5.3.4.2 Quality

Please outline the quality plan in place in your company

This should include:

Details of your company's quality certification, (any recognised quality approved status),

a summary of your company's quality system in so far as it is relevant to this service

Details of your quality management organisation

Details of quality control methods to be employed in the provision of this service

Reference to quality standards which will apply, covering such topics as audits and reviews,

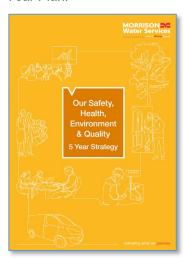
documentation, change control and your approach to continuous improvement

Appropriate measures of success that can be audited by NWL as and when required Current ISO9001

or any recognised quality approved status should be stated

Please outline the quality plan in place in your company

Morrison Water Services (MWS) has a strategic plan for quality standards and compliance and is included in our 5 Year Plan.



Our plan is to operate in a responsible way that delivers a quality service and protects the environment and the communities in which we work by:

- Developing a focused sustainability agenda that supports our commitment to sustainable working.
- Developing a focused quality agenda that supports our commitment to a quality service.
- Setting targets and measure our performance to demonstrate how we operate in a sustainable way.
- Ensuring all operations are legally compliant and operating within environmental limits.

This then flows down to MWS objectives and targets and a dashboard of key indicators.



	Megsure	Lead	Objective / Target			Measured	
	Measure	Lag	2022/23	Change	2023/24	Measured	Achieved When
QUALITY & SUSTAINABILITY (ESG)	Environmental Incidents		Baseline	10%	≤0.06	Ratio of reported environmental incidents against man-hours	Target Met
	Environmental Hazards Reported		Baseline	10%	>10	Number of Environmental hazards reported to incident line resulting in positive intervention to prevent incident	Target met
	Certification Management		100%	Same	100%	Certification within each business	All current certification maintained
	Waste to Landfill		Baseline	NA	Baseline	Amount of waste sent to landfill	Target met
	Operational Carbon Use		Baseline	NA	Baseline	Operational Carbon used Scope 1 and 2	Target to be set once Science based targets have been completed
	Quality Non Conformances		Not Set	NA	Baseline	Recorded via site observations	Not measured previously
	Quality Positive Interventions Reported		Not Set	NA	Baseline	Recorded via site observations	Not measured previously



Details of your company's quality certification, (any recognised quality approved status)



Active ISO 9001.2015 accreditation by LRQA.

A summary of your company's quality system in so far as it is relevant to this service

Overview of Morrison Water Services - Quality Management System

We have an integrated Business Management System, which incorporates our health and safety, environmental and quality management systems. Our quality system is implemented in line with management system standards, ISO 9001:2015, by LRQA, a UKAS accredited certifying body.

The key elements of the system are:

- Business Policy and Corporate Standards supported by specific policies, procedures, generic documents, process maps, registers, forms and templates (levels 1 to 5 as illustrated below)
- Organisation
- Planning and Implementation
- Measuring Performance
- Performance Reviews and Auditing

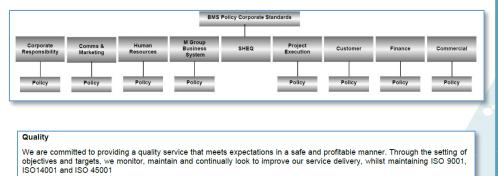
MWS Business Management System				
MWS Business Policy & Corporate Standards – Strategic	Strategic	1		
Quality Management System Procedures ISO 9001 Compliance – Tactical	Tactical	2		
Quality Operating Procedures - Minimum Operational Standards	Operational	3		
Contract Quality Plan, Registers, Presentations, Forms, Templates, Generics, Process Maps - Operational Documentation	Systems Documentation	4		
Specific Work Instructions Together these elements create our 'Plan-Do-Check-Act-Review' cycle which ensures we are continually able to achieve high standards of quality.		5		



Details of your quality management organisation

Our quality management organisation is detailed in our policy MWS-Pol-S-001:

Quality together with Health and Safety is central to our strategy and how we operate.



We manage securely our staff and client's information. We will monitor and improve our standards, abiding by data protection

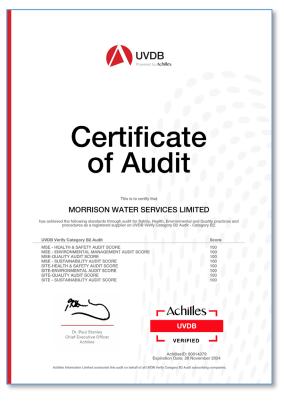
guidelines, whilst implementing and monitoring ISO 27001, ISO 22301 and Cyber Essential Plus.

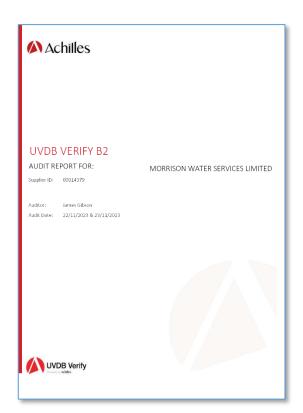


Details of quality control methods to be employed in the provision of this service.

