GULF COAST TESTING, LLC

Certification Program Quality Procedures

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO/IEC 17065
PRODUCT CERTIFICATION BODY
Accreditation ID 203

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1.0 MANAGEMENT REVIEWS

1.1.0 PURPOSE

This section describes the process for conducting management reviews of Gulf Coast Testing's Quality System. The aim of management reviews within GCT is to determine the level of implementation and effectiveness of the GCT management system and whether the system allows for improvement. Management reviews will incorporate all aspects of GCT's quality system including documentation, records, personnel, equipment, and environment.

1.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual and conformity to ISO/IEC 17065.

1.3.0 APPLICATION

The Quality Assurance Officer will present sufficient information to the Program Manager to allow a detailed review of the suitability and effectiveness of the GCT quality system. The Quality Assurance Officer is responsible for maintaining records of all management reviews, including details of discussions taken, and for monitoring completion of actions originating in the management reviews.

1.4.0 DEFINITIONS

N/A

1.5.0 REFERENCES

ISO/IEC 17065:2012(E) Section 8.2 General Management System Documentation

1.6.0 PROCEDURES

1.6.1 Management Audit Inputs

The Program Manager shall conduct a review of GCT's quality system during the third quarter of each year or at a time determined by the program manager. The cyclical nature of this process allows each GCT review to implement changes based on past performances. The review shall be conducted using the Management Review Form. The review shall include but not be limited to the following:

1. Results of Internal and External Audits - Open Non conformances
2. Document Review

    a. Standards
    b. Certification Policies
    c. Quality Manual
    d. Website Documents
    e. ISO/IEC Documents.

f. GCT Quality Procedures (rotate documents or as necessary)

3. Quality System Fulfilment and the Suitability of Policies and Procedures
4. Client Feedback and Complaints
5. Feedback from the Impartiality Report
6. Status of Preventative and Corrective Procedures
7. Appeals and Complaints
8. Changes that could affect the Management System
9. Changes in the Volume and type of Work
10. Action items and results from previous management reviews

1.6.2 Management Audit Documentation

The results of the management review, including progress toward achievement of the objectives of the quality management system, shall be made available to the GCT staff. The outputs of the management system shall include decisions and actions related to the following:

1. Improvement of the effectiveness of GCT's management system
2. Improvement of GCT related to the fulfilment of ISO/IEC 17065 and ISO/IEC 17025
3. Resource needs

The Quality Assurance Officer shall record the information on the Management Review Form. The Quality Assurance Officer shall maintain the records of each management review per the Record and Document Control Procedure.

1.7.0 TECHNICAL AIDS

QF008.Management Review

1.8.0 EXPLANATORY NOTE

Management review meetings may be held more frequently to address time critical, ad hoc, quality issues as required, or if requested by the Program Manager.

2.0 QUALITY PLANNING

2.1.0 PURPOSE

This section describes the activities for quality planning.

2.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065.

2.3.0 APPLICATION

This section is performed by the Program Manager.

2.4.0 DEFINITIONS

N/A

2.5.0 REFERENCES

ISO/IEC 17065:2012(E) Section 7.4 Evaluation

2.6.0 PROCEDURES

The GCT quality plan shall develop a plan for each project in compliance with the contract, client, and GCT policies and procedures as follows:

1. The Program Manager ensures that planning and scheduling is coordinated and that schedules are developed for all evaluations and procedures of GCT, including the Management Review Procedure and Internal Quality Assurance Audits Procedure.
2. The Program Manager shall assign to each task identified in the procedures to an employee qualified to carry out the execution of the task.
3. If there are any additional external or internal documents mandatory for the project, the Program Manager ensures that the documents are specified in the plan.
4. The Program Manager, as part of the management review and pursuant to the Management Review Procedure will ensure that quality planning is reviewed. The review will include but is not limited to:

    a. Performance associated with contract compliance.
    b. Completion of tasks on or before the scheduled due date
    c. Resolution of any nonconformance associated with the project
    d. Inclusion of any contract amendments that might affect the quality plan

5. When changes to the planning process are indicated, the Program Manager ensures that the proper changes are made and that the changes or disseminated to the employees.
6. The Quality Assurance Officer shall ensure that records and changes made are maintained pursuant to the Record and Document Control Procedure.

2.7.0 TECHNICAL AIDS

QF033.Evaluation Plan and Document Checklist

2.8.0 EXPLANATORY NOTE

N/A

3.0 NEW APPLICATIONS FOR CERTIFICATION

3.1.0 PURPOSE

This section describes the activities for new applications for certification.

3.2.0 POLICY

The scope of GCT's services, with respect to wastewater treatment unit certification, includes testing new units and certifying alternate units based on existing certifications. GCT only performs certification of residential wastewater treatment units in accordance with the Standards and ISO/IEC 17065 and 17025.

3.3.0 APPLICATION

This section is performed by the Program Manager.

3.4.0 DEFINITIONS

Application for Certification – all the necessary information to complete the certification process for a new certification in accordance with the relevant Standard. An application for certification is a formal document to gather information as a part of the certification process. Reference ISO/IEC 17065 Section 7.2.

Contract for Certification – the contract for certification is a legally enforceable agreement for the provision of certification activities between GCT and its clients. Certification agreements shall consider the responsibilities of the certification body and its clients.

Application Review - a review of the information obtained from the Client to ensure that the information about the client and the product is sufficient for the conduct of the certification process.

3.5.0 REFERENCES

ISO/IEC 17065:2012(E) Section 7.2 and 7.3

3.6.0 PROCEDURES

3.6.1 SUBMISSION OF APPLICATIONS

The Client shall submit an Application for Certification on Quality Form QF032 requesting GCT to evaluate Client's model for certification. The Application for Certification can be found on GCT's website, http://gctla.com/certification-application, where it can be completed online or downloaded for manual completion. The application can also be obtained by request by contacting GCT at info@gctla.com.

3.6.2 CLIENT REQUIRED DOCUMENTATION

The Client will supply detailed product information for the products for which certification is requested. This information shall include but not be limited to:

1. Company Name
2. Contact Information
3. Legal Status of Company
4. Function and relationship in larger corporation, if applicable
5. Number of Employees
6. Outsourced Processes, if applicable
7. Facility Information
8. Model Name, Material, and Capacity
9. Scope of Certification Requested

3.6.3 APPLICATION REVIEW

GCT shall conduct a review using Quality Form QF032 from the information obtained in 3.6.2 to ensure that:

1. The information about the client is sufficient to conduct the certification process;
2. Information about the model is documented including previous models certified for client, the model's name, and model's type;
3. The scope of certification as it pertains to the Standard(s) is defined;
4. The Project Description is defined;
5. The certification means is determined:
   i. Testing is required, or
   ii. An engineering evaluation pursuant to Section 1.3 or 1.4 of Standard is required.
6. GCT has the competence and capability to perform the certification activity.
   i. The Program Manager reviews the certification request and evaluates the request based on previous certification experience, technical competence of GCT personnel, and GCT's resources.
   ii. If the Program Manager concludes GCT has the competence and capability to fulfill the certification request by the client, GCT will accept the certification activity.
   iii. Should the Program Manager conclude GCT lacks the competency or resources, GCT shall decline the certification request.
7. The date GCT agrees to proceed to evaluation is recorded.
8. Any known difference in understanding between GCT and the client is resolved, including agreement regarding standards or certification documents and the date of agreement is recorded;
9. GCT shall assign an SPE number to the project; and
10. GCT shall send the client a contract to the client using GCT Quality Form QF031 and record the date the contract was sent to the client.

3.7.0 TECHNICAL AIDS

QF030 - Application for Certification
QF031 - Contract for Certification

GCT Quality Form QF032 - Application Review

3.8.0 EXPLANATORY NOTE

N/A

4.0 MAINTAINING CERTIFICATION OF EXISTING SYSTEMS

4.1.0 PURPOSE

This section describes the activities for maintaining certification of existing certified systems.

4.2.0 POLICY

All Quality Procedures are written to comply with the GCT policy established in the Quality Manual. GCT establishes the requirements for the continued certification of products based on the requirements of the Standards and ISO/IEC 17065.

4.3.0 APPLICATION

The Program Manager performs this section.

4.4.0 DEFINITIONS

Authorized Representative – Organization, group, individual, or other entity that is authorized by the Client to distribute, sell, install, or service residential wastewater treatment products.

4.5.0 REFERENCES

NSF/ANSI Standard 40 – Informative Annex 2.3
ISO/IEC 17065:2012(E) Section 7.9
GCT Certification Policies for Wastewater Treatment Devices

4.6.0 PROCEDURES

4.6.1 CLIENT REQUIREMENTS FOR CONTINUING CERTIFICATION

The Program Manager, through the Continuing Compliance Procedure outlined in the New and Continuing Compliance Reports Procedure, shall ensure:

1. The client pays all applicable certification fees.
2. The client continues to meet the requirements of the Standards.
3. The client complies with all program policies and contract provisions.
4. The client designates each certified system with a model designation that bears the GCT Mark.
5. The client identifies components that are intended to be used to form a complete functional system with the GCT Mark.
6. The client undergoes an annual audit.
7. The Client shall disclose to GCT the name, address, and telephone number for each authorized representative of Certified Residential Wastewater Treatment Systems or other agent providing service for certified systems.
8. Verification systems reaching their seventh year of certification have not changed in design or manufacture.

4.6.2 CONTINUING COMPLIANCE AUDITS

The Program Manager shall set a date for a continuing compliance audit to ensure that the product continues to meet all the requirements of the Standards. The Program Manager will designate the GCT personnel required to be present at the audit.

4.6.2.1 AUDIT PLANS

The GCT Program Manager will develop an audit plan for each Client and authorized representative audited. Each audit plan will include the following:

1. Auditee Identification – Client or Authorized Representative to be audited
2. Audit Objective – Reason why audit is being conducted for each audit scheduled
3. Audit Criteria – Procedures, technical specifications, standard operating procedures, and other associated requirements appropriate to audit
4. Audit Date – Date(s) of audit
5. Audit Number – Audit number as described in Section 11.6.3 of this document
6. Auditors – GCT personnel who will conduct audit
7. Documentation Identification – Procedure(s) or technical protocol(s) to be addressed in audit
8. Open Non-conformances – Any open non-conformances from previous audits
9. Equipment and Resources – Any support material required to conduct audit
10. Audit Report Distribution List – Individuals who will receive audit report
11. Anticipated Audit Report Date – Date when individuals on distribution list will receive audit report.

In the event of a remote audit, the Program Manager will first verify the adequacy of resources required to ensure an effective audit outcome. The use of the internet or other remote communication for audit purposes shall be mutually agreed upon by the body being audited and the body performing the audit in accordance with information security and data protection measures and regulations. The Program Manager shall verify the manufacturer has the technological competence and ability to understand and utilize the information and communication technologies employed to achieve the desired results of the audit. The individual(s) preparing and reviewing the audit plan will sign and date the plan. In the event of a remote audit, the documents shall be transmitted to the manufacturer for signature. The Program Manager will include the audit checklists with the audit plan. Upon completion of the audit plan, the checklists, correspondence, and the audit report shall constitute the audit report package for archiving purposes.

