

ACCREDITATION PROGRAM FOR OPERATING AUTHORITIES ON-SITE/SYSTEMS VERIFICATION AUDIT REPORT – 2018

FILE #: 1634181-01

Ontario Clean Water Agency Kawartha Hub

Operating Authority for:

City of Kawartha Lakes

Re Accreditation Audit

Prepared by: Paul Cartlidge

Date: Apr 23, 2018



Audit Objectives

The objective of the audit was to determine whether the drinking water Quality Management System (QMS) of the subject system conforms to the requirements of the Ontario Ministry of the Environment's (MOE) Drinking Water Quality Management Standard (DWQMS) at all of the locations noted in the Applicant Profile Form (AP 602). It was also intended to gather the information necessary for SAI Global to assess whether accreditation can be offered to the operating authority.

Audit Scope

The facilities and processes associated with the operating authority's QMS were objectively evaluated to obtain audit evidence and to determine a) whether the quality management activities and related results conform with DWQMS requirements, and b) if they have been effectively implemented.

Audit Criteria:

- The Drinking Water Quality Management Standard
- Current QMS manuals, procedures and records implemented by the Operating Authority
- SAI Global Accreditation Program Handbook

Auditor:

Paul Cartlidge

Audit Report Distribution List:

The Audit Report is distributed as follows:

- Operating Authority
- Owner
- Ministry of the Environment Director

Confidentiality and Documentation Requirements

The SAI Global stores their records and reports to ensure their preservation and confidentiality. Unless required by law, the SAI Global will not disclose audit records to a third party without prior written consent of the applicant. The only exception will be that the SAI Global will provide audit and corrective action reports to the Ontario Ministry of the Environment. For more information, please refer to the SAI Global Accreditation Program Handbook.



PART A. MANAGEMENT SUMMARY

This was an on site verification audit of the Ontario Clean Water Agency for the City of Kawartha Lakes for conformance with the requirements of DWQMS: Oct. 2006.

The overall effectiveness of the Ontario Clean Water Agency for the City of Kawartha Lakes Quality Management System is considered:

☑ Effective
☐ Not effective

No non-conformities were identified during this assessment, as noted in Part D of this report.

The audit objectives have been accomplished within the audit scope in accordance with the audit plan and the time allocation.

Notes

Copies of this report distributed outside the organization must include all pages.

As part of the SAI Global Terms, it is necessary for you to notify the SAI Global of any changes to your Quality Management System that you believe are significant enough to risk non-conformity with DWQMS: Oct. 2006. For more information, please refer to the SAI Global Accreditation Program Handbook.



PART B. GENERAL INFORMATION

Operating Authority: Legal name and address	Ontario Clean Water Agency – Kawartha Hub				
Address	123 East St South Bobcaygeon, Ontario, K0M 1A0				
Applicant representative	Geoff Redden				
Title	Senior Operations Manager				
Telephone	705-738-9734	Fax			
E-mail	gredden@ocwa.com				
Owner:					
Legal name and address ☐ same as above, or:	City of Kawartha Lakes 12 Peel St., Box 9000 Lindsay Ontario, K9V 5R8				
Applicant representative	Geoff Redden				
Title	Senior Operations Manager				
Telephone	705-738-9734	Fax			
E-mail	gredden@ocwa.com				

Accreditation Option: Full Scope - Entire DWQMS

Population Serviced: 11665

This audit report covers the subject systems listed:

Bobcaygeon Drinking Water System Canadiana Shores Drinking Water System Fenelon Falls Drinking Water System Janetville Drinking Water System Kings Bay Drinking Water System Kinmount Drinking Water System Manilla Drinking Water System Manorview Drinking Water System Mariposa Estates Drinking Water System Norland Drinking Water System Omemee Drinking Water System Pinewood Drinking Water System Pleasant Point Drinking Water System Southview Drinking Water System Victoria Place Drinking Water System **Woodfield Drinking Water System Woodville Drinking Water System** Sonya Village Subdivision Drinking Water System Western Trent/Palmina Drinking Water System **Birchpoint Estates Drinking Water System**