Quality control methods are part of our Project Execution Plan, which is fundamental in providing a structure and mode of operation for our metering operations. This document also details levels and scope of authority, escalation process in decision making and key policies, procedures and reporting to be followed.

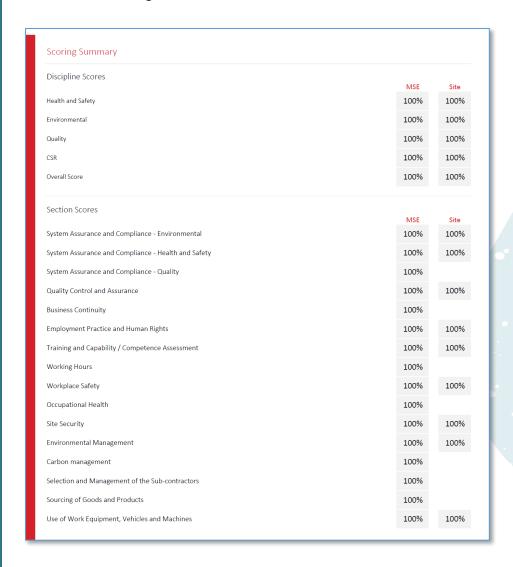
Reference to quality standards which will apply, covering such topics as audits and reviews, documentation, change control and your approach to continuous improvement

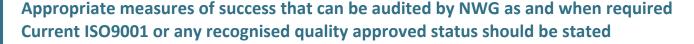




MWS are audited by UVDB to ensure our systems and approach meet the required standards. The following results are from our Yorkshire Water metering contract.







An appropriate measure is data accuracy

We understand that data inaccuracy can lead to poor customer service, aborted visits, poor productivity, mistakes, inaccurate claims, wasted effort, inaccurate billing, and confusion. From a corporate position, MWS sets out the standards and quality policies which contract adhere to, which ensures the highest standards of our work, how we audit the work and report on those activities. All our contracts comply with our BMS Quality System, certified to ISO 9001:2015. Key elements of our BMS are:

- ▶ Business Policy and Corporate Standards supported by specific policies, procedures, generic documents, process maps, registers, forms and templates
- Organisation
- Planning and implementation
- Measuring performance
- Performance reviews and auditing.

Together these elements create our 'Plan-Do-Check-Act Review' cycle which ensures we are continually able to achieve a high level of service. As part of this process we will also prepare an Inspection and Test Plan (ITP) for the smart metering programme, working closely with your employees, with particular attention on planning work, regular testing, proving and handover. We know that an agreed audit and reporting regime are fundamental to a quality and data driven environment, while ensuring that our field operations and customer interfaces are operating with maximum efficiency and effectiveness. A number of benefits will result from data collection and analysis, e.g. accurate programming, accurate streetwork noticing, reduced highway authority (HA) penalties, better HA relations/trust, less disruption to the public and road user, improved client reputation, strong brand/reputation and greater freedom and road space granted by HAs. This robust approach to data accuracy will also mitigate issues



with proving and internal fits, reducing re-work and extra visits, while leading to a positive customer experience and improved efficiency.

MWS achieves consistent quality by:

- Providing capable, well-trained workforce.
- Establishing clear quality standards, based on client requirements, MWS standards and industry best practice.
- Implementing these standards within our ISO-accredited Work Management System (WMS).
- Training staff and sub-contractors to follow the quality processes embedded in our working practices.
- Rigorously monitoring quality/compliance (automated and manual checks).
- Sharing performance with clients, staff, sub-contractors/supply chain, maximising opportunities to learn/improve.

Our right first-time culture starts with ensuring our workforce is properly trained and has the correct tools and equipment to do a great job. A key MWS differentiator is our substantial level of investment in training and tools that enables our workforce (including sub-contractors) to deliver 'right first time', bringing cost and programme benefits. For example our behavioural safety programme has reduced service strikes by 57% since 2020.

MWS Smart Metering team is certified through our bespoke, EUSR-accredited in-house programme that includes:

- Specific meter installation methods
- Knowledge of scenarios
- One-to-one live site training
- Behavioural training, reducing defects/costs of rectification.

Planning/preparation: Our surveyors gather data from field surveys to inform the team of the viability of each job and reinstatement challenges, minimising issues such as 'no waters' (stop taps closed; grit in meters). Our dedicated planning and scheduling team will utilise all works information, property location, streetworks data and customer requirements to ensure the right resource is planned to the right job at the right time.

Every stage of works is rigorously quality checked; we will work with NWGs work management system, which will incorporate all elements of NWG's specification and mandate evidence of quality completion of each stage of a job, before works can progress to the next stage or make recommendations on how the system can be improved to capture these quality checks.