4.6.2.2 AUDIT CHECKLISTS

The auditor will use the Manufacturer's Audit Checklist or Manufacturer's Audit Checklist for Remote Audits, describing the items to be investigated. The audit checklists will serve as the audit working papers used to document the audit process.

The audit checklist will:

1. Identify the auditee

2. Specify the audit number as follows: Client Name XX-01. Example: Smith Manufacturing 25-01 will mean the first audit of Smith Manufacturing for the year 2025. The audit number will also identify the corresponding audit report.

3. Identify the applicable audit criteria:

    a. Standards
    b. GCT Quality Procedures
    c. GCT Certification Policies for Wastewater Treatment Devices

4.6.2.3 CONDUCTING THE AUDIT

The auditor will travel to the Client's Plant or conduct a remote audit on the agreed upon date to conduct the audit. In the event of a remote audit, the auditor shall conduct the audit by an agreed upon technology. The auditor will interview the Client or the Client's designated representative and review all documents, including but not limited to:

1. Shipping and receiving records (not included for remote audits)
2. Component list and drawings of Client's certified products
3. Product Literature (warranty, owner's manual, installation manual)
4. Complaint Records
5. GCT Quality Manual
6. Advertising Literature
7. Authorized Representative Inspections
8. Any other documents the auditor may request.

4.6.2.4 AUDIT CHECKLIST

The auditor will complete the Manufacturer's Audit Checklist with the following information:

1. Objective Evidence: Information gathered by the auditor(s) to support conformance or nonconformance to the audit criteria requirement. The auditor will assign a number to each nonconformance as described in Section 11.6.4.2 of this document and will report non-conformances using the Corrective Action Form.
2. Comments: Clarifying remarks using the Narrative Page – required for non-conformances.
3. Signing: Auditor will sign and date the completed audit checklist at the conclusion of the audit. For remote audits, the documents will be sent to the client for signature upon conclusion of the audit.

4.6.2.5 DOCUMENTING NON-CONFORMANCES

The auditor will identify each non-conformance using the Client name and audit number followed by the initials of the auditor and a sequence number, for example, 01, 02, 03, etc. The auditor will transfer this number to the Corrective Action Form to allow traceability to the audit checklist. For example: Smith Manufacturing 25-01-ACS identifies the first non-conformance (01) in the audit report of Smith Manufacturing for the year 2025 and the non-conformance is identified by the auditor whose initials are

ACS. The manufacturer shall conduct an investigation to determine the root cause of each identified non-conformance. Manufacturers will report corrective actions using the Corrective Action Form. The auditor will confirm the effectiveness of corrective actions implemented by the Manufacturer. This action constitutes closure. The Quality Assurance Officer will document closure of each corrective action on the Non-conformance Report per Section 11.6.7 of this document.

4.6.2.6 FINAL REPORT

The auditor will prepare the final audit report within seven days from the date of the audit. The auditor may use the non-conformance identifiers in a format corresponding to that of the audit criteria in place of the Corrective Action Form. The auditor will attach the Corrective Action Form (s) and the Audit Observations Report, if any, to the audit report. The auditor will provide a copy of the report to the Client, Quality Assurance Officer and to any other individuals on the authorized distribution list. The Client is required to submit formal responses to audit findings to the auditor within seven days after receiving the audit report. The Client is not required to submit formal responses to audit observations.

4.6.2.7 AUDIT FOLLOW UP

The Client shall review the non-conformances and implement corrective actions and transmit a response to the auditor for review.

4.6.2.8 AUDIT CLOSURE

After reviewing the Client's response, the auditor will note closure by completing the bottom of Corrective Action Form. If the review indicates that the Client needs to implement further corrective action before closure, the auditor will notify the Client.

4.6.2.9 DISTRIBUTION AND COMMUNICATIONS

The auditor will provide the Client and the Quality Assurance Officer with a copy of each audit report.

4.6.3 CONTINUING 7-YEAR CERTIFICATION

In the event a client has a system entering the final year of the seven-year certification, the Deputy Program Manager shall notify the Program Manager which model is expiring prior to client's annual compliance audit. GCT will evaluate all changes that have taken place, including material and component suppliers, manufacturing processes, and design modifications, and make a determination as to the level of testing that must be completed for continued compliance with applicable standard and to demonstrate comparability with prior test results. If GCT notifies the Company of the need for testing, the Company shall supply a product to GCT for testing no later than six months from the date of notification.

The evaluation shall be noted on QF045 Manufacturer's Audit Checklist Form using the QFXX Re-Evaluation of Certified Products Form.

4.7.0 TECHNICAL AIDS

QF036 In-Plant Audit Form
QF045 Manufacturer's Audit Checklist Form
QF037 Equipment Evaluation Form
QF046 Audit Narrative Page
QF047 Authorized Representative Inspection Report
QF048 Site Visit Inspection Report
QF050 Corrective Action Form
QF040 Re-Evaluation of Certified Products

4.8.0 EXPLANATORY NOTE

N/A

5.0 EXTENDING OR REDUCING SCOPE

5.1.0 PURPOSE

This section describes the activities for extending or reducing scope pursuant to the Standards.

5.2.0 POLICY

All Quality Procedures are written to comply with GCT policy established in the Quality Manual and ISO/IEC 17065.

5.3.0 APPLICATION

This section is performed by the Program Manager.

5.4.0 DEFINITIONS

N/A

5.5.0 REFERENCES

NSF/ANSI Standard 40, Section 1.3, 1.4
NSF/ANSI Standard 40, Normative Annex 1
ISO/IEC 17065:2012(E) Section 7.2 (Note 3), 7.7.3 (a), 7.10.3, 7.11.1 b), 7.11.6, A.4.3

5.6.0 PROCEDURES

5.6.1 EXTENDING SCOPE

5.6.1.1 CLIENT INFORMATION

If a Client requests a model to be extended in scope, the following procedure will be followed:

1. All requests shall be submitted to GCT in writing.
2. Documentation will be provided by the Client showing the proposed scope extension.
3. The Client will provide drawings showing all dimensions of the proposed system.
4. The Client will provide GCT with any documents GCT considers necessary to evaluate the scope extension.

5.6.1.2 GCT EVALUATION

Once GCT receives the proper documentation from the Client, GCT shall evaluate the request as follows:

1. Pursuant to the Evaluation Process Procedure, GCT will perform an engineering analysis to determine if the proposed system should be approved by engineering evaluation or subject to testing pursuant to the requirements of the Standard.

2. If approved by engineering evaluation, the procedure shall be followed as per the Evaluation Process Procedure.
3. If the proposed system must be tested, the procedure shall be followed as per the Evaluation Process Procedure.
4. GCT shall respond to the Client within sixty days of receiving the documentation. Should GCT require additional time for evaluation, GCT shall notify the Client the reasons for requesting the additional time and a new response date.
5. Once the evaluation is complete, GCT shall notify the Client by letter as to the results of the evaluation. The Manufacturer shall not release the extended product until a letter is received from GCT approving the change. Client shall acknowledge the final report using QF054 - Project Acceptance Form.
6. If the change is approved, GCT will issue a Certification Certificate and the Client will be listed in the Official Listing.

5.6.1.3 COMPLAINTS AND DISPUTES

If the Client does not agree with the action taken by GCT, the Client shall utilize the procedure set forth in the Complaints, Disputes, and Appeals Documentation Procedure to register his complaint or dispute.

5.6.2 REDUCING SCOPE

GCT does not suspend systems. If a Client notifies GCT in writing of their decision to de-list a certified system, the following procedure shall be followed:

1. GCT will change the listing records to remove the system from the listing.
2. GCT will notify the Client in writing with the Letter for Revocation of Use of the Certification Mark that the system has been de-listed and request the Client remove the system in their next published program listing book.
3. GCT will insure in the yearly audit that only approved systems are in a Client's published listing book and promotional material.

5.6.3 DOCUMENTATION

GCT shall document all decisions on extending or reducing scope per the documentation procedures in the Evaluation Process Procedure.

5.7.0 TECHNICAL AIDS

QF033.Evaluation Plan and Document Checklist

5.8.0 EXPLANATORY NOTE

N/A

6.0 CHANGES IN PROGRAM REQUIREMENTS

6.1.0 PURPOSE

This section describes the activities for when there are changes in program requirements.

6.2.0 POLICY

All Quality Procedures are written to comply with GCT policy established in the Quality Manual Section with which this section corresponds and ISO/IEC 17065.

6.3.0 APPLICATION

This section is performed by the Program Manager.

6.4.0 DEFINITIONS

N/A

6.5.0 REFERENCES

ISO/IEC 17065:2012(E) Section 4.1.2.2, 7.10
GCT Certification Policies for Wastewater Treatment Devices

6.6.0 CHANGE PROCEDURES

6.6.1 CHANGES IN PROGRAM REQUIREMENT BY GCT

6.6.1.1 CHANGES DURING TESTING

When a program requirement changes while a Client is testing for certification, the Program Manager shall:

1. Notify the Client by email or mail within thirty (30) days of adopting the changes in GCT's requirement for certification;
2. Consider the views expressed by interested parties before deciding on the precise form and effective date of the changes;
3. Institute the new requirements as he/she determines to meet the criteria of the Standards.

6.6.1.2 CHANGES TO CERTIFIED PRODUCTS

When a program requirement changes, the Program Manager shall:

1. Notify the Client within 30 days of the adopting the change in GCT's requirement for certification

2. Consider the views expressed by interested parties before deciding on the precise form and effective date of the change
3. Review the certified product(s) affected by the change and set a timetable for re-qualifying the products.
4. Re-evaluate and re-qualify the certified products as per the Evaluation Process Procedure.
5. Verify each Client meets the new requirements of the Standards by the deadline date or de-list the certified product

6.6.2 CHANGES IN STANDARDS

The Program Manager shall monitor for any changes in the requirements of the Standards.

6.6.2.1 CHANGES DURING TESTING

When changes are made to the Standards while a Client is testing for certification, the Program Manager shall:

1. Notify the Client within 48 hours of receiving the updated requirements;
2. Consider the views expressed by interested parties before deciding on the precise form and effective date of the changes;
3. Implement the changes as he/she determines to meet the criteria of the Standards and shall evaluate the residential wastewater treatment system per the Evaluation Process Procedure for the new requirements

6.6.2.2 CHANGES TO CERTIFIED PRODUCTS

When changes are made to the Standards, the Program Manager shall:

1. Notify the Client regarding changes in the requirements of the Standards:

    a. If the change requires modification to the product, GCT will notify the Client by letter within 30 days of receiving the change
    b. If the change requires no modification to the product, GCT will notify the Client at the annual audit

2. Consider the views expressed by interested parties before deciding on the effective date of the change.
3. Review the certified product(s) affected by the change and set a deadline for re-qualifying the products.
4. Re-evaluate and re-qualify the certified products as appropriate pursuant to the Evaluation Process Procedure.
5. Verify each Client makes the necessary changes by the deadline date or de-list the certified product.

