

MEMOUNIV02-2022-SA2.RPT

CONFIDENTIAL

MANAGEMENT SYSTEM (MS) AUDIT REPORT For Memorial University Technical Services

DATE OF AUDIT: September 26 & 27, 2022

DATE OF REPORT: January 29, 2023

- AUDIT CRITERIA: ISO 9001:2015 APPLICABLE DOCUMENTS: MS Documents (Manual, Procedure, Work Instruction, Forms) CWB Registration Audit Documents
- AUDIT TYPE: Surveillance Audit Two (SA2)

SCOPE OF THE MANAGEMENT SYSTEM: The Department of Technical Services, repairs and maintains laboratory equipment and designs and fabricates custom research apparatus. The department also installs and maintains the core infrastructure and produces cryogenic liquids. All sections of the ISO-9001:2015 standard apply and Technical Services operates under the policy structure of Memorial University.

SITES ("*" - visited at this audit)

| | Address | Scope | # of Employee s |
|---|--|--|-----------------------|
| * | Technical Services Memorial University Chemistry Building, Room C-1026 Finance & Administration (Director & Quality Manager(Mechanical Department Electronic Department | The Department of Technical Services, repairs and maintains laboratory equipment and designs and fabricates custom research apparatus. The department also installs and maintains the core infrastructure and produces cryogenic liquids. All sections of the ISO-9001:2015 standard apply and Technical Services operates under the policy structure of Memorial University. | 85 |

| AUDIT TEAM: | Ray Kavanagh, Lead Auditor |
|-------------------------------|---|
| MANAGEMENT REPRESENTATIVE: | Richard Meaney, Director Jim Titford, Director of Finance & Administration / Quality Assurance Manager Denis Cramm, Mechanical Division Manager Jennifer Ann Murray, Electronic Division Manager |
| LANGUAGE OF AUDIT: | English |
| LANGUAGE OF DOCUMENTATION: | English |
| CONFIDENTIALITY: | CWB Registration ensures that client information will be maintained in confidence. |
| SIGNATURE OF LEAD AUDITOR: | Ray Kavanagh |

3225E/2019-04

CONCLUSIONS

No non-conformities were found during the audit. Continued registration to ISO 9001:2015 is recommended.

| a) | Conformity to the AUDIT CRITERIA. | YES |
|----|--|-----|
| b) | The ability to meet applicable statutory, regulatory and contractual requirements. | YES |
| c) | Effectiveness of the MS to ensure that specified objectives are met. | YES |
| d) | The certification scope is appropriate to the context of the organization. | YES |
| e) | The audit objectives were achieved. | YES |

With regards to the AUDIT OBJECTIVES, the MS has demonstrated:

Audits are based on a sampling process. Evidence collected during the audit is a representative sample of the overall operations of an organization; the results and conclusions include an element of uncertainty.

AUDITOR COMMENTS

This report covers the Surveillance Audit Two One (SA2) performed in person at the Memorial University Technical Services Division including the Mechanical Department and the Electronics Department. The (SA2) is focused on a selection of management processes, and a selection of operation processes. The Director of Technical Services, the Quality Manager, the Manager of the Mechanical Department, and the manager of the Electronics Department provided excellent support for and participation in this Audit. No non-conformities were found. Opportunities for improvement are included in this Report. The audit objectives detailed in the SA2 Audit Plan, and included above, were achieved.

The Scope of Memorial University Technical Services is: The Department of Technical Services, repairs and maintains laboratory equipment and designs and fabricates custom research apparatus. The department also installs and maintains the core infrastructure and produces cryogenic liquids. All sections of the ISO-9001:2015 standard apply and Technical Services operates under the policy structure of Memorial University. The Scope adequately represents the mandate of the Technical Services Division

The Surveillance Audit Two (SA2) included a selection of processes from ISO 9001:2015 and MUN Technical Services' Management System. The processes included: Clause 5, Leadership and Commitment; Clause 6 Planning for the Management System; Clause 7 Support Resources except for 7.5 Documented Information; Clauses 8.5, 8.6, 8.7 from Operation; Clause 9, Performance Evaluation; and Improvement, Clause 10.1. The Management System is documented and implemented under the day-to-day monitoring and management by an experienced Quality Manager who has acquired extensive experience in the Technical Services Division and currently also holds the position of Manager of Administration.

The Director of the Technical Services Division is a Mechanical Engineer, the Manager of the Mechanical Department is a Mechanical Engineer, and the Manager of the Electronics Department is an Electrical Engineer. Together with the Quality Manager, collectively they have extensive knowledge and experience in financial and technical areas and leadership and management of people. The priorities of the Director and the top management team are customer satisfaction and continual improvement of the management system. The priorities guide the employees of Technical Services and were evident during the audit.

