Illustrative examples on how to apply ISO 14046



Edition: 2 Stage: Published (60.60) TC: ISO/TC 207/SC 5 ICS: 13.020.10, 13.020.60

re yom making a QUALITY difference



Making progress possible. Together.