6.6.3 EXPIRATION OF CERTIFICATION

When the certified residential wastewater system has been certified for six years, the Program Manager shall:

1. Re-evaluate the certified product(s) affected by expiration pursuant to the Evaluation Process Procedure.
2. Verify each Client institutes the decision of the Program Manager.

6.6.4 SUSPENSION OF CERTIFICATION

GCT makes no provision for suspension of certification. If the certified unit fails to meet the requirements of certification for any reason, the certified unit shall be decertified pursuant to the Evaluation Process Procedure in Section 7.6.4.

6.7.0 TECHNICAL AIDS

N/A

6.8.0 EXPLANATORY NOTE

N/A

7.0 EVALUATION PROCESS

7.1.0 PURPOSE

This section describes the activities for system evaluations pursuant to the appropriate standard.

7.2.0 POLICY

All Quality Procedures are written to comply with GCT policy established in the Quality Manual section with which this section corresponds and ISO/IEC 17065.

7.3.0 APPLICATION

This section is performed by the Program Manager and the GCT evaluators.

7.4.0 DEFINITIONS

SPE Report – Specific Evaluation Performance Report; a report on the evaluation of the Model with all the associated data pursuant to the Standard(s).

7.5.0 REFERENCES

ISO/IEC 17065:2012(E) Section 6.2.1 a), 6.2.2.1, 6.2.2.2, 7.4
NSF/ANSI Standard 40 Section 8.5
NSF/ANSI Standard 245 Section 8.4
NSF/ANSI Standard 350 Section 8.6.2
NSF/ANSI Standard 385 Section 6.5
NSF/ANSI Standard 46 Section 11.6.1.2, 11.6.3.5

7.6.0 PROCEDURES

Upon receipt of an Application for Certification, the Program Manager shall follow the Application for Certification Procedure. Upon receipt of a either a signed Contract for Specific Performance Evaluation from the Client or a request for a supplemental evaluation from an existing certified client, the Program Manager shall instruct the GCT employees to proceed with the evaluation.

7.6.1 EVALUATION FOR APPLICATIONS FOR NEW CERTIFICATION

7.6.1.1 SCHEDULING

The Program Manager shall consult with the Deputy Program Manager as to the availability of space at the test site. The Deputy Program Manager shall then inform the Client in writing the date that the Client may bring the Model to GCT's test site.

The Deputy Program Manager shall meet with and inform GCT staff a new Application for Certification has been received. GCT staff shall complete the Evaluation Plan by assigning the appropriate staff the task of evaluating the Model against the requirements of the requested Standard(s). GCT may outsource evaluation tasks in

the evaluation process except for the decision on certification, which will only be done by a GCT employee. In the event any of the evaluation process is outsourced, the Client shall be notified of the outsourcing in writing. If the Client objects to the outsourcing, the Client may appeal the decision to outsource the process pursuant to the Complaints, Disputes, and Appeals Documentation Procedure.

GCT shall only rely on evaluation results related to certification completed prior to the application for certification, where it takes responsibility for the results and satisfies itself that the body that performed the evaluation fulfils the requirements contained in the relevant International Standard and those specified by the certification scheme. The impartiality requirements of the evaluation personnel stipulated in the relevant standard shall always be applicable.

7.6.1.2 EVALUATION PLAN

GCT staff shall follow the Evaluation Plan to determine if the requirements of the Standard(s) are met. The GCT evaluation plan shall contain all the elements necessary to decide on certification, including but not limited to:

1. In-Plant Audit - the initial In-Plant audit may be conducted in person or via Zoom (or equivalent)
2. Equipment Evaluation Form - the initial equipment evaluation is conducted when the unit is delivered to the test site
3. Unit Installation Form – to be completed upon installation of the unit
4. Infiltration/Exfiltration Form – to be completed upon installation of the unit
5. Drawing/Schematic
6. Aerator Specifications
7. Diffuser Specifications
8. Alarm Specifications
9. Control Panel Specifications
10. Owner’s Manual
11. Laboratory Data Review

GCT staff shall identify any nonconformance on the Corrective Action Form. The Client shall be responsible for determining and implementing corrective actions and responding using the Corrective Action Form. GCT staff shall confirm the effectiveness of the corrective actions implemented by the Client. If the GCT staff member agrees with the corrective action, he will sign the form and the non-conformance is closed.

7.6.1.3 CRITERIA EVALUATION

GCT staff shall use the Criteria Evaluation Form to determine if the evaluation information collected by GCT staff meets the criteria in the Standard.

7.6.1.4 CERTIFICATION DECISION

The Program Manager shall decide on certification from the Criteria Evaluation Form submitted by the GCT Staff. If in the sole opinion of the Program Manager, the criteria for the Standard have been met, the Program Manager shall certify the model and

authorize a draft SPE Report to be prepared. The draft SPE Report shall be forwarded to the client for review. The client shall notify GCT in writing their acceptance of the draft report or propose edits to the draft SPE Report. GCT may accept or reject the edits. The client shall notify GCT in writing upon acceptance of the draft SPE Report using QF054, and the SPE Report shall be considered final. GCT shall sign the certification certificate, and the model shall be listed on the GCT website. The date on the SPE Report shall be the date the report is finalized.

If the Program Manager recommends against certification, the Program Manager shall authorize a draft SPE Report which indicates why the client certification was not granted. The client shall notify GCT in writing their acceptance of the draft SPE Report or propose edits to the draft report. GCT may accept or reject the edits. The client shall notify GCT in writing using QF054 upon acceptance of the draft report, and the report shall be considered final. If the Client objects to the recommendation against certification, the Client may appeal the decision pursuant to the Complaints, Disputes, and Appeals Documentation Procedure.

7.6.2 SCOPE EXTENSION EVALUATION

When a Client submits an Application for Extension of Scope per the Extending or Reducing Scope Procedure, GCT shall initiate the following actions:

7.6.2.1. SCHEDULING

The Program Manager shall meet with and inform the GCT staff a request an extension of Scope has been received and shall assign the request a SPE Identifier Number. GCT staff shall complete the Evaluation Plan by assigning the appropriate staff the task of evaluating the Model against the requirements of the requested Standard(s). GCT may outsource evaluation tasks in the evaluation process except for the decision on certification, which will only be done by a GCT employee. In the event any of the evaluation process is outsourced, the Client shall be notified of the outsourcing in writing. If the Client objects to the outsourcing, the Client may appeal the decision to outsource the process pursuant to the Complaints, Disputes, and Appeals Documentation Procedure.

GCT shall only rely on evaluation results related to certification completed prior to the application for certification, where it takes responsibility for the results and satisfies itself that the body that performed the evaluation that meet applicable requirements of the ANSI certification for ISO/IEC 17065. The impartiality requirements of the evaluation personnel stipulated in the relevant standard shall always be applicable.

7.6.2.2 EVALUATION PLAN

GCT staff shall follow the Extension of Scope Evaluation Plan to determine if the requirements of the Standard(s) are met.

GCT staff shall identify any nonconformance on the Corrective Action Form. The Client shall be responsible for determining and implementing corrective actions and responding using the Corrective Action Form. GCT staff shall confirm the effectiveness of the corrective actions implemented by the Client. If the GCT staff

member agrees with the corrective action, he will sign the form and the non-conformance is closed.

7.6.2.3 CERTIFICATION DECISION

The Program Manager shall decide on certification from the Criteria Evaluation Form submitted by the GCT Staff. If in the sole opinion of the Program Manager, the criteria for the Standard have been met, the Program Manager shall certify the model and authorize a draft SPE Report to be prepared. The draft SPE Report shall be forwarded to the client for review. The client shall notify GCT in writing their acceptance of the draft report or propose edits to the draft SPE Report. GCT may accept or reject the edits. The client shall notify GCT in writing upon acceptance of the draft SPE Report using QF054, and the SPE Report shall be considered final. GCT shall sign the certification certificate, and the model shall be listed on the GCT website. The date on the SPE Report shall be the date the report is finalized.

If the Program Manager recommends against certification, the Program Manager shall authorize a draft SPE Report which indicates why the client certification was not granted. The client shall notify GCT in writing their acceptance of the draft SPE Report or propose edits to the draft report. GCT may accept or reject the edits. The client shall notify GCT in writing using QF054 upon acceptance of the draft report, and the report shall be considered final. If the Client objects to the recommendation against certification, the Client may appeal the decision pursuant to the Complaints, Disputes, and Appeals Documentation Procedure.

7.7.0 TECHNICAL AIDS

QF030 Application for Certification
QF031 Contract for Specific Performance Evaluation
QF033 Evaluation Plan and Checklist
QF037 Equipment Evaluation Form
QF050 Corrective Action Form
QF053 Certification Certificate
QF052 Official Listing
QF043 Letter of Authority to Use the Certification Mark
QF051 Standard Performance Evaluation (SPE) Report Template
QF054 SPE Report Acceptance

7.8.0 EXPLANATORY NOTE

N/A

8.0 REVISION OF A TEST REPORT

8.1.0 PURPOSE

This section describes the activities for revising test reports.

8.2.0 POLICY

All Quality Procedures are written to comply with GCT policy established in the Quality Manual section with which this section corresponds and ISO/IEC 17065 and ISO/IEC 17025.

8.3.0 APPLICATION

The Program Manager perform this section.

8.4.0 DEFINITIONS

N/A

8.5.0 REFERENCES

ISO/IEC 17065:2012(E) Section 8.3.2 c)

8.6.0 PROCEDURES

In the event that a Standard Performance Evaluation Report must be revised, all persons to whom GCT has sent a copy of the original report must be advised and sent a revised report.

1. Based on the investigation that led to the issuance of a revised SPE, generate a transmittal letter which describes:

    a. The nature of the error, change, or oversight
    b. The impact of the error, change, or oversight
    c. The revised or corrected information
    d. The impact of the revised or corrected information

2. Identify the recipients of the original SPE report.
3. Contact each recipient and inform them of the revision.
4. Send transmittal letter and revised SPE to each recipient.

8.7.0 TECHNICAL AIDS

QF051 Standard Performance Evaluation Report

8.8.0 EXPLANATORY NOTE

N/A

9.0 INTERNAL QUALITY ASSURANCE AUDIT

9.1.0 PURPOSE

The purpose of this procedure is to describe the processes and activities necessary to organize, conduct, and respond to quality system internal audits to ensure the suitability and effectiveness of the Gulf Coast Testing, LLC quality system. This procedure identifies the entities responsible for staffing, planning, and conducting internal audits. These internal audits encompass all activities, processes, and documents that form a part of the Gulf Coast Testing, LLC quality system.

9.2.0 POLICY

All Quality Procedures are written to comply with the GCT policy established in the Quality Manual section with which this section corresponds and ISO/IEC 17065.

9.3.0 APPLICATION

The QA/QC Manager performs this section.

