

# Control Room Operations Competence Framework

|  | BRONZE   | SILVER  | GOLD   |
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| <b>STATEMENTS</b>                              | Has some autonomy, working at operative level, carrying out scheduled work and responding to incidents. Communication, customer service, IT and problem solving are key requirements of this role. Bronze level candidates will be using their own initiative to make decisions and work as part of a supervised team as well as prioritising and deploying high priority reactive work. They will take ownership of the task and role to ensure that all customer promises are met and pro-actively contact customers or 3rd parties to advise early of problems with meeting what has been agreed. | Has the skills and knowledge to carry out work unsupervised and could be leading a small team of others. Involved in incident and crisis management and business continuity, acting as a focal point for operational information as well as a communication hub for the operational business. Close integration with the customer contact function and improved visibility of work affecting customers and customer service performance is key. Real-time situational awareness including cost/performance management information dashboards, and increasing use of decision support tools .e.g. Hazard Manager and real-time optimisation e.g. telemetry and control applications. | Has the skills and knowledge to apply corporate strategy in relation to control room work management with regard to: KPIs; regulatory targets; health and safety; planned and/or reactive work; incident management and customer relations awareness. Monitor and make recommendations for improved working methods including safety and improved efficiency. It involves moving to a service culture. It requires clear, joined-up, business processes. It involves developing relationships and trust which requires improved communication, involvement and engagement. |
| <b>COMPLY WITH REGULATIONS AND LEGISLATION</b> |  |   |  |
| <b>1) INTRODUCTION TO THE LAW</b>              | 1.1 Work in accordance with the Water Act to ensure compliance. Understand the importance of compliance and report issues of non-compliance  | 1.1 Know the water act, the reason it exists and the importance of compliance for water utility companies   | 1.1 Know the water act, the reason it exists and the importance of compliance for water utility companies<br>Communicate, implement, monitor and review operations to comply with the Water Act  |
|  | 1.2 Work in compliance with the Data Protection Act (DPA) and understand how it influences how data is stored and protected  | 1.2 Ensure work is carried out in accordance with the DPA, reporting issues of non-compliance   | 1.2 Manage control room company data systems   |
|  | 1.3 Know the company systems that hold sensitive data and the importance of maintaining accurate and controlled data   | 1.3 Know the company systems that hold sensitive data and the importance of maintaining accurate and controlled data<br>Implement company systems   | 1.3 Know when and where to seek support and/or expert/legal advice and how is this information is cascaded to the appropriate person   |
|  | 1.4 Know when and where to seek support and/or expert/legal advice   | 1.4 Communicate to others the working time directive procedure  | 1.4 Ensure that stakeholders are not impacted when dealing with legal issues   |
|  | 1.5 Understand the implications of the working time directive on your working hours  |   | 1.5 Have the ability to prepare information in case of prosecution   |
|  |  |   | 1.6 Know how to manage a breach in data handling including communications to ensure minimum impact on reputation   |
|  |  |   | 1.7 Highlight and cascade improvements, updates or mitigation for data protection procedures   |
|  |  |   | 1.8 Communicate, implement and monitor the working time directive, and take appropriate action when necessary  |
| <b>2) INTRODUCTION TO THE REGULATORS</b>       | 2.1 Know who the key regulators are and how they influence the work of the water companies   | 2.1 Know the key regulators and their functions and how they influence the work of water companies  | 2.1 Maintain robust, productive working relationships with key contacts with regulatory bodies   |
|  | 2.2 Identify reportable supply demand balance outage incidents and regulatory bodies who require notification  | 2.2 Ensure reportable supply demand outage incidents are reported accurately and within agreed timescales   | 2.2 Keep up to date with all regulation and regulatory changes and communicate all changes   |
|  | 2.3 Work in accordance with the key regulations to ensure compliance.  | 2.3 Monitor for non-compliance and resolve where possible or ensure issues are appropriately reported.  | 2.3 Understand the corporate definition of both domestic and commercial compensation standards and how these link into the regulatory requirements, and identify which processes should be followed  |
|  | 2.4 Report non-compliance issues within area of responsibility to appropriate person.  | 2.4 Ensure data remains valid, up to date and in accordance with regulatory and company requirements  | 2.4 Communicate, implement, monitor and review operations to comply with the regulatory requirements of DWI/DWQR and EA/SEPA   |
|  | 2.5 Identify and understand the corporate definition of domestic and commercial compensation standards and their relation to the regulatory requirements   | 2.5 Understand the corporate definition of both domestic and commercial compensation standards and how these link into the regulatory requirements  | 2.5 Be able to manage the operational response to a quality event to minimise stakeholder impact and protect company reputation  |

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|  | 2.6 Understand the corporate definition of both domestic and commercial compensation standards and how these link into the regulatory requirements  | 2.6 Know the compensation payments for service failures relating to loss of supply, sewerage flooding and water quality failure                                | 2.6 Manage the working relationship with stakeholders ensure effective and efficient completion of joint ventures  |
|  | 2.7 Know the compensation payments for service failures relating to loss of supply and sewerage flooding  | 2.7 Be able to communicate relevant aspects of the regulatory requirements and ensure work is carried out to the required standard                             |  |
|  | 2.8 Understand who the DWI/DWQR are and the EA/SEPA are and how water companies interface with them   | 2.8 Understand and communicate the impact on alerts received in the control centre   |  |
|  | 2.9 Carry out all work in compliance with DWI/DWQR and EA/SEPA  | 2.9 Monitor for non-compliance or any environmental issues and resolve where possible or ensure issues are appropriately reported.                             |  |
|  | 2.10 Report non-compliance issues within area of responsibility to appropriate person.  | 2.10 Communicate to others the importance of professional working relationships with stakeholders  |  |
|  | 2.11 Understand the relationship between the water company and Stake holders  |  |  |
| <b>3) COMPLIANCE AND CONSENT</b>                           | 3.1 Awareness of the compliance and consent arrangements for water supply and waste treatment in your organisation. Understand the implications and consequences of non-compliance  | 3.1 Understand the implications and consequences of non compliance of the consent arrangements for water supply and waste treatment for your organisation      | 3.1 Communicate, implement, monitor and review the compliance and consent arrangements for water supply and waste treatment within your organisation and implement remedial action where required          |
|  | 3.2 Utilise approved supply and waste compliance monitoring methods. Understand the functions they perform and consequences of failure  | 3.2 Ensure approved supply and waste compliance monitoring methods are used. Understand the functions they perform and consequences of failure                 | 3.2 Manage and respond to issues arising due to non-compliance, including making recommendations and recording details in full in line with protocols and procedures                                       |
|  | 3.3 Report non-compliance issues within area of responsibility to appropriate person.   | 3.3 Know how compliance and consent monitoring tools work and how they fit together, the mitigation routes that can be taken and the impact of consent failure | 3.3 Management internal and external stakeholder relationships   |
|  |   | 3.4 Respond to a breach of a consented. Take appropriate steps to ensure a robust escalation and response.   | 3.4 Understand and use compliance and consent monitoring tools and take appropriate mitigation routes to minimise the impact   |
|  |   | 3.5 Monitor for non-compliance or any environmental issues and resolve where possible or ensure issues are appropriately reported.                             | 3.5 Plan, communicate, implement, monitor and review a strategic response to a breach of a consent. Take appropriate steps to ensure a robust escalation and response and management of stakeholder impact |
|  |   |  | 3.6 Manage and resolve non-compliance /environmental issues  |
| <b>4) SECURITY AND EMERGENCY MEASURES DIRECTION (SEMD)</b> | 4.1 Understand the drivers for SEMD, government threat levels and their meaning for both the water industry and the UK.   | 4.1 Know the current threat level (for the water industry and the UK) and the procedure that must be followed upon escalation of the threat level              | 4.1 Communicate, implement, monitor and review the SEMD threat levels, responding appropriately and swiftly to any changes in threat level   |
|  | 4.2 Know what the CNI/Water framework is and how they are impacted on   | 4.2 Ensure approved supply and waste compliance monitoring methods are used. Understand the functions they perform and consequences of failure                 | 4.2 Ensure all work is carried out in line with regulatory requirements, managing and reporting any issues of non-compliance   |
|  | 4.3 Understand the purpose of the regulatory requirements for the construction standards of alarm monitoring centre (AMC) and other security mitigation and carry out all work in line with regulatory requirements, reporting any issues of non-compliance within area of responsibility and to the appropriate person | 4.3 Ensure emergency and escalation procedures are carried out in accordance with approved procedures  | 4.3 Manage the emergency and escalation procedure, ensuring they are carried out in accordance with approved procedures  |
|  | 4.4 Understand the possible impacts to water supplies and demand balance following a third party action   |  |  |
|  | 4.5 Know the emergency procedures and escalation procedures relating to all SEMD incidents including those affecting all key supply and demand sites  |  |  |
| <b>REMOTE ASSET MONITORING AND CONTROL</b>                 |   |  |  |