The audit findings are summarized in a series of bullet-point statements

- The management system is mature and stable and managed by an experienced Quality Manager
- The scope of the management system was reviewed with the Director and is satisfactory
- The Context of the Company is documented (not formally included in SA2)
- The Quality Policy is signed and posted and communicated at the onboarding of new employees and followed up in meetings with employees

- MUN Technical Services has established objectives and a plan to achieve each objective
- The management system is effective in identifying risks and opportunities under the authority of the University Risk Manager and within Technical Services by the Director and top management team
- Communication within Technical Services is open and effective
- The Department Managers ensure that all project files are maintained digitally are all records are backed up off-site
- System weaknesses are identified by the organization and addressed as they are identified.
- Internal audit findings are being addressed by the organization.
- The management review meeting evaluated the effectiveness of the management system
- MUN Technical Services has demonstrated continual improvement in system performance
- The Department Managers provided evidence on operation planning and determination of customer requirements – quoting, proposal development, project design, and project execution
- The Department Managers manage the design of solutions to meet client requirements
- The Quality Manager and the Purchasing Manager perform critical supplier selection and supplier performance assessment
- The Quality Manager and respective Department Managers provided evidence of the use of the established procedure used to record and process nonconformities
- \When nonconformities or complaints are identified, MUN Technical Services investigates its own systems and procedures and takes appropriate corrective action
- The Quality Manager provided evidence on the recording and processing of opportunities for improvement
- Opportunities for improvement observed in this audit are included in this report
- There was no deviation from the Audit Plan.
- The audit progressed efficiently without any delays thanks to the Quality Manager. The Director, the Department Managers, and other contributors to the audit.
- There are no unresolved issues from the audit

This was a successful audit of the Memorial University Technical Services Division's quality management system. I extend thanks to all participants with a special thanks to the Director, Department Managers, and Quality Manager for their leadership and commitment, and participation in this audit which contributed significantly to the efficient progress of the audit in accordance with the SA2 Audit Plan. It was a pleasure to be the lead auditor for this audit.

As noted in previous audit reports, individually and collectively the Director and his top management team provide exemplary leadership and commitment. The Director and his team are long-term employees of Memorial University Technical Services who understand the diverse and unique requirements of their clients of university professors and students and they face every new challenge with enthusiasm and confidence in design outputs and the employees who execute each project to ensure that deliverables met client requirements.

I wish you continued success.

| Tentative date for the next audit: | Next audit type: | Date of expiry on the current certificate: | | | | | |
|---|------------------|---|--|--|--|--|--|
| June 2024 | RRA | Cert. # 7116 | | | | | |
| | | Expiry 07/10/2023 | | | | | |
| Re-Registration audits should be booked eight to six weeks prior to the date of expiration. | | | | | | | |

Planned requirements / processes to be audited according to ISO 9001:2015

| Requirements | 4 | 5 | 6 | 7.1 | 7.2 | 7.3 | 7.4 | 7.5 | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 8.6 | 8.7 | 9.1 | 9.2 | 9.3 | 10.1 | 10.2 | 10.3 |
|------------------------------|---|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| ST 2 / Re-Reg. | х | х | х | х | х | х | х | х | Х | х | х | х | х | х | х | х | х | х | х | х | х |
| 1 st Surveillance | х | х | х | | | | | х | Х | х | х | х | | | | х | х | х | х | х | |
| 2 nd Surveillance | | х | х | х | х | х | х | | | | | | х | х | х | | х | х | | х | х |

NONCONFORMITIES

| # of Minor: | # of Major: | Target response date: | Follow-up audit required: | | |
|-------------|-------------|-----------------------|---------------------------|--|--|
| 0 | 0 | NA | NO | | |
| | | | | | |

Notes:

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Please ensure that you include responses for Disposition/Correction(s), Cause(s) and Corrective Action(s). For initial registration, if CWB Registration is unable to verify the implementation of corrections and corrective actions of any major nonconformity within six months after the last day of Stage 2, a new Stage 2 Audit is required. ٠

OPPORTUNITIES FOR IMPROVEMENT

| Clause # | Ols are opportunities for improvement to the management system and an opportunity for CWB Registration to contribute to our productive partnership. Ol's are generic in nature and are not intended to be specific/prescriptive advice. |
|----------|---|
| 6.2. | Technical Services objectives should be organized into Technical Services Corporate objectives aimed to fulfill the quality policy, and Technical Services Functional objectives aimed to contribute to the achievement of the Corporate objectives |
| 7.3 | Priority should be given to ensuring that every employee understands her/his role and responsibility to contribute to the fulfillment of the quality policy and the success of the quality management system |