9.4.0 DEFINITIONS

1. **Auditee** – the organization or representative from an organization that is audited.

2. **QA/QC Manager** – The individual who manages the internal auditing program. The QAO appoints the lead auditor, organizes the quality audit, reviews the nonconformance, evaluates the implementation of corrective action, and reports the results to the Program Manager.

3. **Lead Auditor** – An individual qualified through training or experience to organize and direct a quality audit, report nonconformance, and recommend corrective action. The auditor shall be knowledgeable in certification, auditing, and the requirements of ISO/IEC 17065 and shall be appointed by the QA/QC Manager.

4. **Audit Number** – the audit identifier.

5. **Audit Plan** – an outline that describes the audit activities to be conducted.

6. **Audit Report** – a summary of the findings of the audit.

7. **Audit References** – support material examined which relate to the subject audited.

8. **Audit Schedule** – A formal listing of all planned audits for the upcoming calendar year. The official version of this schedule is maintained on the quality web site.

9. **Closure** - Resolution of open items and findings.

10. **Internal Audit** – A systematic and independent examination to determine the Gulf Coast Testing, LLC quality system has been effectively implemented and maintained.

11. **Nonconformance** – Non-fulfillment of a specified quality system requirement.

12. **Observation** – Objective evidence that creates concern on the part of the auditor. It is not a non-fulfillment of the requirements but may indicate future problems. A response by the Auditee is usually not required.

13. **Objective Evidence** – Records or statements of fact pertaining to implementation or effectiveness of an element of the quality system.

14. **Observed Concern** – A condition that may lead to a nonconformance in the future. Corrective action is not required but is strongly recommended.

15. **Open Item** – A nonconformance from a previous audit that has not been closed.

9.5.0 REFERENCES

ISO/IEC 17065:2012(E) Section 8.6

9.6.0 PROCEDURES

9.6.1 SCHEDULING

During each calendar year, the QA/QC Manager will appoint a Lead Auditor to audit the procedures, programs, and/or work practices of Gulf Coast Testing, LLC. The lead auditor may appoint additional members of the audit team. Each audit team member will only audit activities independent of their certification activities at GCT, and no auditor shall audit their own work. The Lead Auditor will schedule the audit and ensure that the employees of GCT are aware of the audit schedule.

9.6.2 AUDIT PLANS

The Lead Auditor will develop the audit plan for GCT in conjunction with the QA/QC Manager. The Program Manager will be notified of the audit plan on a timely basis. Each audit plan will include the following:

1. **Auditee Identification**: – The Gulf Coast Testing, LLC activity that is to be audited.
2. **Audit Objective**: – The reason why the audit is being conducted for each audit scheduled.
3. **Audit Criteria** – The information to determine if the certified body is meeting the applicable requirements
4. **Audit Date(s)** – The date(s) of the audit.
5. **Audit Number** – The audit number
6. **Auditor(s)** – The name(s) of the individual(s) who will conduct the audit.
7. **Open Non-conformances** – Any open nonconformance(s) from previous audits.
8. **Equipment and Resources** – Any support materials required to conduct the audit.
9. **Audit Report Distribution List** – The individuals who will receive the audit report.
10. **Anticipated Audit Report Date** – The date when the individuals on the distribution list will receive the audit report.

After preparing and reviewing the audit plan, the Lead Auditor and the QA/QC Manager will sign and date the plan. The auditor will include the Internal Audit Checklist Form with the audit plan. Upon completion, the audit plan, the audit checklist, and the audit report constitute the audit report package for archiving purposes.

9.6.3 AUDIT CHECKLISTS

Auditors will use the Internal Audit Checklist Form to serve as the audit working papers used to document the audit process. Quality system documents will provide the requirements for the checklist. The audit checklists will:

1. Specify the audit number as follows: GCTXXXX-XX. Example: GCT2025-01 will mean it was the first audit for Gulf Coast Testing, LLC in 2025. The audit number will also identify the corresponding audit report.
2. Identify the audit criteria (requirements/standards/procedures)
3. Specify the Audit Criteria Identifier: Under this heading is listed the information by which the auditor can make a proper determination of whether the requirement has been met.

9.6.4 CONDUCTING THE AUDIT

The Lead Auditor will interview staff, review documents, and observe practices to obtain the audit information. The auditor will record information collected onto the audit checklist, which will provide the basis for the Draft Audit Report. The auditor may include additional notes and exhibits as the working papers. Each individual on the audit team shall identify the portion of the audit they conducted.

9.6.4.1 AUDIT CHECKLIST

The auditor will complete the audit checklist with the following information:

1. **Compliance**: The auditor shall note whether the certified body has complied with the requirement, not complied with the requirement, or determined the requirement to be non-applicable. The auditor shall also note any opportunities for improvement.
2. **Auditor Notes/Evidence and Non-Conformances**: The information gathered by the auditor(s) to support conformance or nonconformance to the audit criteria requirement. The auditor will assign a number to each non-conformance as described in the Revision of a Test Report Procedure, Section 8.6.4.2 and will report non-conformances using the Corrective Action Form.
3. **Comments**: Clarifying remarks recorded on the Narrative Page Form are required for nonconformance.
4. **Signing**: The auditor will sign and date the completed audit checklist at the conclusion of the audit.

9.6.4.2 DOCUMENTING NON-CONFORMANCES

The auditor will identify each nonconformance using the audit number followed by the initials of the Lead Auditor and a sequence number, for example, 01, 02, 03, etc. The Lead Auditor will transfer this number to the Corrective Action Form to

allow traceability to the audit checklist. For example: Gulf Coast Testing, LLC 03-01-ACS-01 identifies the first non-conformance in the audit report of Gulf Coast Testing, LLC 03-01 and the non-conformance is identified by the auditor whose initials are ACS. The QA/QC Manager will investigate to determine the root cause of each identified non-conformance. The QA/QC Manager or his/her designee is responsible for determining and implementing corrective actions. Auditors will report corrective actions on the Corrective Action Form. The Lead Auditor will confirm the effectiveness of corrective actions implemented by the QA/QC Manager. The Lead Auditor and the QA/QC Manager will meet with the Program Manager and report on their findings. This action constitutes closure. The QA/QC Manager will document closure of each corrective action on the Non-conformance Report.

9.6.5 AUDIT REPORT

The Lead Auditor will prepare the final audit report upon completion of the audit, but not more than thirty days from the date of the audit. If additional auditors were appointed, each member of the audit team shall identify the portion of the audit they conducted by initialing that portion of the report. The Lead Auditor may use the non-conformance identifiers in a format corresponding to that of the audit criteria in place of the individual Corrective Action Form. The Lead Auditor will attach the Corrective Action Form(s) and the Audit Observations Report, if any, to the audit report. The auditor will provide a copy of the report to the QA/QC Manager and to any other individuals on the authorized distribution list. The QA/QC Manager is required to submit formal responses to the audit findings to the Lead Auditor within seven days after receiving the audit report. The QA/QC Manager is not required to submit formal responses to audit observations. The Lead Auditor will provide a copy of the audit report and all attachments to the QA/QC Manager.

9.6.6 AUDIT FOLLOW UP

The QA/QC Manager will review the non-conformances and communicate the results to the GCT personnel responsible for the area audited. GCT will implement corrective actions and transmit a response to the Lead Auditor for review.

In the event the audit discloses events which cast doubt on the validity of client results, GCT shall notify the client within thirty (30) days of the finding.

9.6.7 AUDIT CLOSURE

After reviewing the QA/QC Manager's response, the Lead Auditor will note closure by completing the bottom of Corrective Action Form. If the review indicates that the Lead Auditor needs to implement further corrective action before closure, the Lead Auditor will notify the QA/QC Manager.

The Lead Auditor will forward the Corrective Action Form, stating the verified corrective action to the QA/QC Manager who will determine if the corrective action is satisfactory. If it is satisfactory, the QA/QC Manager will indicate closure by signing the Corrective Action Form. The QA/QC Manager records and maintains the status of all Corrective Action Forms. Upon closure of all Corrective Action Forms for a given audit number,

the QA/QC Manager shall notify the Program Manager that all Corrective Action Forms for the audit in question are closed.

9.6.8 DISTRIBUTION

The QA/QC Manager will provide the Program Manager with a copy of each audit report. The Program Manager will present the status of the auditing program, and the results of audits conducted at the audit review and the next scheduled Management Review.

9.7.0 TECHNICAL AIDS

QF050 Corrective Action Form
QF046 Narrative Page Form

9.8.0 EXPLANATORY NOTE

N/A

10.0 CORRECTIVE AND PREVENTIVE ACTIONS (CAPA)

10.1.0 PURPOSE

The purpose of this section is to describe how to correct deficiencies and incidents of nonconformance and identify the cause to prevent reoccurrence in other aspects of the Quality System. CAPA (Corrective Actions and Preventative Actions) is a systematic process for identifying and eliminating the root causes of non-conformities or other undesirable situations in an organization's processes. GCT uses CAPA to ensure it has an effective Quality Management System.

10.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

10.3.0 APPLICATION

This section is applicable to all GCT employees.

10.4.0 DEFINITIONS

Corrective and Preventive Action (CAPA) Plan – actions taken to collect information and identify a problem, determine root cause, identify and implement a corrective and/or preventive action to prevent further recurrence.

Correction – immediate remedial actions taken to repair, rework or adjust the effect of an existing deviation or other undesirable situation.

Corrective Action – immediate action to a problem that has already occurred or has been identified.

Preventive Action – taken to eliminate the root cause of a potential problem, including the detection/identification of problems.

Root Cause – factor that caused a non-conformance and should be permanently eliminated through process improvement.

Root Cause Analysis – a class of problem-solving methods used to identify the root causes of problems or events.

10.5.0 REFERENCES

ISO/IEC 17065:2012(E) Section 8.0

10.6.0 PROCEDURES

The preventive action procedure collects information, analyzes the information collected, and prevents quality problems based on information analysis.

10.6.1 IDENTIFICATION OF AN ISSUE

Potential and actual issues that arise during the testing and evaluation process can be identified through several sources, including:

1. A specific incident has occurred
2. Observations/concerns are noted by a GCT employee
3. Observations/concerns are noted after a management review, a training session, an internal audit, or audits of GCT clients
4. A concern raised by an outside organization, including ANSI or other third-party certification companies
5. A complaint filed by a customer against a certified client
6. A complaint filed by a certified client against GCT
7. Observations made by clients of GCT

10.6.2 ASSESSING THE RISK

1. GCT shall identify and decide who will be responsible for the CAPA plan. This includes development of the CAPA plan, its implementation, training of staff on the CAPA plan, and evaluation of the results of the CAPA plan. This is normally the Program Manager or Deputy Program Manager.
2. Evaluate the extent of the problem: identify or characterize the problem; determine the scope and impact; investigate data, process, operations and other sources of information; investigate the impact of the issue on GCT's certification process.

3. Focus on determining the root cause(s): investigate how/why the incident occurred (i.e. are there specific causes or sources of the problem; why is this problem occurring; is the problem due to training, design, manufacture, management, documentation, etc.)