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| <b>5) SCADA, TELEMETRY AND ALARM MANAGEMENT</b>              | 5.1 Understand the purpose and principles of SCADA and telemetry systems. work supervised in line with company procedures and service level agreements.  | 5.1 Understand the purpose and principles of SCADA and telemetry systems including: the process of changing alarm levels; the purpose for alarm priorities, set points and when and how they need to be changed simple triage and maintenance; the impact on the business and the stakeholders of any change | 5.1 Communicate, implement, manage, monitor and review the remote operation of assets in line with company procedures and service level agreements. Understand the business and regulatory impact and risk of not meeting telemetry alarm service level agreements. Be aware of the configuration of the telemetry system between site and the control room |
|  | 5.2 Gather alarm data and history and triage telemetry alarms in line with level of expertise/responsibility. Seek advice when unable to carry out triage successfully. Implement curative actions based on analysis of data | 5.2 Gather and process alarm data and history and triage telemetry alarms, seeking advice where necessary. Implement curative actions based on analysis of data  | 5.2 Carry out a detailed analysis of a variety of data sources on alarms that are triggering operational issues and make decisions following review to manage the issues. Understand how waste low flow and supply and demand balance alarm are triaged   |
|  | 5.3 Be able to identify and allocate an alarm to the appropriate person and confirm details of the situation indicated by the alarm conditions   | 5.3 Be able to identify and allocate an alarm to the appropriate person and confirm details of the situation indicated by the alarm conditions   | 5.3 Understand the criteria of an emergency supply or waste situation presented via the telemetry system, its escalation and corrective actions   |
|  | 5.4 Understand and carry out when necessary the telemetry escalation process   | 5.4 Resolve issues where possible and escalate within the 'control room' environment when the problem cannot be resolved   | 5.4 Understand the causes, impact and risks in the event of the loss of telemetry and carry out mitigation measures in the event of a loss  |
|  | 5.5 Carry out curative work to approved standards and confirm action has had required effect   | 5.5 Carry out trend analysis and historic data analysis in order to provide solutions  | 5.5 Make, communicate and provide a variety of solutions on escalated issues.   |
|  | 5.6 Understand staff availability impact when attending high level alarms  | 5.6 Ensure curative work is carried out in accordance with approved procedures and confirm curative action has had desired effect  | 5.6 Carry out a detailed analysis of alarm data and make decisions following review on alarm history, trend, previous issues  |
|  | 5.7 Define security action alarms and their purpose  | 5.7 Understand staff availability impact when attending high level alarms  | 5.7 Make decisions associated with all data streams including stakeholder, weather, incidents   |
|  |  | 5.8 Configure alarm view lists appropriate to the needs of the control room user   | 5.8 Manage staff availability impact when attending high level alarms   |
|  |  | 5.9 Define security action alarms and their purpose and likely causes  | 5.9 Define security action alarms, their purpose, likely causes and escalation procedure  |
| <b>6) PROACTIVE NETWORK AND REMOTE MONITORING</b>            | 6.1 Understand the principles of network monitoring for water supply and waste water in own area of work   | 6.1 Understand the principles of network monitoring for water supply and waste water in own area of work including why and how the network is monitored  | 6.1 Understand the methodology and business process network monitoring for water supply and waste water and how changes can impact on the stakeholder   |
|  | 6.2 Action alarms, alerts and tasks based on predetermined priorities/procedures and service level agreements  | 6.2 Understand and communicate the risks associated with the work and the escalation process to others   | 6.2 Communicate, implement, manage, monitor and review network and remote monitoring in line with company procedures and service level agreements   |
|  | 6.3 Understand the risks associated with the work being undertaken and the escalation process  | 6.3 Carry out a hydraulic assessment in order to provide outcomes and/or solutions   | 6.3 Make and communicate decisions on escalation issues, provide solution creations for escalation scenarios  |
|  |  | 6.4 Understand and work within service level agreements  | 6.4 Make changes to set points, understanding the impact on the business and stakeholders   |
|  |  | 6.5 Assess risk based on hydraulic/WQ/ customer parameters, understanding consequences.  | 6.5 Carry out a detailed analysis of a variety of data sources, stakeholder contact/WQ and make decisions following review on history, trend, previous issues to contain incidents  |
|  |  | 6.6 Carry out trend analysis and historic data analysis and provide solutions to deliver best outcomes   | 6.6 Understand and carry out hydraulic modeling   |
| <b>7) NETWORK MONITORING CRITICAL PRESSURE POINTS (CPPs)</b> | 7.1 Understand CPPs and their functional purpose   | 7.1 Understand CPPs and their functional purpose, the types of signals and data expected from this type of asset   | 7.1 Communicate, implement, manage, monitor and review network monitoring CPPs in line with company procedures and service level agreements   |
|  | 7.2 Know the company procedures for asset excursion management   | 7.2 Communicate the company procedures for asset management  | 7.2 Communicate, implement, monitor and review the management of asset excursion  |
|  |  | 7.3 Understand and communicate the contingency measures for operations outside GSS   | 7.3 Communicate, implement, monitor and review contingency plans  |
|  |  | 7.4 Make recommendations to ensure the business approach to issues with CPPs remains appropriate and robust  | 7.4 Ensure the business approach to issues with CPPs remains appropriate and robust. Understand the factors that have to be taken into account and the physical and geographical constraints  |

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| <b>8) REMOTE OPERATION OF ASSETS</b> | 8.1 Understand the remote operation of pumps, valves and treatment processes        | 8.1 Understand the remote operation of pumps, valves and treatment processes  | 8.1 Communicate, implement, manage, monitor and review the remote operation of assets in line with company procedures and service level agreements |
|                                      | 8.2 Carry out all work in line with company procedures and service level agreements | 8.2 Communicate the company procedures and service level agreements for the remote operation of pumps, valves and treatment processes |  |
|                                      | 8.3 Understand the escalation procedures  | 8.3 Understand and activate the contingency measures for operations outside the company procedures and service level agreement        |  |