SURVEILLANCE TWO AUDIT (SA2) REPORT FOR Memorial University Technical Services

ISO 9001:2015 AUDIT SUMMARY

| | ELEMENTS | NCR# | EVALUATION |
|---------|---|------|------------|
| | | | |
| | ISO 9001:2015 | | |
| 1 | SCOPE | | S |
| 4 | CONTEXT OF THE ORGANIZATION | | NA |
| 4.1 | Understanding the organization and its context | | NA |
| 4.2 | Understanding the needs and expectations of interested parties | | NA |
| 4.3 | Determining the scope of the quality management system | | NA |
| 4.4 | Quality management system and its processes | | NA |
| 4.4.1 | The organization shall establish, implement, maintain and continually improve a quality management system, including the processes needed and their interactions, in accordance with the requirements of | | NA |
| 4.4.2 | a) maintain documented information to support the operation of its processes; | | NA |
| 5 | LEADERSHIP | | S |
| 5.1 | Leadership and commitment | | S |
| 5.1.1 | General | | S |
| 5.1.2 | Customer focus | | S |
| 5.2 | Quality policy | | S |
| 5.2.1 | Establishing the quality policy | | S |
| 5.2.2 | Communicating the quality policy | | S |
| 5.3 | Organizational roles, responsibilities, and authorities | | S |
| 6 | PLANNING FOR THE QUALITY MANAGEMENT SYSTEM | | S |
| 6.1 | Actions to address risks and opportunities | | S |
| 6.1.1 | planning for the quality management system | | S |
| 6.1.2 | The organization shall plan and control changes in the management system documentation | | S |
| 6.2 | Quality objectives and planning to achieve them | | S/OI |
| 6.2.1 | The organization shall establish quality objectives at relevant functions, levels and processes. | | S |
| 6.2.2 | When planning how to achieve its quality objectives, the organization shall determine: | | S |
| 6.3 | Planning of changes | | S |
| 7 | SUPPORT | | S |
| 7.1 | Resources | | S |
| 7.1.1 | General | | S |
| 7.1.2 | People | | S |
| 7.1.3 | Infrastructure | | S |
| 7.1.4 | Environment for the operation of processes | | S |
| 7.1.5 | Monitoring and measuring resources | | S |
| 7.1.5.1 | General | | S |

| 7.1.5.2 | Measurement Traceability | S |
|---------|---|------|
| 7.1.6 | Organizational Knowledge | S |
| 7.2 | Competence | S |
| 7.3 | Awareness | S/OI |
| 7.4 | Communication | S |
| 7.5 | Documented Information | NA |
| 7.5.1 | General | NA |
| 7.5.2 | Creating and Updating | NA |
| 7.5.3 | Control of Documented Information | NA |
| 7.5.3.1 | Document Controlled information required by the quality management system and by this International Standard shall be controlled to ensure: | NA |
| 7.5.3.2 | Activities for control of information | NA |
| 8 | OPERATION | NA |
| 8.1 | Operational Planning and Control | NA |
| 8.2 | Requirements for Products and Services | NA |
| 8.2.1 | Customer Communication | NA |
| 8.2.2 | Determining the Requirements for Products and Services | NA |
| 8.2.3 | Review of the Requirements for Products and Services | NA |
| 8.2.3.1 | Conduct review | NA |
| 8.2.3.2 | The organization shall retain documented information, as applicable: | NA |
| 8.2.4 | Changes to Requirements for Products and Services | NA |
| 8.3 | Design and Development of Products and Services | NA |
| 8.3.1 | General | NA |
| 8.3.2 | Design and Development Planning | NA |
| 8.3.3 | Design and Development Inputs | NA |
| 8.3.4 | Design and Development Controls | NA |
| 8.3.5 | Design and Development Outputs | NA |
| 8.3.6 | Design and Development Changes | NA |
| 8.4 | Control of externally provided processes, products, and services | NA |
| 8.4.1 | General | NA |
| 8.4.2 | Type and extent of control | NA |
| 8.4.3 | Information for External Providers | NA |
| 8.5 | Production and Service Provision | S |
| 8.5.1 | Control of Production and Service Provision | S |
| 8.5.2 | Identification and Traceability | S |
| 8.5.3 | Property belonging to customers or external providers | S |
| 8.5.4 | Preservation | S |
| 8.5.5 | Post-delivery activities | S |
| 8.5.6 | Control of Changes | S |
| 8.6 | Release of Products and Services | S |
| 8.7 | Control of Nonconforming Outputs | S |
| 8.7.1 | Delivery of non-conforming outputs | S |
| 8.7.2 | Retention of documented information | S |
| 9 | PERFORMANCE EVALUATION | NA |
| 9.1 | Monitoring, measurement, analysis and evaluation | NA |

| 9.1.1 | General | NA |
|--------|---|----|
| 9.1.2 | Customer Satisfaction | NA |
| 9.1.3 | Analysis and Evaluation | NA |
| 9.2 | Internal Audit | S |
| 9.2.1 | The organization shall conduct internal audits at planned intervals | S |
| 9.2.2 | The organization shall hold an annual management review meeting | S |
| 9.3 | Management Review | S |
| 9.3.1 | General | S |
| 9.3.2 | Management Review Inputs | S |
| 9.3.3 | Management Review Outputs | S |
| 10 | IMPROVEMENT | S |
| 10.1 | General | S |
| 10.2 | Nonconformity and Corrective Action | S |
| 10.2.1 | When a non-conformity occurs | S |
| 10.2.2 | Retain documented information | S |
| 10.3 | Continual Improvement | S |
| EVALUA | s noted by an asterisk are performed at all stage two, re-registration TION CODE: actory; OI=Opportunity for Improvement; MI=Minor Nonconformity; MA=I e | |