PART C. SUMMARY OF FINDINGS

SUMMARY	OF FINDIN	165			1			
OPERATING AUTHORITY Optorio Cloop Water Agency for the City of Kawartha Lakes						1634181-01		
Ontario Clean Water Agency for the City of Kawartha Lakes								
ACCREDITATION CYCLE: Re Accreditation Audit								
AUDIT TYPE	AUDIT TYPE AUDITOR					Apr 22 2019		
☐ Systems ☑ On-Site Verification Paul Cartlid			ae			Apr 23, 2018 to		
					Apr	26, 201	8	
SUBJECT SYSTEM(S) AUDITED								
① OCWA Kawartha Hub Office ② Sampling – k	(inmount E	rinking	ı Wateı	r Svster	n			
③ Sampling – Western Trent/Palmina Drinking \						ay Drin	king	
Water System S Sampling – Southview Drinking			•	J	J	,	J	
	SYSTEM -	①	2	3	4	(5)	6	
1. Quality Management System		С						
2. Quality Management System Policy		С	С	С	С	С		
3. Commitment and Endorsement		С						
4. Quality Management System Representative		С						
5. Document and Records Control		С						
6. Drinking-Water System		С	С	С	С	С		
7. Risk Assessment		С						
8. Risk Assessment Outcomes		С						
9. Organizational Structure, Roles, Responsibilities and								
Authorities 10 Compatencies								
10. Competencies 11. Personnel Coverage								
12. Communications			С	С	С	С		
13. Essential Supplies and Services					Ŭ			
14. Review and Provision of Infrastructure								
15. Infrastructure Maintenance, Rehabilitation &			_	_	_	_		
Renewal			С	С	С	С		
16. Sampling, Testing and Monitoring			С	С	С	С		
17. Measurement & Recording Equipment Calibration			С	С	С	С		
and Maintenance								
18. Emergency Management			С	С	С	С		
19. Internal Audits								
20. Management Review		С						
21. Continual Improvement		C						
Major non-conformity. The auditor has determined one of the following: (a) a required element of the DWQMS has not been incorporated into a QMS; (b) a systemic problem with a QMS is evidenced by two or more minor non-conformities; or (c) a minor non-conformity identified in a corrective action request has not been remedied.								
	Minor non-conformity. In the opinion of the auditor, part of a required element of the DWQMS has not been							
C Conforms to requirement.								
Not applicable to this audit.								
 * Additional comment added by auditor in the body of 	the report.							



PART D. FINDINGS/COMMENTS

DWQMS Reference: 1 Quality Management System

Client Reference: Multi Facility Operational Plan for the City of Kawartha Lakes Drinking

Water Systems, Revision 9, 31-Oct-2016

Results: Conforms

Details: Documented Quality Management System described in the Multi Facility

Operational Plan for the City of Kawartha Lakes Drinking Water

Systems, Revision 9, 31-Oct-2016

DWQMS Reference: 2 Quality Management System Policy

Client Reference: Multi Facility Operational Plan for the City of Kawartha Lakes Drinking

Water Systems, Revision 9, 31-Oct-2016, section 2 – Quality &

Environmental Management System Policy

Results: Conforms

Details: Policy Statement describes the Quality Management System – reviewed

and accepted. Policy statement was revised and approved by OCWA Board of Directors on April 6, 2016. Reviewed and accepted. Through interviews of staff and observations on-site pertaining to the other requirements of the DWQMS, the policy is effectively implemented.

DWQMS Reference: Client Reference:

3 Commitment and Endorsement

Multi Facility Operational Plan for the City of Kawartha Lakes Drinking Water Systems, Revision 9, 31-Oct-2016, section 3 - Commitment & Endorsement of OCWA'S QEMS & Operational Plan and Appendix N -

signed Commitment and Endorsement Sheet.

Results: Conforms

Details: Appendix N contains written endorsement of Operational Plan signed by

OCWA representatives on January 8, 2018 and City of Kawartha Lakes Manager of Environmental Services and Director of Public Works on January 9-10, 2018. Reviewed and accepted. Through interviews of staff and observations on-site pertaining to the other requirements of the DWQMS, OCWA Top Management has demonstrated evidence of the

commitment to the Quality Management System.