Mobile applications provide near real-time photographic evidence at key stages of the meter installs, recording the quality of reinstatement; minimising repeat visits and non-conformity. The apps enable site staff to:

- upload photographs to demonstrate quality of backfills and reinstatement.
- record pre-work site set up for street works compliance.
- video record risk assessments, reviewed by supervisors to check safe, correct working.

We recommend that every job is audited using photographic recognition technology or automated job management checks that prevent operatives leaving the premises until the system verifies the work has been properly completed. The successful introduction of this technology for our own works management system has enabled us to deliver very low fault percentages and create efficiencies – leading to a significantly higher number of installs. Photographs are checked by our quality team for compliance with SROH and industry good practice. They report any issues to supervisors for immediate on-site corrective measures.

Workforce must check the following:

Pre- Checks	Completion Checks
Adult present when entering domestic properties.	Leaks.
Pets removed from works area.	Working meter.
Solvents/bleaches removed from works area.	Pressure and flow.
Water-run appliances switched off.	Any trapped air flushed.
Meter Accessible.	Noise/vibration after fit.
Stop tap/screw valve accessible; working.	Earth bonding refit.
Drain-off accessible.	Customer happy with location.
Pressure and flow check	Photos of location of works, meter, damage after works.
Earth Bonding/pen stick test.	Photos of meter/serial and reading.



NWG Smart Metering

Customer happy with location.	
Photos of location of works; pre-existing damage.	
Photos of Meter/Serial and reading.	

Example: On our Thames Water contract, the quality of our site operations is constantly monitored, and a high level of data is collected. We monitor reinstatement very closely, collecting accurate layer dimensions and compaction test readings to ensure compliance and mitigate the need for re-work. All digs have daily checks and photographic evidence. The subsequent reinstatement requires us to record tarmac temperature. A minimum of two layers of tarmac are recorded and a range of >15 to 22 Clegg readings is required and validated. Additional data is collected relating to Permit Boards, site set-up and site clear. A daily compliance report is collated with all the data collected and a report submitted to Thames Water.

In November 2020 we undertook 13,765-meter operations at Thames Water, of which 4,849 (35.23%) were from our progress meter programme (PMP). Of the dataset, after data auditing and cleansing, only 339 (2.46%) were referred for field investigation. A further 2,057 (14.94%) had their status changed. 100% of all meter operation were data checked and accurate.

With regards to meter specific data management, ensuring the correct meter is fitted and that the serial number is recorded accurately is paramount to avoid any issues around supply and billing. On the NWG smart metering contracts we will utilise NWG systems to continually review and improve data collection and the level of accuracy achieved. We will review meter identification (bar code-serial number verification), ensure time stamps of photographs of installations are accurate with geo location tags, and provide back-up information when services are within a two-metre proximity to avoid incorrect connections. We typically would expect to capture the following using your system (using photographs) dials, flow rate, manufacturer and model number.

At Thames Water, we check every job (offshore) and where an issue occurs the job is sent for a field investigation. During this investigation, further photographs are taken. The data we collect allows us to set out logical rules for proving installs where internal access cannot be gained. The threshold is currently set at 95%. For NWG we would be happy to manage this service in the same way providing cost efficiencies and data accuracy.

We use generative AI image recognition which contributes to a 'right first time' approach by

- 1. Improving accuracy meter readings/serial numbers are recorded photographically,
- 2. Enhancing efficiency accurate photographs of meters,
- 3. Supporting quality assurance real-time data capture reduces reworks/remedial work.

We can deploy technology to enhance this process. For example, Blicker – a tool which takes accurate photographs of meters and dials first time – reduces data hand-offs and manual processing, improving data accuracy and increasing efficiency. This also significantly reduces the numbers of data checkers required. Recording accurate location of installs is also key and requires precise recording to allow accurate proving and query resolution. Therefore, we will implement a hierarchy of information and audit which will include a series of drop-down options on a field device. Using your systems we recommend the following is recorded, a first location (internal, garden, public), second location (left hand side of garden) and third location free text (under the plant pot). This will support proving and will reduce time on any subsequent visit post survey.

We ensure this methodology and approach is mirrored by our supply chain to have a consistent approach to quality. Subcontractors are subject to the same quality training/standards/checks as our in-house teams and receive quality control inductions prior to works; Monthly performance assessments/reviews cover productivity, commercial, streetworks, defects, safety events, FPN numbers, training and customer interactions. Typically we perform core testing to check the quality of subcontractor reinstatement. Core samples are analysed for compliance and to correct any quality issues. Learnings from analysis are shared with all teams via toolbox talks and briefings to drive improvement.

Real-time data generated from our workflow and internal systems/Power Bi provides quality-related data visualisations/dashboards and insights into performance, including deep-dive analysis at, e.g., team level, driving continuous improvement. Our structured approach to metering reduces complaints, contributing to higher C-/D-MeX scores.