### DEVIATION FROM NORMAL OPERATIONS

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| <b>9) INCIDENT MANAGEMENT - GENERAL</b> | 9.1 Understanding your companies incident categorisation.   | 9.1 Understanding your companies incident categorisation and method of application  | 9.1 Communicate, implement, manage, monitor and review the continuity and incident plans for the business - including escalation, teams, stakeholder communications, customers, interruption to supply, alternative water supply, waste tankering |
|   | 9.2 Understand the purpose of continuity and emergency planning in the water industry   | 9.2 Implement continuity and emergency planning in the water industry   | 9.2 Communicate, invoke and manage a business continuity plan and ensure copies are available   |
|   | 9.3 Know where to access business continuity documentation and identify contingency measures and resources  | 9.3 Understand and communicate the escalation procedures within your team and organisation  | 9.3 Communicate, implement, manage, monitor and review the continuity and incident plans for the business - including escalation, teams, stakeholder communications, customers, interruption to supply, alternative water supply, waste tankering |
|   | 9.4 Know the escalation levels and procedures within your team and organisation   | 9.4 Communicate the escalation levels within your team and organisation   | 9.4 Support, review or manage an incident management team   |
|   | 9.5 Understand when an incident management team would be formed   | 9.5 Know the process for setting up an incident management team and understand the resource requirements for an incident management team  | 9.5 Develop , manage and maintain effective relationships with regulatory stakeholders  |
|   | 9.6 Work within the incident management team when required  | 9.6 Understand the relationship with key regulatory stakeholders and how an activation of an incident can affect the business. Liaise and manage relationships with key stakeholders including emergency services | 9.6 Communicate, implement, monitor and review contingency plans  |
|   | 9.7 Understand the relationship with key regulatory stakeholders and how an activation of an incident can affect the business                             | 9.7 Understand the importance of timescales and trigger points during an incident and the importance of collating data, information and situation reports   | 9.7 Know the external stakeholders to contact regarding weather events which may have a negative impact on the business and stakeholders including the reasons they would be contacted  |
|   | 9.8 Understand the importance of timescales and trigger points during an incident and the importance of collating data, information and situation reports | 9.8 Understand the relationship between asset failure and stakeholder impact and operational control and call centre  | 9.8 Know when contingency measures/ resources need to be implemented due to the identification of an impact of the weather  |
|   | 9.9 Understand the relationship between asset failure and stakeholders impact and operational control and call centre                                     | 9.9 Manage information being fed back to call taking staff  | 9.9 Communicate, implement and review available options to mitigate risk of stakeholder impact in the event of a high risk asset failure  |
|   | 9.10 Know the governance that is in place to ensure adequate risk management for all supply and waste networks  | 9.10 Know the governance that is in place to ensure adequate risk management for all supply and waste networks  | 9.10 Ensure appropriate information is being fed back to call taking staff  |
|   | 9.11 Understand the relevant elements of the procedures and the consequences of not adhering to them  | 9.11 Communicate the relevant elements of the procedures and the consequences of not adhering to them   | 9.11 Communicate company line and ensure understanding of PR repercussions  |
|   | 9.12 Understand your role and responsibilities in the event of an emergency in the workplace including evacuation and technology system failure           | 9.12 Know where to source and access information to determine the root cause of asset failure   | 9.12 Communicate, implement and review risk management processes and procedures   |
|   | 9.13 Know when it is possible for the business to deviate from normal operation and the possible resolutions  | 9.13 Ensure lessons learned, captured and implemented are feedback to relevant parties  | 9.13 Communicate, implement, monitor and review contingency and emergency response procedures   |
|   |   | 9.14 Understand and communicate roles and responsibilities in the event of an emergency in the workplace including evacuation and technology system failure   | 9.14 Understand the possibilities of deviation from normal operations and how these can be resolved   |

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|   |  | 9.15 Understand the strategic thinking behind contingency and emergency plans  |  |
|   |  | 9.16 Understand the possibilities of deviation from normal operations and how these can be resolved  |  |
| <b>10) INCIDENT MANAGEMENT - WATER SUPPLY</b>                   | 10.1 Know what planned and unplanned interruptions to supply are   | 10.1 Know what planned and unplanned interruptions to supply are   | 10.1 Communicate, implement, monitor and review plans for interruptions to the supply  |
|   | 10.2 Know the impact of poor planning of a planned or unplanned event  | 10.2 Understand how poor planning can impact on a planned or unplanned event   | 10.2 Manage supply interruptions and the risks associated with them  |
|   | 10.3 Know the indicators and risks of supply interruption  | 10.3 Know the different ways to manage supply interruptions and the risks associated with them   | 10.3 Understand the trigger points for the provision of alternative water and the options to maintain supplies and the associated risks  |
|   | 10.4 Understand the trigger points for the provision of alternative water and the option to maintain supplies and the associated risks     | 10.4 Identify key site information that would indicate an interruption to supply   | 10.4 Know the different types of alternative water supplies and their suitability for deployment to stakeholders                         |
|   | 10.5 Know the different types of alternative water supplies and their suitability for deployment to stakeholders                           | 10.5 Understand the trigger points for the provision of alternative water and the options to maintain supplies and the associated risks                            | 10.5 Manage and communicate risks associated with alternative water supplies in line with regulatory requirements and company procedures |
|   | 10.6 Understand the regulatory requirements for alternative water supplies   | 10.6 Know the different types of alternative water supplies and their suitability for deployment to stakeholders   |  |
|   |  | 10.7 Understand and communicate the regulatory requirements for alternative water supplies   |  |
| <b>11) INCIDENT MANAGEMENT - WASTE</b>                          | 11.1 Know what planned and unplanned events can impact the waste water network   | 11.1 Know what planned and unplanned events can impact the waste water network   | 11.1 Manage and communicate the use of waste tankering   |
|   | 11.2 Know the impact of poor planning of a planned or unplanned event  | 11.2 Understand how poor planning can impact on a planned or unplanned event   | 11.2 Understand and communicate to others the licensing and regulatory requirements around waste tankering                               |
|   | 11.3 Know why and when waste tankering would be used   | 11.3 Understand the reasons for waste tankering and why and when it would be used  |  |
|   |  | 11.4 Know what information in the control centre would indicate a need for waste tankering   |  |
|   |  | 11.5 Understand and communicate the licensing and regulatory requirements around waste tankering   |  |
| <b>12) POLLUTION MANAGEMENT</b>                                 | 12.1 Know the impact of a water supply and waste pollution.  | 12.1 Know the impact of a water supply and waste pollution.  | 12.1 Know the impact of a water supply and waste pollution.  |
|   | 12.2 Know the company procedures/licensing/ regulatory requirements relating to pollution, control and management                          | 12.2 Understand the company procedures/licensing/ regulatory requirements relating to pollution, control and management  | 12.2 Understand and communicate the company procedures/licensing/ regulatory requirements relating to pollution, control and management  |
| <b>ASSET SECURITY</b>   |  |  |  |
| <b>13) SECURITY MEASURES, IMPACT AND CONTROL OF INFORMATION</b> | 13.1 Know the nationally recognised threat levels and the impact they can have on the water company  | 13.1 Know the nationally recognised threat levels and the impact they can have on the water company  | 13.1 Understand the source and meaning of threat levels and the associated impact on the water industry and the UK                       |
|   | 13.2 Know how and why recording devices are used in the Control Room or Incident Centres.  | 13.2 Understand the source and meaning of threat levels and the associated impact on the water industry and the UK   | 13.2 Communicate, implement, monitor and review the company's required compliance with required security measures                        |
|   | 13.3 Be able to identify controlled/sensitive data/information in a control room and understand why it is controlled                       | 13.3 Ensure all work is carried out in compliance with required security measures  |  |
|   | 13.4 Know what the data protection act is and how it impacts on your role and carry out all work in line with data protection requirements | 13.4 Know how to review recording (audio and/or visual) from the control room in case of a breach of security and how to ensure that sensitive data is not at risk |  |
|   |  | 13.5 Be able to identify controlled/sensitive data/information in a control room and understand why it is controlled   |  |
|   |  | 13.6 Ensure all work is carried out in line with data protection requirements  |  |
|   |  | 13.7 Understand and utilise control measures that are in place to control sensitive data   |  |