4. After identifying the root cause(s), break the solution into discrete, measurable actions that address the root cause(s) - actions items should include:

    a) Identify the action to correct and prevent recurrence. This includes revising procedures, additional training, and/or changing systems.
    b) Who will be responsible for the corrective or preventive action.
    c) Establish a target date for completion.

5. Track the progress towards completion of all required actions and evaluate whether the implemented actions have corrected the problem.

6. For preventive actions, describe the preventive action planned and who is responsible.

10.6.5 DOCUMENTING AND REPORTING THE CAPA

CAPAs should be documented using the CAPA QFXXX, The CAPA Action Form will be used to ensure that the action is correctly implemented and is appropriate to the impact of the problem encountered. The CAPA action will be implemented in a timely manner, and the QA/QA Manager shall confirm the effectiveness with a follow-up audit.

10.7.0 TECHNICAL AIDS

QF050.Corrective Action Form

10.8.0 EXPLANATORY NOTE

N/A

11.0 NEW AND CONTINUING COMPLIANCE REPORTS

11.1.0 PURPOSE

The purpose of this section is to describe the process of the New and Continuing Compliance Report, which determines the new and continuing compliance by the Client with the program standards and policies.

11.2.0 POLICY

All Quality Procedures are written to comply with GCT policy established in the Quality Manual section with which this section corresponds and ISO/IEC 17065.

11.3.0 APPLICATION

This section is performed by the Program Manager.

11.4.0 DEFINITIONS

Authorized Representative – Organization, group, individual, or other entity that is authorized by the Client to distribute, sell, install, or service residential wastewater treatment products.

11.5.0 REFERENCES

Quality Manual
Standards
GCT Certification Policies for Wastewater Treatment Devices

11.6.0 PROCEDURES

11.6.1 SCHEDULING COMPLIANCE REPORTS

During the fourth quarter of each year or as scheduled by the Program Manager, the Program Manager will conduct a continuing compliance audit at the Client's production facility. The Program Manager will designate the GCT personnel required to be present at the audit. The Client shall disclose to GCT the name, address, and telephone number for each authorized representative of Certified Residential Wastewater Treatment Systems or other agent providing service for certified systems. All correspondence generated as a result of scheduling will become part of the audit report.

11.6.2 AUDIT PLANS

The GCT Program Manager will develop an audit plan for each Client and authorized representative audited. Each audit plan will include the following:

1. Auditee Identification – Client or Authorized Representative to be audited
2. Audit Objective – Reason why audit is being conducted for each audit scheduled
3. Audit Criteria – Procedures, technical specifications, standard operating procedures, and other associated requirements appropriate to audit

4. Audit Date – Date(s) of audit
5. Audit Number – Audit number as described in Section 11.6.3 of this document
6. Auditors – GCT personnel who will conduct audit
7. Documentation Identification – Procedure(s) or technical protocol(s) to be addressed in audit
8. Open Non-conformances – Any open non-conformances from previous audits
9. Equipment and Resources – Any support material required to conduct audit
10. Audit Report Distribution List – Individuals who will receive audit report
11. Anticipated Audit Report Date – Date when individuals on distribution list will receive audit report.

In the event of a remote audit, the Program Manager will first verify the adequacy of resources required to ensure and effective audit outcome. The use of the internet or other remote communication for audit purposes shall be mutually agreed upon by the body being audited and the body performing the audit in accordance with information security and data protection measures and regulations. The Program Manager shall verify the manufacturer has the competency and ability to understand and utilize the information and communication technologies employed to achieve the desired results of the audit. The individual(s) preparing and reviewing the audit plan will sign and date the plan. In the event of a remote audit, the documents shall be transmitted to the manufacturer for signature. The Program Manager will include the audit checklists with the audit plan. Upon completion of the audit plan, the checklists, correspondence, and the audit report shall constitute the audit report package for archiving purposes.

11.6.3 AUDIT CHECKLISTS

The auditor will use the Manufacturer's Audit Checklist or Manufacturer's Audit Checklist for Remote Audits, describing the items to be investigated. The audit checklists will serve as the audit working papers used to document the audit process.

The audit checklist will:

1. Identify the auditee
2. Specify the audit number as follows: Client Name XX-01. Example: Smith Manufacturing 24-01 will mean the first audit of Smith Manufacturing for the year 2024. The audit number will also identify the corresponding audit report.

3. Identify the applicable audit criteria:
    a. Standards
    b. GCT Quality Manual
    c. GCT Quality Procedures.

11.6.4 CONDUCTING THE AUDIT

The auditor will travel to the Client's Plant or conduct a remote audit on the agreed upon date to conduct the audit. In the event of a remote audit, the auditor shall conduct the audit by an agreed upon technology. The auditor will interview the Client or the Client's designated representative and review all documents, including but not limited to:

1. Shipping and receiving records (not included for remote audits)

2. Component list and drawings of Client's certified products
3. Product Literature (warranty, owner's manual, installation manual)
4. Complaint Records
5. GCT Quality Manual
6. Advertising Literature
7. Authorized Representative Inspections
8. Any other documents the auditor may request.

11.6.4.1 AUDIT CHECKLIST

The auditor will complete the Manufacturer's Audit Checklist with the following information:

1. Objective Evidence: Information gathered by the auditor(s) to support conformance or nonconformance to the audit criteria requirement. The auditor will assign a number to each nonconformance as described in Section 11.6.4.2 of this document and will report non-conformances using the Corrective Action Form.
2. Comments: Clarifying remarks using the Narrative Page – required for non-conformances.
3. Signing: Auditor will sign and date the completed audit checklist at the conclusion of the audit. For remote audits, the documents will be sent to the client for signature upon conclusion of the audit.

11.6.4.2 DOCUMENTING NON-CONFORMANCES

The auditor will identify each non-conformance using the Client name and audit number followed by the initials of the auditor and a sequence number, for example, 01, 02, 03, etc. The auditor will transfer this number to the Corrective Action Form to allow traceability to the audit checklist. For example: Smith Manufacturing 24-01-ACS identifies the first non-conformance (01) in the audit report of Smith Manufacturing for the year 2024 and the non-conformance is identified by the auditor whose initials are ACS. The manufacturer shall conduct an investigation to determine the root cause of each identified non-conformance. Manufacturers will report corrective actions using the Corrective Action Form. The auditor will confirm the effectiveness of corrective actions implemented by the Manufacturer. This action constitutes closure. The Quality Assurance Officer will document closure of each corrective action on the Non-conformance Report per Section 11.6.7 of this document.

11.6.4.3 USING THE AUDIT OBSERVATIONS REPORT

The auditor may prepare an Audit Observations Report on a separate sheet to document concerns that may be potential non-conformances, and/or to identify opportunities for continuous improvement of the company's quality system.

11.6.5 AUDIT REPORT

11.6.5.1 DRAFT REPORT

The auditor may prepare a handwritten draft audit report, if time permits, and the contents reviewed by the Quality Assurance Officer. The auditor may prepare the draft

report similarly to the final report or the draft report may simply provide the audit number, the auditor(s), audit date(s), and list the non-conformances, if any. The auditor and the Quality Assurance Officer will sign the draft report to indicate agreement with its contents. The auditor will leave a copy with the Quality Assurance Officer. If time does not permit the preparation of a draft audit report, the auditor will present the audit results verbally to the Quality Assurance Officer.

11.6.5.2 FINAL REPORT

The auditor will prepare the final audit report within seven days from the date of the audit. The auditor may use the non-conformance identifiers in a format corresponding to that of the audit criteria in place of the Corrective Action Form. The auditor will attach the Corrective Action Form (s) and the Audit Observations Report, if any, to the audit report. The auditor will provide a copy of the report to the Client, Quality Assurance Officer and to any other individuals on the authorized distribution list. The Client is required to submit formal responses to audit findings to the auditor within seven days after receiving the audit report. The Client is not required to submit formal responses to audit observations.

11.6.6 AUDIT FOLLOW UP

The Client shall review the non-conformances and implement corrective actions and transmit a response to the auditor for review.

11.6.7 AUDIT CLOSURE

After reviewing the Client's response, the auditor will note closure by completing the bottom of Corrective Action Form. If the review indicates that the Client needs to implement further corrective action before closure, the auditor will notify the Client.

11.6.8 DISTRIBUTION AND COMMUNICATIONS

The auditor will provide the Client and the Quality Assurance Officer with a copy of each audit report.

11.7.0 TECHNICAL AIDS

QF036 In-Plant Audit Form
QF045 Manufacturer's Audit Checklist Form
QF037 Equipment Evaluation Form
QF046 Audit Narrative Page
QF047 Authorized Representative Inspection Report
QF048 Site Visit Inspection Report
QF050 Corrective Action Form

11.8.0 EXPLANATORY NOTE

N/A

12.0 COMPLAINTS, DISPUTES, AND APPEALS

12.1.0 PURPOSE

The purpose of this section is to describe the process of handling complaints, disputes, and appeals within or outside of the Client or GCT.

12.2.0 POLICY

All Quality Procedures are written to comply with the GCT policy established in the Quality Manual section with which this section corresponds and ISO/IEC 17065.

12.3.0 APPLICATION

The Program Manager performs this section.

12.4.0 DEFINITIONS

N/A

12.5.0 REFERENCES

ISO/IEC 17065:2012(E) – Section 4.1.2.2 c) 2), 5.1.3 l), 7.13, 8.5.2 h), Annex A.5
GCT Certification Policies for Wastewater Treatment Devices

12.6.0 PROCEDURES

12.6.1 DOCUMENTATION OF COMPLAINTS

12.6.1.1 COMPLAINTS ABOUT GCT ACTIVITIES

GCT will require the Client to file the request with the Program Manager in writing using the Complaint Documentation Form. The complainant shall include the following information with the complaint:

1. Name of individual filing the complaint
2. Name of the company filing the complaint
3. Date of the complaint
4. Description of the complaint
5. Documented identification of the complaint

The Program Manager shall inform the Quality Assurance Officer of the complaint and include the complaint information and documentation. The Program Manager shall respond to the complainant that the complaint has been received. The Quality Assurance Officer shall identify each complaint with a complaint number as follows: GCT C01-2025. This will mean the first complaint against Gulf Coast Testing, LLC in 2025 and identify the Complaint Report. The Quality Assurance Officer shall record the complaint in the relevant project folder on the server.

12.6.1.2 COMPLAINTS BETWEEN CLIENTS

GCT shall document all complaints, formal or informal, received by Clients, distributors, or other parties and the manufacturer. The Program Manager shall respond to the complainant that the complaint has been received. A formal complaint is a complaint referred to GCT in writing using the Complaint Documentation Form. Informal complaints are complaints that are not filed with GCT in writing. A formal complaint shall contain, at a minimum, the following information:

1. Name of the individual filing the complaint
2. Address of individual filing the complaint
3. Telephone number of the individual filing the complaint
4. Manufacturer and model
5. Nature of the complaint

The Program Manager shall inform the Quality Assurance Officer of the complaint and include the complaint information and documentation. The Quality Assurance Officer shall identify each complaint with a complaint number as follows: Company Name C01-2025. This will mean the first complaint against Company Name in 2025. This complaint number will also identify the Complaint Report. The Quality Assurance Officer shall record the complaint in the relevant project folder on the server. The Quality Assurance Officer shall refer complaints regarding issues under the control of the manufacturer concerning a certified individual wastewater treatment plant unit to the manufacturer for handling under the complaint process of the manufacturer.