DWQMS Reference: Client Reference:

4 Quality Management System Representative

Multi Facility Operational Plan for the City of Kawartha Lakes Drinking

Water Systems, Revision 9, 31-Oct-2016, section 4 - Quality &

Environmental Management System Representative

Results: Conforms

Details: The role of QEMS Representative is shared between the Senior

Operations Manager, Operations Manager and Process and Compliance Technician (PCT). Reviewed and accepted. Through interviews of staff and observations on-site, the PCT maintains procedures needed for the QMS, management reports, training of personnel and promotion of the QMS in the OCWA Kawartha Hub (cluster meetings contain QMS)

topics).



DWQMS Reference:

Client Reference:

Results: Details:

5 Document and Record Control

QEMS Procedure QP-01 Document and Records Control Procedure.

Conforms

QEMS Procedure QP-01 Document and Records Control Procedure revision 12, 31-Oct-2017 reviewed and contains instructions for

documents and records control. Reviewed and accepted.

Records are appropriately maintained at the WTP facilities and the OCWA Kawartha Hub office in Bobcaygeon, as well as electronically on OCWA servers. Revisions to procedures are managed by the PCT

including updates to electronic and hard copies.

Reviewed the update to procedure QP-03 Personnel Coverage rev. 10, and verified on the access to SOP Online Analyser Calibration/Verification

and Adjustment, rev. 0.

Kawartha Hub Servers are backed up by the OCWA IT staff daily, weekly

and monthly (viewed backup for week of April 23, 2018).

DWQMS Reference: Client Reference:

6 Drinking Water System

Multi Facility Operational Plan for the City of Kawartha Lakes Drinking Water Systems, Revision 9, 31-Oct-2016, section 6 and Appendix B-1 to B-20 for Drinking Water System Descriptions of the facilities.

Results: Conforms

Details: Facilities visited during the audit matched the Drinking Water System

Descriptions including:

• B-5 Kings Bay WTF, revision 5, 31-Oct-2016

B-6 Kinmount WTF, revision 6, 13-Mar-2018
B-14 Southview WTF, revision 6, 31-Oct-2016

 B-19 Western Trent/Palmina Drinking Water System, revision 4, 31-Oct-2016

DWQMS Reference Client Reference: 7 Risk Assessment

QEMS Procedure QP-02 Risk Assessment and Risk Assessment

Outcomes

Results: Conforms

Details: QEMS Procedure QP-02 Risk Assessment and Risk Assessment

Outcomes, revision 8, 22-Mar-2018 reviewed and accepted.

DWQMS Reference:

8 Risk Assessment Outcomes

Client Reference: Risk Assessment Outcomes for each Drinking Water System (see

below)

Results:

Conforms

Details:

Summary of Risk Assessment Outcomes reviewed and accepted for systems visited during the audit including:

- C-5 Kings Bay WTF, revision 8, 22-Mar-2018
- C-6 Kinmount WTF, revision 9, 20-Apr-2018
- C-14 Southview WTF, revision 7, 22-Mar-2018
- C-19 Western Trent/Palmina Drinking Water System, revision 4, 22-Mar-2018

Full Risk Assessments performed for all systems in 2018. Reviewed and accepted.

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DWQMS Reference: 9 Organizational Structure, Roles, Responsibility and

Authorities

Client Reference: Multi Facility Operational Plan for the City of Kawartha Lakes Drinking

Water Systems, Revision 9, 31-Oct-2016, section 9 - Organizational Structure, Roles, Responsibilities and Authorities and Appendix D - QEMS Organizational Structure for the City of Kawartha Lakes Water

Treatment Facilities, Revision 3, 30-Sep-15

Results: Conforms

Details: Organizational Structure, Roles, Responsibility and Authorities reviewed

are adequately described in the Operational Plan. Reviewed and accepted. Organizational structure verified as accurate during the audit.

DWQMS Reference: 10 Competencies Client Reference: Multi Facility Operationa

Multi Facility Operational Plan for the City of Kawartha Lakes Drinking

Water Systems, Revision 9, 31-Oct-2016, section 10 - Competencies

Conforms

Classifications for each facility are designated by the Ontario Water& Wastewater Certification Office/Ministry of Environment. Operators for each facility must meet the operator classification based on the facility classification (e.g. supply and distribution class 1). Certifications for operators reviewed for the operators observed at the following facilities during the audit:

- Kinmount Main Operator 95820 (Water Treatment Class 1)
- Western Trent/Palmina Team Lead Operator 66778 (Water Treatment Class 3)
- OIC Operator 2081 (Water Treatment Class 3)
- King's Bay Operator 64215 (Water Treatment Class 3)
- Southview Operator 88063 (Water Treatment Class 3)

All training activities are recorded in the OCWA training database.