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|   |   | 13.8 Understand and carry out all work in line with company policies regarding data protection and know what measures are in place to manage and control the data                     |  |
| <b>14) SECURITY ALARM MANAGEMENT - ALARM TRIAGE</b>   | 14.1 Know the Standard Operating Procedures and understand how they impact on your role   | 14.1 Be able to identify and understand the suite of security Standard Operating Procedures in your company and the impact they have on your role                                     | 14.1 Communicate, implement, monitor and review the company's security Standard Operating Procedures and service level agreements  |
|   | 14.2 Know the different types of security alarms and their associated target for response   | 14.2 Understand and monitor service level agreements, addressing any excursions   | 14.2 Ensure that security alarm categorisation is consistent and appropriate   |
|   | 14.3 Understand the general escalation routes and the conditions that allow for an alarm to be "parked" and monitored.  | 14.3 Understand how to recognise, escalate and resolve repeat alarms and raise asset security faults  | 14.3 Communicate, implement, monitor and review efficient alarm management methods for dealing with alarm "floods"   |
|   | 14.4 Be able to identify potential causes of repeat security alarms   | 14.4 Ensure relevant information is communicated to all interested parties whether internal or external accurately and within agreed timescales                                       |  |
|   | 14.5 Be able to identify faults that may be found on security equipment   | 14.5 Take action to address communication issues where there are limitations of poor telecommunications   |  |
|   | 14.6 Communicate information accurately and within agreed timescales, giving due regard to its priority and sensitivity using different but appropriate methods of communication where required |   |  |
|   | 14.7 Identify limitations of poor telecommunications reception areas and actions to address communications issues   |   |  |
| <b>15) SECURITY ALARM MANAGEMENT - ACCESS CONTROL</b> | 15.1 Understand the importance of controlling access to a site or asset and the implications of not doing so  | 15.1 Understand the importance of controlling access to a site or asset and the implications to the business of not doing so  | 15.1 Communicate, implement, monitor and review the company's control of access and information gathering regarding threats  |
|   | 15.2 Know what information to get from a caller making a bomb threat  | 15.2 Identify methods of access control for asset and sites.  |  |
|   | 15.3 Know what and how to safely gather information regarding a suspicious package  | 15.3 Know what information to get from a caller making a bomb threat  |  |
|   |   | 15.4 Know what and how to safely gather information regarding a suspicious package  |  |
| <b>16) SECURITY ALARM MANAGEMENT - FIELD RESPONSE</b> | 16.1 Clarify and prioritise details of the work to be undertaken and allocate field workers, identifying any authorisations required  | 16.1 Clarify and prioritise details of the work to be undertaken and allocate field workers, identifying any authorisations required  | 16.1 Plan, communicate, manage, monitor and review approved procedures for the allocation of field workers ensuring all required authorisations are in place   |
|   | 16.2 Confirm with the appropriate people that field workers have been dispatched and record and report in line with agreed procedures   | 16.2 Confirm with the appropriate people that field workers have been dispatched and record and report in line with agreed procedures   | 16.2 Know the key regulators governing security risk and manage the relationships in your company. Ensure that all policies, procedures and regulations are being met  |
|   | 16.3 Identify security risks that should be taken into account when a site is being risk assessed   | 16.3 Identify security risks that should be taken into account when a site is being risk assessed, where this information is held within the business and how is the information used | 16.3 Monitor work progress of field workers, informing relevant parties where the work they are doing impacts on others and confirming stages which have been completed. Identify reporting mechanisms for this work |
|   | 16.4 Monitor work progress of field workers, informing relevant parties where the work they are doing impacts on others and confirming stages which have been completed                         | 16.4 Identify records detailing high risk sites. Understand and follow the standard operating procedures that deal with alarm response from these sites                               |  |
|   | 16.5 Update and complete all records in line with agreed procedures   | 16.5 Monitor work progress of field workers, informing relevant parties where the work they are doing impacts on others and confirming stages which have been completed               |  |
|   |   | 16.6 Update and complete all records in line with agreed procedures   |  |
| <b>17) CCTV - POLICE RESPONSE</b>                     | 17.1 Understand the types of information the police would require to attend a verified/confirmed alarm  | 17.1 Respond to the types of information the police would require to attend a verified/confirmed alarm  | 17.1 Communicate, implement and monitor the company procedures for reacting to a verified/confirmed alarm  |
|   |   | 17.2 Respond to the steps to be taken in order to verify the need for a police response to a security alarm.  | 17.2 Monitor for due diligence when verifying the need for a police response to a security alarm   |