12.6.2 COMPLAINT RESOLUTION

12.6.2.1 COMPLAINTS ABOUT GCT ACTIVITIES

The Quality Assurance Officer shall review the complaint to determine the validity of the complaint. If the Quality Assurance Officer determines the complaint to be valid, he/she shall inform the Program Manager that an investigation is underway. The Quality Assurance Officer will interview the staff, review documents, and observe practices to obtain information related to the complaint. The Quality Assurance Officer shall record all the information collected. The Quality Assurance Officer shall identify all non-conformances associated with the complaint and conduct an investigation to determine the root cause of the non-conformance. All non-conformances shall be recorded on the Corrective Action Form using the complaint number to allow traceability. The Quality Assurance Officer shall require the GCT employee responsible for the non-conformance to implement corrective action. The Quality Assurance Officer will confirm the effectiveness of the corrective actions implemented by the employee and sign the document. The Quality Assurance Officer shall then present the corrective action to the Program Manager. If the Program Manager agrees with the corrective action, he shall sign the document. This action constitutes closure. The Quality Assurance Officer shall document closure of each corrective action in the Complaint Report.

12.6.2.2 COMPLAINTS BETWEEN CLIENTS

12.6.2.2.1 FORMAL COMPLAINTS

The Quality Assurance Officer shall review the complaint to determine the validity of the complaint. The Quality Assurance Officer's review may include a site visit to the plant, a field inspection, or any other reasonable inspection needed to determine the validity of the complaint. The Quality Assurance Officer may, at his/her discretion, designate a qualified GCT employee to undertake the review. If the Quality Assurance Officer determines the complaint to be valid, he/she shall inform the Program Manager that an investigation is underway. The Quality Assurance Officer will interview the Client, review documents, and observe practices to obtain information related to the complaint. The Quality Assurance Officer shall record all the information collected. The Quality Assurance Officer shall identify all non-conformances associated with the complaint and conduct an investigation to determine the root cause of the non-conformance. All non-conformances shall be recorded on the Corrective Action Form using the complaint number to allow traceability. The Quality Assurance Officer shall require the Client to implement corrective action. The Quality Assurance Officer will confirm the effectiveness of corrective actions implemented by the Client and sign the document. This action constitutes closure. The Quality Assurance Officer shall document closure of each corrective action in the Complaint Report.

12.6.2.2.2 INFORMAL COMPLAINTS

The Quality Assurance Officer shall investigate informal complaints as she/he deems appropriate. The Quality Assurance Officer may, at his/her discretion, investigate the complaint as a formal complaint utilizing the procedure in Section 12.6.2.2.1 of this document.

12.6.3 COMPLAINT REPORT

12.6.3.1 COMPLAINTS ABOUT GCT ACTIVITIES

The Quality Assurance Officer shall prepare the Complaint Report within seven days of the date of the complaint. The Quality Assurance Officer shall attach all documentation including but not limited to the initial complaint and the Corrective Action Form. The Quality Assurance Officer shall provide a copy of the report to the Program Manager. The Program Manager will transmit a copy of the report to the client.

12.6.3.2 COMPLAINTS BETWEEN CLIENTS

The Quality Assurance Officer shall prepare the Complaint Report within seven days from the date of closure of the non-compliance. The Quality Assurance Officer shall attach all documentation including but not limited to the initial complaint and the Corrective Action Form. The Quality Assurance Officer shall provide a copy of the report to the Program Manager. The Program Manager will transmit a copy of the report to the complainant.

12.6.4 APPEAL OF THE COMPLAINT REPORT

12.6.4.1 COMPLAINTS ABOUT GCT ACTIVITIES

If the Client is not satisfied with resolution in the Complaint Report, then the client may seek resolution through arbitration.

12.6.4.2 COMPLAINTS BETWEEN CLIENTS

The Quality Assurance Officer shall prepare the Complaint Report within seven days from the date of closure of the non-compliance. The Quality Assurance Officer shall attach all documentation including but not limited to the initial complaint and the Corrective Action Form. The Quality Assurance Officer shall provide a copy of the report to the Program Manager. The Program Manager will transmit a copy of the report to the complainant within ten days of receiving the Complaint Report. The Program Manager will include with the report an explanation of the appeal process.

In the event the complainant is not satisfied with the resolution, the complainant has the right to appeal. GCT's policy for appeals has two levels, with the complainant having the option to be present or represented at the final level.

The initial communication is processed and investigated as a complaint per Section 12.6.2 of this document. If the complainant is not satisfied with the resolution, the complainant must register a written dispute within 60 business days after receiving GCT's resolution. The Program Manager will notify the complainant in writing within 10 business days of receipt of the appeal and begin an administrative review to investigate the dispute. Within 45 business days of receiving the letter, GCT will forward the complainant a written notice of its decision.

If the complainant is not satisfied with the decision in GCT's written notice, the complainant may proceed to the final level of the appeal process. Second-level appeals must be submitted in writing within 60 business days after receiving the first-level appeal decision. An Appeals Committee comprised of three members not involved in the previous review of the appeal will be formed and will schedule the committee review within 45 days of receipt of the second-level appeal. The Program Manager has complete discretion to appoint three qualified members to the committee. The complainant may be present at the meeting by appearing in person, by conference call, or by sending a representative. The Appeals Committee is the final level of the appeal process. The committee will mail its decision to the complainant within 10 business days of the meeting.

12.7.0 TECHNICAL AIDS

QF049.Complaint Documentation Form

12.8.0 EXPLANATORY NOTE

N/A

13.0 RECRUITMENT AND MONITORING OF PERSONNEL

13.1.0 PURPOSE

The purpose of this section is to describe the processes of recruitment and monitoring of personnel.

13.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065.

13.3.0 APPLICATION

This section is performed by the Program Manager.

13.4.0 DEFINITIONS

N/A

13.5.0 REFERENCES

ISO/IEC 17065:2012(E) Section 4.2.3, 4.2.10, 4.2.12, 5.1.2, 5.1.3, 6.1,7.4.2, 7.13.6

13.6.0 PROCEDURES

GCT shall have sufficient personnel having the education, knowledge and experience for performing certification functions relating to the type, range and volume of work performed. This includes technical personnel competent for the development of product specific criteria including but not limited to testing, sampling, inspection, management quality system evaluation, explanatory documents, and certification. GCT has a Job Description and Qualification Form for each position. GCT maintains an Organizational Chart showing the employees working in each position. Also, GCT keeps Management Resume Forms on each of its managers.

The Program Manager will place primary importance upon recruitment, selection, training, and monitoring of personnel.

13.6.1 RECRUITMENT OF EMPLOYEES

When recruiting employees, GCT shall:

1. Advertise for employees in media that are appropriate to the industry.
2. Offer salaries that are in line with the industry norms.
3. Offer benefits that are in line with the industry norms

13.6.2 SELECTION OF EMPLOYEES

GCT shall:

1. Select personnel that demonstrate those skills and demeanor that may be relevant to the position.
2. Select employees that reflect the image of GCT
3. Select employees with previous experience in the industry
4. Select employees with proven competency in the skills required
5. Select employees with the ability to work independently and be a part of the team
6. Select employees with the ability to work with the client in a pleasant manner

13.6.3 MONITORING OF EMPLOYEES

13.6.3.1 PERSONNEL FILES

Personnel employed by GCT shall have qualifications for their positions. Such qualifications shall be consistent with the duties of the positions as described in the Quality Manual. Information on the qualifications and subsequent training of all personnel shall be kept in personnel files. Such files shall also show:

1. Name and address
2. Position held
3. Educational qualification and professional status
4. Experience and training
5. Confidentiality and Disclosure Agreement Form
6. Annual Employee Performance Evaluation

13.6.3.2 CONFIDENTIALITY AND INDEPENDENCE

In order to ensure confidentiality and independence, GCT shall:

1. Require all personnel sign the Confidentiality and Disclosure Agreement Form
2. Require all employees attest to their prior associations as per the Confidentiality and Disclosure Agreement
3. Require all employees attest to their understanding of their obligations and commit to GCT they are free from commercial and/or other financial interests

13.6.3.3 PERIODIC EVALUATIONS

During the fourth quarter of the year, the Program Manager shall perform periodic evaluations of all employees but particularly the employees involved in the certification process. The evaluation shall be done using the using the Annual Employee Performance Evaluation Form. If the Program Manager is involved in the certification process, the Deputy Program Manager shall perform an evaluation of the Program Manager regarding his certification activities.

Employees will be notified of the impending evaluations and shall be required to participate in their own performance review.

The Program Manager will determine if the opportunity exists to cross-train employees so that positions can be covered in emergency situations.

13.7.0 TECHNICAL AIDS

QF002 Organizational Chart Form
QF003 Job Description and Qualification Form
QF006 Annual Employee Performance Evaluation Form

13.8.0 EXPLANATORY NOTE

N/A

14.0 DOCUMENT CONTROL AND RETENTION

14.1.0 PURPOSE

The purpose of this section is to describe the record and document control program and to ensure its continued efficiency through the internal audit process.

14.2.0 POLICY

All Quality Procedures are written to comply with GCT policy established in the Quality Manual section with which this section corresponds and ISO/IEC 17065, ISO/IEC 17025, and ISO/IEC 17020.

14.3.0 APPLICATION

This section is performed by the Program Manager.

14.4.0 DEFINITIONS

Source Documents – the document in currently in use which is either in Word or Excel format
Published Documents – source documents which are converted to a PDF document and published on the GCT website

14.5.0 REFERENCES

ISO/IEC 17065:2012(E) Section 7.12, 8.3, 8.4
ISO/IEC 17025:2017(E) Section 7.11, 8.3, 8.4

14.6.0 PROCEDURES

14.6.1 DOCUMENT CONTROL

The document control program shall have as its objective, the continued functionality, availability, relevance, security, and economical operation of all documents used by GCT. The document control program shall be administered by the Program Director and the Deputy Program Director.

The document control program shall have at a minimum a system in place to:

1. Track the progressive changes to documents to ensure that only current documents are in place using the following steps:

    a) Source documents are maintained in the Source Documents Folder for the document type and no changes are allowed to the original source documents without approval from the Program Manager.
    b) When changes are contemplated to a source document, the GCT employee shall create a new document with the same name plus “-1” added to the end of the document.

c) The changes are reviewed by the Program Manager and Deputy Program Manager. If the changes are approved, the new document will be saved over the source document. The old document will remain in the previously published Quality Procedures booklet.
d) The new source document will then be published during next year's update.
e) If the document change requires immediate implementation, the booklet will be updated as a supplemental booklet to the current year booklet.