Training records reviewed for above operators including on-site training, health and safety training, external training.

Staff receive annual Performance Plan and Reviews to verify

performance against job expectations. Reviewed for the Kinmount and

King's Bay operators interviewed during the audit.

DWQMS Reference: 11

Client Reference:

Results:

Results:

Details:

Details:

11 Personnel Coverage

QEMS Procedure QP-03 Personnel Coverage, Revision 10, 19-Apr-18

Conforms

Personnel Coverage is ensured through a scheduling system as described in QEMS Procedure QP-03 Personnel Coverage. Reviewed and accepted.

On-call schedule viewed for 2018 based on 3 clusters (North, South, Central), on-call operator assigned for on-call duties on a weekly basis. All operators meet the minimum qualification requirements based on the classifications of the facilities. ORO has highest designation, all other operators have minimum class 1 designation. Each cluster has a pool of the facilities with the proper qualifications.

staff available for regular duties, with the proper qualifications.



DWQMS Reference:

Client Reference:

12 Communications

QEMS Procedure QP-04 Communications, Revision 4, 06-Mar-18

Results: Details: **Conforms**

Procedure QP-04 reviewed and accepted.

OCWA Kawartha Hub provides monthly, quarterly and annual reports to the City of Kawartha Lakes regarding the performance of the systems – viewed monthly report for February 2018, and annual report for FY 2017-2018. Community Complaints logged into the OPEX System. Reviewed the following complaints received in 2017-2018:

- Mariposa Woods of Manilla 14/11/2017 pump overflow caused flooding – well pump left on
- Janetville 25/07/2017 odour complaint Cl2 residuals checked
 no changes required
- Birch Point 16/05/2017 water pressure dropped in the midst of performing maintenance flushing

All complaints are adequately investigated.

Information on the QMS is available for the public on the OCWA website. Information on the QMS is communicated to suppliers via a letter outlining the QMS Aspects (viewed for Trent Security in 2016).

DWQMS Reference: Client Reference:

13 Essential Supplies and Services

QEMS Procedure QP-05 Essential Supplies and Services, revision 6,

31-Oct-16

Results: Details:

Conforms

QEMS Procedure QP-05 Essential Supplies and Services describes the requirements for contractors, water testing services, calibration services, chemical supplies and process components and the controls placed on these companies. Essential Supplies and Services List, Apr 24, 2017 contains a list of all companies. Reviewed and accepted.

Reviewed qualifications for the following essential supplies and services:

- SGS Lakefield (testing services) viewed CALA Accreditation certificate (valid to May 31, 2019)
- Franklin Empire (calibration services) viewed ISO 9001:2008 certificate (valid to 14 Sept 2018)
- Brenntag (Chemical Supply Sodium Hypochlorite packing slip shows NSF grade)
- Chemtrade (Chemical Supply Aluminum Sulfate packing slip shows NSF grade).
- Manufacturer for Filter media R.W. Sidley Inc (listed on NSF certification list for filter media).
- Certified Well Technician G. Hart and Sons Well Drilling (Ontario Well Technician licenses T-3088, T-3428)

DWQMS Reference: Client Reference:

14 Review and Provision of Infrastructure

QEMS Procedure QP-06 Review and Provision of Infrastructure, revision

3, 26-Sep-14

Results:

Conforms

Details:

Procedure QP-06 reviewed and accepted. Reviewed List of Capital Items for FY 2018. Capital items are entered as work orders into the Maximo Asset Management System and tracked for completion (some items may be deferred at the request of the City). Reviewed approval of Fenelon Falls Chemical Feed Pumps (received PO 902943 from City of Kausette Lake to approve the Lake to approve the complete).

Kawartha Lakes to complete).