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| <b>18) CCTV CPNI - COUNTER TERRORISM</b>          | 18.1 Understand the CTSA and their role   | 18.1 Respond to the CTSA and their role and how the company liaises and works alongside them  | 18.1 Communicate, implement and monitor the company procedures for liaising and working with the CTSA/Internal company liaison   |
|   |   |   | 18.2 Communicate what advice notes are and how they impact on the business   |
| <b>CORE SKILLS</b>                                |   |   |  |
| <b>19) BASIC BIOLOGY AND CHEMISTRY</b>            | 19.1 Know how biology and chemistry is used in the water industry   | 19.1 Know how biology and chemistry is used in the water industry   | 19.1 Know how biology and chemistry is used in the water industry  |
|   |   | 19.2 Carry out your duties using the principles of biology and chemistry where required   | 19.2 Carry out your duties using the principles of biology and chemistry where required  |
| <b>20) BASIC OPERATIONAL MATHS</b>                | 20.1 Understand and calculate percentages when relating to your work  | 20.1 Understand and calculate percentages when relating to your work  | 20.1 Understand and calculate percentages when relating to your work   |
|   | 20.2 Understand and calculate time differentials relating to your work  | 20.2 Understand and calculate time differentials relating to your work  | 20.2 Understand and calculate time differentials relating to your work   |
|   | 20.3 Convert numbers to words in relation to your work  | 20.3 Convert numbers to words in relation to your work  | 20.3 Convert numbers to words in relation to your work   |
|   |   | 20.4 Understand and calculate fractions   | 20.4 Understand and calculate fractions  |
|   |   | 20.5 Convert time differences into seconds  | 20.5 Convert time differences into seconds   |
|   |   |   | 20.6 Understand and calculate flow rates and use them to assess sites  |
| <b>21) COMPANY SPECIFIC IT SYSTEMS</b>            | 21.1 Know the functionality of the control room systems and operate systems effectively   | 21.1 Operate systems effectively and understand interfaces between control room systems   | 21.1 Operate systems effectively and understand interfaces between control room systems  |
|   |   | 21.2 Know about and carry out mitigation of IT systems failure and demonstrate the stakeholder impact of core IT system failure   | 21.2 Know and demonstrate the ability to carry out mitigation of IT systems failure and the ability to escalate to appropriate personnel for system resolution                   |
|   |   |   | 21.3 Understand IT system limitations and possible risk and impact to business and stakeholders  |
| <b>22) RISK ASSESSMENTS AND METHOD STATEMENTS</b> | 22.1 Understand the purpose of risk assessments/method statement their health and safety implications and effect on site staff.   | 22.1 Understand the difference between risk assessment and method statement and how the two interlink.  | 22.1 Communicate, implement, monitor, review and manage the risk assessments and method statements and their relationship  |
|   | 22.2 Know how occupational, environmental, and human factors can impact the level of risk   | 22.2 Identify risk assessments/method statement and the impact to the network   | 22.2 Review method statements and risk assessments, with the knowledge and confidence to question and refuse applications where applicable                                       |
|   | 22.3 Understand the requirements and importance of risk assessment. Know how to carry out a dynamic risk assessment, your own responsibilities and those of the organisation. | 22.3 Interpret and understand how the method statement and associated risk assessments are developed  | 22.3 Understand the risk and the business to authorise medium to high risk assessments/method statement  |
|   | 22.4 Know how to identify a hazard, how to assess and control risks.  | 22.4 Understand the risk and the business and authorise lower risk assessments/method statement   | 22.4 Understand risk assessment/method statement regulatory requirements and the impact on the business and stakeholders   |
|   | 22.5 Assess the level of risk and eliminate where possible, prioritising hazards which could result in serious harm.  | 22.5 Understand the requirements, importance, purpose, legal implications of carrying out risk assessments, including own responsibilities and those of the organisation. | 22.5 Understand all statutory legislation, codes of practice etc. relating to health and safety and in particular risk assessments in the workplace.                             |
|   | 22.6 Identify and report those hazards that cannot be eliminated to the appropriate person.   | 22.6 Ensure all risk assessments are carried out and recorded within own area of responsibility.  | 22.6 Develop, implement, communicate and review risk assessment documentation and policies and procedures.   |
|   |   | 22.7 Ensure that all risks are communicated to others.  | 22.7 Manage recording and reporting procedures for risk assessments.   |
|   |   | 22.8 Understand the risk assessment procedure and recording and reporting procedure.  |  |
| <b>23) PERMIT TO WORK</b>                         | 23.1 Understand the reasons for the permit to work and the implications of not complying  | 23.1 Understand and implement the reasons for the permit to work and the implications of not complying  | 23.1 Communicate, implement, monitor and review the compliance and consent arrangements for permit to work within your organisation and implement remedial action where required |

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|  | 23.2 Carry out all work in compliance with the permit to work  | 23.2 Ensure all work is carried out in compliance with the permit to work   | 23.2 Manage and respond to issues arising due to non-compliance, including making recommendations and recording details in full in line with protocols and procedures                                   |
|  | 23.3 Identify how non-compliance issues are reported within area of responsibility to appropriate person.  | 23.3 Highlight how non-compliance is monitored and how issues are resolved and reported   |   |
| <b>24) PROBLEM SOLVING</b>                           | 24.1 Know how to ability to identify problem   | 24.1 Highlight method for problem solving resolution  | 24.1 Problem solving method communicating.  |
| <b>25) COMMUNICATION AND CUSTOMER SERVICE SKILLS</b> | 25.1 Show locations of control room communication strategies, customer service policies and procedures and service level agreements including escalation policies and communication methods  | 25.1 Understand the control room communication strategy, company customer services policies and procedures and service level agreements and ensure they are being implemented   | 25.1 Communicate, implement, manage, monitor and review customer service policies and procedures in line with the control room communications strategy, company procedures and service level agreements |
|  | 25.2 Know and use different methods of internal and external communication and understand the variances and factors can affect the urgency and importance of information.  | 25.2 Use effective internal communications at all levels of the business and understand the variances and factors can affect the urgency and importance of information.   | 25.2 Manage the shift changeover process  |
|  | 25.3 Receive and communicate information at the appropriate pace, level, security, sensitivity, clearly, concisely, accurately in a professional timely calm manner, to the appropriate staff and check for understanding              | 25.3 Receive and communicate information at the appropriate pace, level, security, sensitivity, clearly, concisely, accurately in a professional timely calm manner, to the appropriate staff and check for understanding | 25.3 Communicate effectively with internal and external stakeholders and understand the level of information which should be provided   |
|  | 25.4 Provide information and advice to internal and external customers   | 25.4 Handover and provide operational information at personnel changeover   | 25.4 Describe the purpose of Wholesale service desk and impact on the organisation  |
|  | 25.5 Handover and provide operational information at personnel changeover  | 25.5 Communicate to others the purpose of the Wholesale service desk and the impact on the organisation   |   |
|  | 25.6 Use the appropriate questioning to gather information about the callers problem. Take ownership of a customer call and in resolving the callers problem. Implement processes to resolve the callers issues accurately and quickly |   |   |
|  | 25.7 Record customer details and query in line with corporate procedures   |   |   |
|  | 25.8 Work within own levels of responsibility and understand when and how to implement silver level call escalation  |   |   |
|  | 25.9 Understand the purpose of the Wholesale service desk and the impact on the organisation   |   |   |
| <b>26) CORPORATE PROCEDURES</b>                      | 26.1 Understand the types of procedures used in the control room in relation to different 'control room functions/elements/mechanisms' in the business   | 26.1 Understand the types of procedures used in the control room in relation to different 'control room functions/elements/mechanisms' in the business  | 26.1 Understand the types of procedures used in the control room in relation to different 'control room functions/elements/mechanisms' in the business  |
|  | 26.2 Locate and follow procedures for the control room activities  | 26.2 Locate and follow different types of procedures used in the control room in relation to the different functions of a control room  | 26.2 Communicate, implement, monitor and review procedures used in the control room for the different functions   |
|  |  | 26.3 Understand and maintain confidentiality of certain procedures and documentation which are held in the control room   | 26.3 Ensure confidentiality is maintained when required   |
|  |  | 26.4 Understand the process undertaken for review of existing procedures and who is responsible   | 26.4 Implement and action the updating/changing/creating and implementation for a new procedure   |
| <b>27) DATA ANALYSIS AND DIAGNOSTIC METHODS</b>      | 27.1 Locate, understand and utilise the suite of standard operating procedures and other documents as appropriate and provide support for problem resolution   | 27.1 Identify problems and locate, understand and use the suite of standard operating procedures and other documents as appropriate to support problem resolution   | 27.1 Ensure availability of the suite of standard operating procedures and other documents as appropriate to support problem resolution   |
|  | 27.2 Identify and interpret trends and calculate a rate of change  | 27.2 Identify the likely consequences of a problem and extent or likely impact on the business of that problem.   | 27.2 Identify the likely consequences of a problem and extent or likely impact on the business of that problem.   |
|  | 27.3 Calculate a time point on a trend which would identify stakeholder impact   | 27.3 Identify low to medium risk issues and instigate problem resolutions   | 27.3 Identify low to medium risk and medium to high risk issues and instigate problem resolutions   |
|  | 27.4 Understand the relationship between metres head and pressure.   | 27.3 Analyse and interpret multiple trends and be able to identify anomalies and develop a course of action to address any issues   | 27.4 Identify the likely consequences of a problem and extent or likely impact on the business, stakeholders and regulatory requirements  |