2. Maintain the security measures and back-up control so that documents can be replaced in case of fire or theft.

3. Periodically review all documents to ensure functionality and relevance of GCT's documents.

4. Convert to electronic documents whenever possible and transition to replacing paper documents with electronic ones.

5. Insure availability of relevant documents to employees and customers of GCT.

6. Identify confidential records and differentiate them from records that are not confidential and have electronic versions of the records shielded from unauthorized users.

7. Scan documents submitted to GCT so the documents will be available on the GCT Dropbox document management system.

8. Ensure any documents on the website are the correct version of the document and document the review in GCT Master File List.

9. Arrange to store paper confidential records in secure areas and lockable file cabinets.

10. Document the correction of mistakes in records.

11. Compliance with GCT's Quality Policy Manual, Quality Procedures, ISO/IEC 17065, ISO/IEC 17025, and ISO/IEC 17020.

12. Compliance with all federal, state, and local laws

14.6.2 CORRECTION OF DOCUMENTS

When mistakes occur in records, they shall be corrected as follows:

1. Written Records – each mistake shall be crossed out with a single line, not erased, made illegible, or deleted, and the correct value entered alongside. All such alterations to records shall be signed or initialed by the person making the correction.

2. Electronic Data – electronic data are corrected pursuant to Section 14.6.1 of this document

14.6.3 GCT DROPBOX DOCUMENT STORAGE

The Program Manager and Deputy Program Manager shall ensure documents stored in the GCT Dropbox filing system are properly named as follows:

1. The documents are correctly named and placed in the correct folder. The formats shall be as follows:

    a) Documents without SPE Numbers:

    Date.Document Name or Description

    b) Documents with SPE numbers shall be added as follows:

    SPEXXX.Date.Document Name or Description

    c) Date formats shall always be numerical in the form YEAR.MO.DAY.

14.6.4 GCT HEADER AND FOOTERS

All documents generated by GCT shall have a header and footer placed on the document to identify the document and to determine the most current version of the document.

1. Header

    GCT GULF COAST TESTING, LLC

    Document Description

    The logo shall have the dimensions of 0.53 X 1.24. The document description font shall be Arial, and the font size shall be 18 and bold.

2. Footer

Published [Date] Replaces [Date]	page/total pages	If Printed Document May Be Out of Date Document Number and Name

    The font shall be Arial, and the font size shall be 8.

3. Page Layout

Top: 1”	Bottom: 1”
Left: 1”	Right: 1”
Gutter: 0	Gutter Position: Left
Header: 0.3”	Footer: 0.3

14.6.5 DOCUMENT RETENTION OF CERTIFICATION DATA

GCT retains documents to meet the requirements of:

a) ISO/IEC 17065:2012(E) and ISO/IEC 17025:2017(E)
b) The Standards
c) Federal, State, and Local Agencies

If there are no requirements regarding the retention of a document, GCT will retain the document for a minimum of seven years.

14.6.5 DOCUMENTATION OF ANALYTICAL EQUIPMENT

The Deputy Program Manager maintains a master list of equipment used by GCT for the generation of test results as well as a master list of computer software used for data handling and processing. All analytical equipment is uniquely identified with a GCT number and a manufacturer serial number.

If equipment is required to be calibrated, the calibration records shall be maintained pursuant to the requirements of ISO/IEC Standard 17025 or applicable federal/state regulations. The calibration records shall include the following, where applicable:

a) The identity of the equipment, including software and firmware version.
b) the manufacturer's name, type identification, and serial number.
c) evidence of verification that the equipment conforms with specified requirements.
d) the current location of the equipment.
e) calibration dates, the results of calibrations, adjustments, acceptance criteria, and the due date of the next calibration or the calibration interval.
f) documentation of reference materials, results, acceptance criteria, relevant dates, and the period of validity.
g) the maintenance plan and maintenance to date, where relevant to the performance of the equipment; and
h) details of any damage, malfunction, modification to, or repair of the equipment

14.6.6 DOCUMENT RETENTION OF DATA RECEIVED FROM LABORATORIES

GCT retains records of original observations, derived data, and sufficient information to establish an audit trail, calibration records, staff records and a copy of each test report or calibration certificate issued for seven years. The records shall include the identity of personnel responsible for the sampling, performance of each test and/or calibration and checking of results.

Contract laboratories will retain records of original observations, derived data, and sufficient information to establish an audit trail, calibration records, staff records for three years. Test reports, calibration records, and calibration certificates will be retained for seven years.

14.6.7 RELEASE OF CONFIDENTIAL INFORMATION

In the event GCT is required to release confidential information, either by legal authority or contractual obligations, GCT shall notify the client of the information prior to the information being released.

14.6.8 ELECTRONIC SIGNATURE POLICY

An electronic signature is a generic, technology-neutral term for the various ways that an electronic record can be signed, including a digitized image of a signature, a name typed at the end of an e-mail message by the sender, a biometric identifier, a secret code or PIN, or a digital signature.

Electronic signature is used by GCT as a means of attestation of electronic documents, emails, and other computer-generated documents. Properly executed electronic signatures are considered legally binding to signify completeness as intended by the signer.

It is the policy of GCT to accept electronic signatures as defined within this policy for author validation of documentation, content accuracy and completeness with all the associated ethical, business, and legal implications.

14.6.9 PUBLIC RECORDS

GCT maintains the following documents on the website or available upon request:

a) information regarding GCT's certification process, including evaluation procedures, rules and procedures for granting, for maintaining, for extending or reducing the scope of, for suspending, for withdrawing or for refusing certification;
b) general information on the fees charged to applicants and to clients;
c) a description of the rights and duties of applicants and clients, including requirements, restrictions or limitations on the use of the certification body's name and certification mark and on the ways of referring to the certification granted;
d) information about procedures for handling complaints and appeals.

14.7.0 TECHNICAL AIDS

N/A

14.8.0 EXPLANATORY NOTE

Reserved

15.0 MARKING THE PRODUCT

15.1.0 PURPOSE

The purpose of this section is to describe the proper use GCT's Certification Mark.

15.2.0 POLICY

All Quality Procedures are written to comply with GCT policy established in the Quality Manual section with which this section corresponds and ISO/IEC 17065.

15.3.0 APPLICATION

This section is performed by the Program Manager.

15.4.0 DEFINITIONS

Accreditation Certificate - formal document or a set documents stating that accreditation has been granted for a defined scope

Accreditation Mark (Mark) - legally registered trademark applied by or issued under the procedures of the accreditation system issued by an accreditation body to be used by accredited CABs to indicate their direct conformity with a set of accreditation requirements

Scope of Accreditation - Specific conformity assessment services for which accreditation is sought or has been granted

15.5.0 REFERENCES

NSF/ANSI Standard 40 Informative Annex 2 I-2.1

15.6.0 PROCEDURES FOR USE OF GCT MARK

Certified systems should be designated with the registered GCT Certification Trademark. Only products that have been certified by GCT to be in full compliance with GCT's requirements and have been issued a Certification Certificate may be affixed with the GCT Mark. In addition, the Mark will only be placed on products with a trade designation or model designation shown in the Official Listing. The GCT Mark is pictured in Section 15.7.0 of this document. The following procedure shall be followed relative to use of GCT Certification Mark.

1. The GCT Accreditation Mark and reference to accreditation may only be used once accreditation has been granted.
2. The GCT Accreditation Mark shall be displayed only in the form designated by GCT in the Technical Aid section of this document.
3. The Mark shall be affixed to each product via a data plate and should be clearly visible. The Mark shall indicate the applicable Standard for which accreditation has been granted. If the Certified product does not bear the Mark, a statement will be included in the Official Listing to indicate how the product will be represented as Certified.

4. Permission to use the Mark will be authorized in writing by GCT using the Letter of Authority to Use the Certification Mark.
5. The Mark shall only be placed on Products at authorized production facility locations, unless otherwise authorized in writing by GCT.
6. When there is proof that a product is involved in misuse of The Mark as described by the Quality Manual, corrective actions must be carried out as defined by the Quality Manual. The misuser will be issued a written communication by certified mail using the Letter for Revocation of Use of the Certification Mark Due to Misuse.

15.7.0 TECHNICAL AIDS

QF053.Certification Certificate Form
QF043.Letter of Authority to Use Certification Mark Form
QF044.Letter for Revocation of Use of the Certification Mark Due to Misuse

GCT Certification Trademark

NSF/ANSI Standard ___

15.8.0 EXPLANATORY NOTE

N/A

16.0 LABORATORY TEST METHODS

16.1.0 PURPOSE

The purpose of this section is to ensure the laboratories used by Gulf Coast Testing, LLC comply with ISO/IEC 17065, ISO/IEC 17025, and the Standards.

16.2.0 POLICY

All Quality Procedures are written to comply with GCT policy established in the Quality Manual section with which this section corresponds.

16.3.0 APPLICATION

This section is performed by the Deputy Program Manager.

16.4.0 DEFINITIONS

N/A

16.5.0 REFERENCES

NSF/ANSI Standard 40 Section 8.3.1.2
NSF/ANSI Standard 245 Section 8.3.4
NSF/ANSI Standard 350 Section 8.4.2
NSF/ANSI Standard 385 Section 1.8
APHA/AWWA/WEF, Standard Methods for the Examination of Water and Wastewater
Title 40 Part 136 of the Code of Federal Regulations

16.6.0 PROCEDURES

GCT outsources all laboratory analytical testing. GCT shall manage the outsourced resources in accordance with its evaluation plan. GCT shall:

1. Take responsibility for all activities outsourced.
2. Ensure all SOPs used by laboratories used for Standard testing shall comply with *Standard Methods for the Examination of Water and Wastewater* or to an EPA approved procedure listed in Title 40, Part 136 of the Code of Federal Regulations.

16.7.0 TECHNICAL AIDS

N/A

16.8.0 EXPLANATORY NOTE

N/A

17.0 OUTSOURCED LABORATORIES

17.1.0 PURPOSE

The purpose of this section is to ensure the laboratories used by Gulf Coast Testing, LLC are certified laboratories.

17.2.0 POLICY

All Quality Procedures are written to comply with GCT policy established in the Quality Manual section with which this section corresponds.

17.3.0 APPLICATION

This section is performed by the Deputy Program Manager.