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DWQMS Reference: Client Reference:

Results: Details: 15 Infrastructure Maintenance, Rehabilitation and Renewal Multi Facility Operational Plan for the City of Kawartha Lakes Drinking Water Systems, Revision 9, 31-Oct-2016, section 15 – Infrastructure Maintenance, Rehabilitation and Renewal

Conforms

Operational Plan includes a process for maintenance of Infrastructure and includes a requirement to review with the System Owner. Reviewed and accepted. Monthly, quarterly and annual reports provide a summary of completion of maintenance activities. Dashboard is available in the Maximo system showing all due work orders in a given month assigned to a work crew of multiple persons.

Sampled the following equipment for maintenance activities and viewed associated records:

- Kinmount Emergency Generator 0000208462 monthly checks and annual service 2017-2018
- Kinmount Intake pipe inspection performed November 17, 2016
- Kinmount Train 1/2 Filter media change performed December 16. 2015
- Kinmount alarm dialer 0000208449 monthly checks April 5, 2018
- Western Trent/Palmina Filter System 0000277630 annual filter change performed as required
- Western Trent/Palmina High Lift Pump 0000295923, annual inspection July 10, 2017
- Western Trent/Palmina Emergency Generator 0000280511 monthly checks and annual service 2017-2018
- King's Bay Chlorine Chemical Feed System monthly inspection Jan-Apr 2018
- King's Bay Emergency Generator 0000114574 monthly checks and annual service 2017-2018
- Southview Level Sensor Probe 0000208527 demand maintenance only
- Southview Raw Water Intake Pipe Inspection November 16, 2016 – inspection report reviewed and work order created in Maximo to address issues found as described on report
- Southview Emergency Generator 0000208523 monthly checks and annual service 2017-2018

DWQMS Reference: Client Reference:

16 Sampling, Testing and Monitoring

QEMS Procedure QP-07 Sampling, Testing and Monitoring, revision 6,

31-Oct-17

Kawartha Hub Sampling Calendars for 2018 for all drinking water

systems

Results:

Conforms

Details:

QEMS Procedure QP-07 Sampling, Testing and Monitoring includes the requirement that all sampling, monitoring and testing is conducted at a minimum in accordance with SDWA O. Reg. 170/03, in addition to the requirements by the Owner. Sampling calendars have been generated for all 20 sites covered by the Ontario Clean Water Agency for the City of Kawartha Lakes. The owner is provided with an annual summary of sampling, testing and monitoring results. Procedures and Sampling Calendars reviewed and accepted.

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Daily log books recording all critical facility parameters observed in use at the sites visited during the audit. Data loggers are in place for continuous monitoring, SCADA systems are programmed to alarm at specific set points.

Reviewed laboratory testing reports for Kinmount, Western Trent/Palmina, King's Bay and Southview DWS for Jan-March 2018.

DWQMS Reference: 17 Measurement and Recording Equipment Calibration and

Maintenance

Client Reference: QEMS Procedure QP-08 Measurement and Recording Equipment

Calibration and Maintenance, revision 2, 09-Apr-13

Results: Conforms

Details: Procedure QP-08 reviewed and accepted.

Viewed the calibration records for the following monitoring and measuring devices, found to be in date and documented:

- Kinmount Raw Water Turbidity Analyser 0000208335 cal 4/27/2017
- Kinmount Raw Water Flow Meter 0000208338 cal 4/27/2017
- Kinmount Clearwell Chlorine Analyzer 0000208314 cal 4/27/2017
- Operator JB Hand held chlorine analyser 0000280458 cal Aug 31, 2017 (in-house calibration with traceable reference standards).
- Western Trent/Palmina Chlorine analyser 0000277642 cal 6/29/2017
- Western Trent/Palmina Datalogger 0000277634 cal 6/19/2017
- Western Trent/Palmina DR/820 Colorimeter 0000296984 cal Sept 14, 2017 (in-house calibration with traceable reference standards).
- King's Bay Chlorine Analyser 0000192861 cal 6/14/2017
- King's Bay Turbidimeter 0000192455 cal 6/14/2017
- King's Bay Hand held turbidimeter 0000280457 cal Sept 20, 2017 (in-house calibration with traceable reference standards).
- Southview Turbidimeter 0000192015 cal 7/7/2017
- Southview Chlorine Analyser 0000208519 cal 7/7/2017
- Southview Treated Water Flow Meter 0000277684 cal 6/15/2017
- Southview Datalogger 0000277578 cal 7/7/2017
- Southview DR/820 Colorimeter 0000305801 cal Sept 14, 2017 (in-house calibration with traceable reference standards).