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|                                      | 27.5 Understand different measures of volume  | 27.4 Understand the factors and calculations you would make when using a time to travel model and what would prompt you to escalate the results of your findings  | 27.5 Analyse and interpret multiple trends and be able to identify anomalies and develop a course of action to address any issues   |
|                                      |   | 27.5 Using a hydraulic gradient, identify the timeline of properties affected during an event and the opportunities that you would have to reduce this  | 27.6 Understand and apply a time to travel model in both water and wastewater and manage the recovery process. Understand and apply a time to travel model in both water and wastewater and manage the recovery process |
|                                      |   | 27.6 Using outage information calculate how many litre tankers would be needed to maintain supplies or cope with sewerage pumping station tankering.  | 27.7 Using a hydraulic gradient, identify the timeline of properties affected during an event and the opportunities that you would have to reduce this  |
|                                      |   |   | 27.8 Using outage information calculate how many litre tankers would be needed to maintain supplies or cope with sewerage pumping station tankering.  |
| <b>28) WEATHER IMPACT</b>            | 28.1 How the weather affects the business   | 28.1 Interpret weather forecasting and identify possible impacts on the business  | 28.1 Interpret weather forecasting and identify possible impacts on the business and communicate to others  |
|                                      | 28.2 Understand and follow approved escalation/communication procedures and contingency plans in the event of adverse weather conditions  | 28.2 Interpret, understand and assist in the preparation for adverse weather event plans to reduce the impact on the business   | 28.2 Understand, activate and monitor the implementation of adverse weather event plans during severe weather events  |
|                                      | 28.3 Understand seasonal demand balancing periods to keep the appropriate water pressure  | 28.3 Understand seasonal demand balancing periods to keep the appropriate water pressure  | 28.3 Understand seasonal demand balancing periods to keep the appropriate water pressure  |
|                                      |   | 28.4 Ensure the escalation/communication procedures and contingency plans are followed in the event of adverse weather conditions   | 28.4 Participate in FASTCON during weather events and cascade the information to the relevant business areas.   |
|                                      |   | 28.5 Know who and why external stakeholders (including stakeholders) are contacted regarding weather events which may have a negative impact on the business  | 28.5 Manage the escalation/communication channels and identify the key roles and responsibilities in the process  |
|                                      |   |   | 28.6 Ensure key roles and responsibilities in the process are contacted (including stakeholders) regarding weather events which may have a negative impact on the business and know why they need to be contacted       |
| <b>29) ENERGY MANAGEMENT</b>         | 29.1 Understand tariffs, the different charges/times of energy supply and impact and how tariffs can be influenced  | 29.1 Understand and follow contingency measures for emergency generator provisions. Know who the stakeholders are for emergency generator provisions and where to find your corporate business processes for emergency generator provisions | 29.1 Identify best practice in energy sources and sustainable energy. Marry process requirements with financial savings.  |
|                                      | 29.2 Work in line with the approved processes in relation to energy management  | 29.2 Plan and operate a Triad period and know how to mitigate when this goes wrong. Know how your company could/does feed energy back into the grid   | 29.2 Manage a Triad where responses do not go to plan and identify root cause. Capture and implement lessons learnt, providing feedback to ensure current strategy is improved?   |
|                                      | 29.3 Understand what is meant by an energy Triad what the impact could be   |   |   |
| <b>30) LONE WORKER</b>               | 30.1 Understand the importance of lone worker monitoring, the functionality of your corporate system and also the standard operating procedure that governs the response. Carry out all work in compliance with the lone worker policies and procedures | 30.1 Ensure all work is carried out in compliance with the lone worker policies and procedures  | 30.1 Communicate, implement, manage, monitor and review company lone worker policies and procedures   |
|                                      | 30.2 Understand the arrangements for manual work around in your company should a failure of your corporate lone worker system occur   |   | 30.2 Manage and respond to issues arising due to non-compliance, including making recommendations and recording details in full in line with protocols and  |
|                                      | 30.3 Understand the management of escalation process and how accurate records are kept  |   |   |
| <b>31) HEALTH AND SAFETY AT WORK</b> | 31.1 Be trained to corporate H&S competence   | 31.1 Comply and implement corporate H&S requirements  | 31.1 Cascade business wide H&S updates  |

**NETWORK STRUCTURE AND MANAGEMENT**

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| <b>32) WATER AND WASTE WATER NETWORK STRUCTURE</b>                | 32.1 Understand the hierarchy /structure of the water supply network and the waste water network  | 32.1 Understand the hierarchy /structure of the water supply network and waste waster network, the typical water supply network structure problems and resolution methods   | 32.1 Understand the hierarchy /structure of the water supply network and waste waster network, the typical water supply network structure problems and resolution methods  |
|   | 32.2 Know the key components of a water distribution system and their purpose   | 32.2 Know the key components of a water distribution system and their purpose   | 32.2 Understand the key components of a water distribution system and their purpose  |
|   | 32.3 Know how the component parts of the network function   | 32.3 Understand and carry out hydraulic operations on the network   | 32.3 Understand how the component parts of the network function  |
|   | 32.4 Know what constitutes an asset failure and the impact it may cause stakeholders  | 32.4 Understand how the component parts of the network function   | 32.4 Understand network structure problems and methods of resolution   |
|   |   | 32.5 Understand network structure problems and methods of resolution  | 32.5 Understand and identify strategic methods for improvement to a key component of the water distribution system   |
|   |   | 32.6 Identify and make improvement recommendations for a key component of the water distribution system   | 32.6 Understand strategic methods of network improvements, and how AMP periods relate to this.   |
|   |   |   | 32.7 Understand strategic methods for making improvements to a key component within the water distribution system  |
| <b>33) REGULATORY AND OPERATIONAL REQUIREMENTS OF ABSTRACTION</b> | 33.1 Know and follow business and regulatory requirements for monitoring and reporting intakes/abstractions and the systems and data in place in the control room to support these                                | 33.1 Ensure the business and regulatory requirements for monitoring and reporting intakes/abstractions and the systems and data in place in the control room to support these are followed                        | 33.1 Communicate, monitor, review and manage regulatory requirements for reporting intakes/abstractions  |
|   | 33.2 Know the types of abstraction in your business and the risks associated with it  | 33.2 Understand the types of abstraction in your business and the risks associated with it  | 33.2 Communicate, monitor, manage and review contingencies for total loss of abstraction due to drought or pollution   |
|   | 33.3 Know and follow precautions to protect raw water supplies  | 33.3 Ensure precautions to protect raw water supplies are understood and followed   |  |
|   | 33.4 Know what contingencies are in place in the event of a total loss of abstraction due to drought or pollution   | 33.4 Know what contingencies are in place in the event of a total loss of abstraction due to drought or pollution   |  |
| <b>34) WORKING ON THE NETWORK (PLANNED AND UNPLANNED WORKS)</b>   | 34.1 Know and follow approved procedures for planned and unplanned works and understand the consequences of not adhering to these procedures. Know where and how to access information relating to the procedures | 34.1 Know and follow approved procedures for planned and unplanned works and understand the consequences of not adhering to these procedures. Know where and how to access information relating to the procedures | 34.1 Communicate, implement, monitor and review approved procedures for planned and unplanned works  |
|   | 34.2 Know the differences between planned and unplanned works, resources required and the impact they can have on the supply/demand balance and the sewer network   | 34.2 Understand the differences between planned and unplanned works, resources required and the impact they can have on the supply/demand balance and the sewer network   | 34.2 Manage the impact of planned and unplanned works on the supply/demand balance and the sewer network   |
|   |   | 34.3 Know and follow the approved control room process for determining the degree of urgency of approved work which affect supply and demand balance or waste water treatment process                             | 34.3 Know and ensure the approved control room process for determining the degree of urgency of work which affect supply and demand balance or waste water treatment process is followed                                     |
| <b>35) PROBLEM SOLVING ON THE NETWORK</b>                         | 35.1 Be able to identify issues, communicate the problem and follow approved recording and reporting procedures   | 35.1 Be able to identify issues, understand everyone's interests, consider, evaluate and make recommendations for solutions, complete appropriate documentation   | 35.1 Be able to identify issues, understand everyone's interests, consider, evaluate and select and communicate options for solutions, ensure appropriate documentation is completed and develop and agree contingency plans |
| <b>36) PUMP EFFICIENCY AND OPTIMISATION</b>                       | 36.1 Understand the role of pumps in our water the network  | 36.1 Understand the role of pumps in our water the network  | 36.1 Understand the role of pumps in our water the network   |
|   | 36.2 Understand pump function and operations, including a) the pump build b) impact of wear and tear c) types of pumps d) affects of operation e) terminology   | 36.2 Understand pump function and operations, including a) the pump build b) impact of wear and tear c) types of pumps d) affects of operation e) terminology   | 36.2 Understand pump function and operations, including a) the pump build b) impact of wear and tear c) types of pumps d) affects of operation e) terminology  |
|   | 36.3 Maintain up to date knowledge of optimiser and software technology   | 36.3 Understand and appreciate optimisation   | 36.3 Understand and appreciate optimisation  |
|   |   |   | 36.4 Be able to derive pump regimes to optimal working conditions including a) most efficient b) Miser super user  |
| <b>WATER SUPPLY AND WASTE TREATMENT</b>                           |   |   |  |
| <b>37) PRINCIPLES OF WATER TREATMENT</b>                          | 37.1 Understand the hydrological cycle  | 37.1 Water Treatment: Identify several abstraction Sources  | 37.1 Water Treatment: Identify several abstraction Sources   |

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| <b>WATER TREATMENT</b>                   | 37.2 Identify water resources  | 37.2 Understand infiltration, the consequences, challenges and governance  | 37.2 Understand infiltration, the consequences, challenges and governance   |
|  | 37.3 Know the cycle and Impact of water company treatment  | 37.3 Understand the impact of treatment excursions on water treatment facilities. Identify such issues and make recommendations                              | 37.3 Understand the impact of treatment excursions on water treatment facilities. Identify such issues and make recommendations                                   |
|  | 37.4 Water Treatment: Identify several abstraction Sources   | 37.4 Identify and report problems that cannot be resolved  | 37.4 Identify reportable supply demand balance outage incidents and notify appropriate regulatory bodies  |
|  | 37.5 Identify and report problems that cannot be resolved  | 37.5 Know the water treatment fundamentals including, types of source water, clarification, disinfection, retention times and water quality monitoring       | 37.5 Communicate, monitor and review plans for asset location/relocation overriding basic operating principles when required, managing consent constraints        |
|  | 37.6 Identify the water treatment fundamentals including, types of source water, clarification, disinfection, retention times and water quality monitoring       | 37.6 Understand the consequence of infiltration  | 37.6 Communicate, monitor and review plans for asset removal/retention  |
|  | 37.7 Understand the consequence of infiltration  | 37.7 Know what governs these sources and the challenges using these sources  | 37.7 identify internal and external stakeholders and build and maintain positive working relationships  |
|  | 37.8 Know what governs these sources and the challenges using these sources  |  | 37.8 Support of the root cause problems analysis and ensure lessons are learnt, captured and implemented  |
|  |  |  | 37.9 Understand the water treatment fundamentals including, types of source water, clarification, disinfection, retention times and water quality monitoring      |
|  |  |  | 37.10 Understand the hydrological cycle and know the cycle and Impact of water company treatment  |
|  |  |  | 37.11 Know and communicate with internal and external stakeholders when a water quality issue in a service reservoir is identified                                |
|  |  | 37.12 Understand the consequence of infiltration   |   |
|  |  | 37.13 Know what governs these sources and the challenges using these sources   |   |
| <b>38) PRINCIPLES OF WASTE TREATMENT</b> | 38.1 Understand the waste treatment process  | 38.1 Identify the different processes in waste treatment   | 38.1 Explain the different process in waste treatment   |
|  | 38.2 Know the limitations of different waste treatment sites   | 38.2 Explain the limitations of different types of waste treatment sites   | 38.2 Explain the importance of monitoring the output of a waste treatment works and the impact of monitoring failure  |
|  | 38.3 Identify the waste water treatment fundamentals including, types of source water, clarification, disinfection, retention times and water quality monitoring | 38.3 Know the waste water treatment fundamentals including, types of source water, clarification, disinfection, retention times and water quality monitoring | 38.3 Understand the wastewater treatment fundamentals including, types of source water, clarification, disinfection, retention times and water quality monitoring |
| <b>39) WATER TRANSMISSION</b>            | 39.1 Understand the principles of having a integrated water supply network   | 39.1 Understand the principles of having a integrated water supply network   | 39.1 Understand the principles of having a integrated water supply network  |
|  | 39.2 Know different pipework materials that have been used in the supply network   | 39.2 Know different pipework materials that have been used in the supply network   | 39.2 Know different pipework materials that have been used in the supply network  |
|  | 39.3 Understand the impact of flow reversals on the external domestic and commercial stakeholders  | 39.3 Understand the impact of flow reversals on the external domestic and commercial stakeholders  | 39.3 Understand the impact of flow reversals on the external domestic and commercial stakeholders   |
|  | 39.4 Understand water quality threshold requirements within the distribution network   | 39.4 Understand water quality threshold requirements within the distribution network   | 39.4 Understand water quality threshold requirements within the distribution network  |
| <b>40) SUPPLY INTERRUPTIONS</b>          | 40.1 Identify problems during a supply outage and follow the approved method of escalation for resolution  | 40.1 Identify problems during a supply outage and follow the correct method of escalation for resolution   | 40.1 Communicate, implement, manage, monitor and review the Water Treatment work supply/demand balance in the control room  |
|  | 40.2 Know and apply appropriate temporary solutions for supply restoration   | 40.2 Know and apply appropriate temporary solutions for supply restoration   | 40.2 Ensure solutions for supply restoration are implemented  |
|  | 40.3 Understand and monitor the impact on service reservoirs water storage in the event of a supply interruption   | 40.3 Understand and monitor the impact on service reservoirs water storage in the event of a supply interruption   | 40.3 Understand and monitor the impact on service reservoirs water storage in the event of a supply interruption  |
|  | 40.4 Follow approved reporting and recording procedures  | 40.4 Ensure approved reporting and recording procedures are being followed   | 40.4 Ensure approved reporting and recording procedures are being followed  |