DWQMS Reference: Client Reference:

Client Reterence: Results:

Details:

18 Emergency Management

QEMS Procedure QP-09 Emergency Management, revision 5, 31-Oct-16

Conforms

General requirements are described in procedure QP-09 and the OCWA Emergency Response Plan. The following specific contingency plans have been established:

- CP-01 Spill Response, Revision 1, 30-Jun-14
- CP-02 Critical Injury, Revision 2, 30-Jun-14
- CP-03 Critical Shortage of Staff, Revision 2, 30-Jun-14
- CP-04 Loss of Service, Revision 0, 30-Jun-14
- CP-05 Unsafe Water, Revision 2, 30-Jun-14
- CP-06 Security Breach, Revision 0, 30-Jun-14

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Procedures reviewed and accepted.

Copies of the Facility Emergency Plan were available at each of the sites visited during the audit.

Emergency Response Contingency Plan CP-01 Spill Response was tested on 2017-12-13 by all Operators and PCTs. Each Facility Emergency Plan is reviewed through a work order generated in Maximo (e.g. 297030 for Woodfield).

City of Kawartha Lakes Emergency Plan is referenced in the OCWA FEP and a copy is available in the FEP.

Emergency Contact List (updated January 22, 2018) has all emergency contacts including the City of Kawartha Lakes staff.

DWQMS Reference: Client Reference:

Results: Details: 19 Internal Audits

QEMS Procedure QP-10 Internal QEMS Audits, Revision 3, 31-Oct-16

Conforms

Procedure QP-10 meets the requirements of section 19 of the DWQMS. Internal Audits are performed annually. Most recent internal audit for City of Kawartha Lakes Systems performed on July 19 to August 3, 2017. Audit performed by PCT from a different OCWA Cluster. Sampling of 4 facilities used in the internal audit (Manorview, Woodville, Omemee, Norland). No non-conformances and 6 Opportunities for Improvement were identified. OFIs are reviewed at the Management Review meeting for actions.

DWQMS Reference: Client Reference:

Results Details: 20 Management Review

QEMS Procedure QP-11 Management Review, revision 4, 31-Oct-2016 **Conforms**

Procedure QP-11 captures all PLAN requirements from section 20 of the DWQMS. Management Reviews are conducted a minimum of once every 12 months. Most recent Management Review Meeting performed on October 5, 2017. Meeting minutes contain comments on all requirements from section 20 of the DWQMS. Monthly meetings with the City of Kawartha Lakes cover some of the requirements. Action List is developed to identify action items from the Management Review (including comments, due dates and completion dates). The Management Review minutes were sent to the City of Kawartha Lakes Director of Public Works on November 17, 2017. Monthly meetings also generate action items (e.g. March 2018 meeting reviewed).

DWQMS Reference: Client Reference:

21 Continual Improvement

Multi Facility Operational Plan for the City of Kawartha Lakes Drinking Water Systems, Revision 9, 31-Oct-2016, section 21 – Continual

Improvement

Results: Details: Conforms

In conjunction with the internal QEMS audit and Management Review processes documented above, OCWA uses action plans to continuously improve its QEMS. Through these processes, areas of concern as well as opportunities for improvement are identified at the drinking water

as opportunities for improvement are identified at the drinking water systems operated and maintained by OCWA. Examples reviewed as outputs of the internal audits and management review as described

above.

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PART E. RECOMMENDATION - Onsite

The result of the audit indicates that the Ontario Clean Water Agency for the City of Kawartha Lakes QMS was effectively implemented.

The	fol	lowing	recomm	enda	tion i	s mad	le:
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	Offer of accreditation
	Offer of accreditation after response to corrective action requests has been deemed acceptable to SAI Global
X	Maintenance of existing accreditation
	Complete re-assessment

Final comments: All elements of the DWQMS are well implemented. Staff interviewed during the audit are very knowledgeable and dedicated. Documentation to support the QMS is detailed and well organized.

Paul Cartlidge QMS Lead Auditor SAI Global

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