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|  | 40.5 Know and apply appropriate methods of Water Treatment Work supply demand balance in the event of a loss of supply                                 | 40.5 Understand and apply methods of Water Treatment Work supply demand balance in the event of a loss of supply   | 40.5 Understand and apply methods of Water Treatment Work supply demand balance in the event of a loss of supply   |
| <b>41) SUPPLY AND WASTE (PLANNED AND UNPLANNED WORKS)</b>          | 41.1 Understand the differences of reactive and planned works, the typical work activities and predicated resources required                           | 41.1 Understand the differences of reactive and planned works, the typical work activities and predicated resources required   | 41.1 Communicate, implement, monitor and review control room procedures and activities relating to planned and unplanned works, including managing customers and stakeholders                  |
|  | 41.2 Know the considerations for prioritising planned and reactive work  | 41.2 Know the considerations for prioritising planned and reactive work  | 41.2 Ensure all required authorisations are processed accurately prior to completion of works  |
|  | 41.3 Understand the control room process for determining the degree of urgency of work which affect the optimisation of the network                    | 41.3 Ensure the control room process for determining the degree of urgency of work which affect the optimisation of the network  | 41.3 Manage the control room process for determining the degree of urgency of work which affect the optimisation of the network  |
|  | 41.4 Know the work activities that require an authorisation process to be completed  | 41.4 Know the work activities that require an authorisation process to be completed  | 41.4 Know the work activities that require an authorisation process to be completed  |
|  | 41.5 Know the different types of actions required when work activities impact on external residential and commercial stakeholders                      | 41.5 Know the different types of actions required when work activities impact on external residential and commercial stakeholders  | 41.5 Monitor the different types of actions required when work activities impact on external residential and commercial stakeholders   |
|  | 41.6 Know which planned and unplanned jobs have an impact on the asset and service to stakeholder  | 41.6 Know which planned and unplanned jobs have an impact on the asset and service to stakeholder  | 41.6 Manage commercial, domestic and those stakeholders requiring additional assistance in line with approved procedures   |
|  | 41.7 Know commercial, domestic and those stakeholders requiring additional assistance in line with approved procedures                                 | 41.7 Know commercial, domestic and those stakeholders requiring additional assistance are managed in line with approved procedures   | 41.7 Monitor the agreed process for dealing with a third party supplier issue which has impacted on an asset or service to a stakeholder is followed   |
|  | 41.8 Understand and follow the agreed process for dealing with a third party supplier issue which has impacted on an asset or service to a stakeholder | 41.8 Ensure the agreed process for dealing with a third party supplier issue which has impacted on an asset or service to a stakeholder is followed  | 41.8 Be able to monitor/record and report procedures are followed when planning field workers activities   |
|  | 41.9 Follow approved monitoring, recording and reporting procedures when planning field workers activities   | 41.9 Ensure approved monitoring, recording and reporting procedures are followed when planning field workers activities  |  |
| <b>42) THE INTERACTIONS BETWEEN WATER SUPPLY FLOW AND PRESSURE</b> | 42.1 Know the causes of low flow and low pressure  | 42.1 Proactively reduce the causes of low flow and low pressure, and demonstrated methods for network flow management to prevent stakeholders loss of supply                                       | 42.1 Implement, authorise and oversee to prevent network flow management to prevent stakeholders loss of supply  |
|  | 42.2 Identify if there is a relationship between seasonal demands and impact on water supply pressure  | 42.2 Identify if there is a relationship between seasonal demands and impact on water supply pressure  | 42.2 Identify if there is a relationship between seasonal demands and impact on water supply pressure  |
| <b>43) WATER QUALITY</b>   | 43.1 Identify causes which can affect the water quality of a service reservoir   | 43.1 Identify causes which can affect the water quality and their corrective actions   | 43.1 Identify causes which can affect the water quality and their corrective actions   |
|  | 43.2 Know the methods of monitoring of water quality at a water treatment works and in the distribution network and the key risks for water quality    | 43.2 Understand the methods of monitoring of water quality at a water treatment works and in the distribution network. Be able to identify risks to the water quality and take mitigating measures | 43.2 Understand the methods of monitoring of water quality at a water treatment works and in the distribution network, risks to the water quality and be able to implement mitigating measures |
|  | 43.3 Identify the appropriate methods for managing Water Quality on a water treatment works  | 43.3 Identify and understand the methods for managing Water Quality on a water treatment works   | 43.3 Identify and understand the methods for managing Water Quality on a water treatment works   |
|  | 43.4 Know and work to the recognised disinfection policy at a water treatment works  | 43.4 Understand and ensure work is carried out to the recognised disinfection policy at a water treatment works and explain how the disinfection process is monitored and maintained               | 43.4 Understand and ensure work is carried out to the recognised disinfection policy at a water treatment works and explain how the disinfection process is monitored and maintained           |
|  | 43.5 Know the issues that can affect water quality and the recognised methods of resolution  | 43.5 Understand the issues that can affect water quality and the company policies and procedures that must be followed.  | 43.5 Understand the issues that can affect water quality, the possible implications and ensure the company policies and procedures are followed  |
|  | 43.6 Carry out all work in line with approved regulations and company policies and procedures  | 43.6 Know the methods of improving water quality and how to promote this suggestion for strategic consideration  | 43.6 Understand methods of improving water quality how to promote suggestions for strategic consideration  |
|  | 43.7 Identify different causes of discolorations and the information required from the external stakeholders during discoloration water investigations | 43.7 Ensure all work is carried out in line with approved regulations and company policies and procedures  | 43.7 Understand and implement company policies and procedures for ensuring satisfactory quality water is delivered to stakeholders   |

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|  | 43.8 Be able to identify if the problem is internal to the stakeholders property or water utility  | 43.8 Identify different causes of discolorations and the information required from the external stakeholders during discoloration water investigations         | 43.8 Understand the escalation process for a significant water quality incident, the external agencies who would be involved in an investigation and the roles they would play    |
|  | 43.9 Follow company recording and reporting procedures   | 43.9 Be able to identify if the problem is internal to the stakeholders property or water utility  | 43.9 Ensure all work is carried out in line with approved regulations and company policies and procedures   |
|  | 43.10 Know and implement the appropriate methods for resolving discoloured water issues taking into account the needs of the water utility and the stakeholder | 43.10 Ensure company recording and reporting procedures are followed   | 43.10 Identify different causes of discolourations and the information required from the external stakeholders during discolouration water investigations                         |
|  |  | 43.11 Know and implement the appropriate methods for resolving discoloured water issues taking into account the needs of the water utility and the stakeholder | 43.11 Be able to identify if the problem is internal to the stakeholders property or water utility  |
|  |  |  | 43.12 Ensure company recording and reporting procedures are followed  |
|  |  |  | 43.13 Understand and ensure the appropriate methods for resolving discoloured water issues are implemented taking into account the needs of the water utility and the stakeholder |