17.4.0 DEFINITIONS

N/A

17.5.0 REFERENCES

ISO/IEC 17065:2012(E) Section 6.2.2, 7.4.2

17.6.0 PROCEDURES

17.6.1 Contract Laboratory Verification

1. GCT shall have a contract with the laboratory similar to QF498.Laboratory Contract.
2. GCT shall monitor the qualifications and assessment of the outsourced laboratory.
3. GCT shall only use certified laboratories with accreditation for each test method used by the laboratory.
4. GCT shall ensure the laboratory is ISO/IEC 17025 certified. If the laboratory is not ISO/IEC 17025 certified, GCT shall audit the laboratory to ensure the laboratory is compliant with ISO/IEC 17025 using QF499 ISO/IEC 17025 Laboratory Audit Form.
5. GCT shall ensure all the reporting done by the laboratory shall include the following information:

    a) a title,
    b) the name and address of the laboratory,
    c) the location of performance of the laboratory activities,
    d) unique identification that all its components are recognized as a portion of a complete report and a clear identification of the end,
    e) identification of the method,
    f) a description, unambiguous identification, and the condition of the sample,
    g) the date of sampling,
    h) the date(s) of performance of the laboratory activity,
    i) the date of issue of the report,
    j) a statement to the effect that the results relate only to the items tested, or sampled,

k) the results with the units of measurement,
l) additions to, deviations, or exclusions from the method,
m) identification of the person(s) authorizing the report, and
n) clear identification when results are from external providers.

17.6.2 Laboratory Chain of Custody

GCT shall send all laboratory samples to the laboratory using QF500.Chain of Custody or similar chain.

17.6.3 Contract Laboratory Monitoring

GCT shall monitor the contract laboratory pursuant to GCT Quality Procedure QP27 Sub-Contractor Monitoring and Assessment.

17.7.0 TECHNICAL AIDS

QF498.Laboratory Contract Document
QF499.ISO/IEC 17025 Laboratory Audit Form
QF500.Chain of Custody

17.8.0 EXPLANATORY NOTE

N/A

18.0 Preparation of an Evaluation Report

18.1.0 PURPOSE

The primary purpose of the Standard Performance Evaluation Report is to document and communicate the performance of the test unit relative to the Standards, or any other changes relative to a Standard.

18.2.0 POLICY

All Quality Procedures are written to comply with GCT policy established in the Quality Manual section with which this section corresponds.

18.3.0 APPLICATION

This section is to be performed by the Program Manager.

18.4.0 DEFINITIONS

N/A

18.5.0 REFERENCES

NSF/ANSI Standard 40 Section 9
NSF/ANSI Standard 245 Section 8.5
NSF/ANSI Standard 350 Section 9
NSF/ANSI Standard 385 Section 6.8, 7.8, 8.7
ISO/IEC 17065 Section 7.4

18.6.0 PROCEDURES

18.6.1 REPORT COMPILATION

Compilation of the report shall be performed at the completion of the wastewater treatment system's performance evaluation for certification. The report shall be compiled by an engineer with experience in wastewater and the Standards using the format of the sample Standard Performance Evaluation Report. This report shall include all the information as required the Standard as well as the following information:

1. Cover page
2. Preface
3. Executive Summary
4. Table of contents
5. Process Description including a description of the unit evaluated, the test protocol, and test chronology
6. Analytical Results
7. Additional Models Certified

18.6.2 APPENDICES

The report shall contain the information required by the appropriate Standard and, at a minimum, the following Appendices:

1. An Appendix containing the Treatment unit information

    a. Drawing with Unit Dimensions
    b. Equipment List
    c. Equipment Specifications

2. An Appendix showing the Performance Testing and Evaluation section of the appropriate Standard
3. An Appendix showing the Analytical Results of the testing
4. An Appendix containing the appropriate manuals
5. Documentation of the Approval of Additional Models (if any)
6. Any additional information required by the Standard

The Program Manager shall review the Standard Performance Evaluation Report for completeness and consistency. Validation by signature and dating shall be performed by the Program Manager and QA/QC Manager on the Certification Certificate.

18.6.3 SUPPLEMENTAL REPORTS

GCT shall prepare a supplemental report for any additional changes to a model or the approval of additional models. The supplemental report will reference the original tested model.

18.6.4 CERTIFICATION LISTING

GCT shall not list a product as certified until the final report or final supplemental report has been completed and QF054 Project Acceptance has been returned.

18.6.5 REPORT DISTRIBUTION

GCT shall send out reports pursuant to the request of the Manufacturer.

18.6.6 REPORT RETENTION

The Program Manager will retain the report as part of the Project File in accordance with Gulf Coast Testing's Record Retention Policy as outlined in the QP014.Record and Document Control Procedure.

18.7.0 TECHNICAL AIDS

QF051.Standard Performance Evaluation (SPE) Report

18.8.0 EXPLANATORY NOTE

N/A

19.0 Installation, Adjustment, and Removal

19.1.0 PURPOSE

The purpose of this section is to describe the procedures for installing or removing equipment to be tested.

19.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065.

19.3.0 APPLICATION

This section will be performed by the Deputy Program Manager.

19.4.0 DEFINITIONS

N/A

19.5.0 REFERENCES

Standards

19.6.0 PROCEDURES

19.6.1 INSTALLATION

The treatment system shall be installed by the manufacturer according to the manufacturer's installation manual. GCT does not install wastewater treatment systems. Using the equipment part list, ensure that all required parts are available.

1. GCT shall inform the manufacturer which testing slot to install the wastewater treatment model.
2. The manufacturer shall install or contract with an installer to install the wastewater treatment model per the manufacturer's installation instructions.
3. The manufacturer shall connect the model to GCT's dosing system and use the electrical connections provided by GCT, if applicable.
4. GCT personnel shall record the installation in the Test Installation/Adjustment/Removal Form, and both the manufacturer and GCT personnel shall sign the form.

19.6.2 ADJUSTMENT

Should the wastewater treatment system require an adjustment permitted by the Standard and/or GCT's policies and procedures, the manufacturer shall make the adjustment, and the adjustment shall be recorded on the Test Installation/Adjustment/Removal Form.

19.6.3 REMOVAL

The wastewater treatment system should be removed according to the instructions from the manufacturer and/or according to the manufacturer's installation manual.

1. Disconnect all pipes, pumps, and electrical components from the tank.
2. Remove unit and coordinate disposal with Client.
3. Record the removal of the unit in the Test Installation/Adjustment/Removal Form.

19.7.0 TECHNICAL AIDS

QF035.Test Installation, Adjustment, Removal Form

19.8.0 EXPLANATORY NOTE

N/A

20.0 Sampling Procedure for Inspections

20.1.0 PURPOSE

The purpose of this section is to describe the procedures for choosing the observations that constitute random samples of the items GCT is sampling.

20.2.0 POLICY

All Quality Procedures are written to comply with GCT policy.

20.3.0 APPLICATION

This section is to be performed by the Program Manager.

20.4.0 DEFINITIONS

Population - All the possible units or elements.

Probability Sampling - A technique used to ensure that every element in a population has an equal chance of being incorporated into the sample.

Sample - A portion of the elements in a population.

Sampling Frame - A listing of the elements in a population.

Systematic Random Sampling - A sampling procedure done through some ordered criteria by choosing elements from a randomly arranged sampling frame.

Stratified Random Sampling - A sampling procedure that recognizes subgroups in a sample. The subgroups within the sampling frame are treated as though they are separate sampling frames.

20.5.0 REFERENCES

ISO/IEC 17020

20.6.0 PROCEDURES

The Program Manager shall determine which sampling procedure is applicable to the inspection and use the appropriate sampling technique.

20.6.1 SYSTEMATIC RANDOM SAMPLING

When the population is homogeneous, a systematic random sampling procedure shall be used. A systematic random sample is taken as follows:

Decide on the sample size. The sample size for all GCT sampling can be found in the respective procedure for the inspection/audit.

1. Determine the population.
2. Divide the sample size into the population to select the elements to be samples.

Example: If the sample size is five (5) and the population is fifty (50), the proportion of 5/50 yields .10 which would be a sample of every 10th element.

20.6.2 STRATIFIED RANDOM SAMPLING

When the population to be sampled is not homogeneous, a stratified random sample is taken as follows:

1. Segregate the population into the different subgroups, i.e. metal tanks, concrete tanks, and poly tanks.
2. Decide on the sample size. The sample size for all GCT sampling can be found in the respective procedure for the inspection/audit.
3. Determine the population of each subgroup.
4. For each subgroup, divide the sample size into the population to select the elements to be samples.

Example: If there are one hundred (100) total tanks and twenty-five (25) are metal and seventy-five (75) are concrete. The metal tank population would be twenty-five (25) and the concrete tank population would be seventy five (75). If the sample size for the metal tanks is five (5) and the population is twenty-five (25), the proportion of 5/25 yields .20 which would be a sample of every 5th metal tank.

20.6.3 RANDOM SAMPLING

When the population to be sampled calls for a random sample, GCT personnel shall utilize the following procedure:

1. The Deputy Director shall determine the range of the sample. Example: If a sample is to be taken in the first thirty days of a test, the range is between one and thirty.
2. The Deputy Director shall ask the Quality Assurance Officer to generate a random number from that range using the Excel random number generator.
3. The Deputy Director shall use that number for the sample collection.

20.7.0 TECHNICAL AIDS

N/A

20.8.0 EXPLANATORY NOTE

N/A

21.0 Equipment Control and Maintenance

21.1.0 PURPOSE

This section describes the calibration, maintenance and control of test and measuring equipment and computer software used in sampling, analysis, and inspection.

21.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

21.3.0 APPLICATION

The Deputy Program Manager is responsible for the performance of this procedure.

21.4.0 DEFINITIONS

N/A

21.5.0 REFERENCES

ISO/IEC 17025 Section 6.4.6, 6.4.7, 6.4.8, 6.4.11, 6.4.13

21.6.0 PROCEDURES

21.6.1 ANALYTICAL EQUIPMENT

The primary equipment operator is responsible for the calibration and or verification of GCT's analytical equipment according to the manufacturer's recommendations. The frequency of the calibration may be determined by the requirements of the Quality Procedure.

21.6.2 INTERMEDIATE CHECKS

The Deputy Program Manager determines the requirements for intermediate checks on calibrated equipment. If such checks are required, they shall be found in the Quality Procedure for the instrument. The Deputy Program Manager determines the requirements for correction factors for measuring equipment.

21.6.3 MAINTENANCE AND REPAIR

The primary equipment operator shall perform maintenance on the equipment pursuant to the manufacturer's specification. The maintenance shall be recorded in the equipment master list by the Deputy Program Manager.

The primary instrument operator will inform the Deputy Program Manager if the equipment needs repair. The Deputy Program Manager will record the repair using the Maintenance Log. This entry will describe the damage, repair, re-calibration information, or reason for not re-calibrating. The Deputy Program Manager will label damaged or improperly working equipment as "Out of Service" until repairs are completed. The damaged equipment will be re-calibrated if the damage was such that the calibration is rendered suspect.

The Deputy Program Manager will select and use an approved subcontractor for all maintenance and repair work.

21.6.4 TEST SOFTWARE

Test software must be verified by demonstration. Any revisions to test software must be verified before use. The primary instrument operator will provide details of software verification.

21.7.0 TECHNICAL AIDS

N/A

21.8.0 EXPLANATORY NOTE

Equipment used for calibration will be used only for calibration unless it can be shown that the performance of the reference standard is not invalidated. If relevant, in-service checks will be made on calibrated equipment between calibration intervals. Equipment used for calibration will be certified by a nationally or internationally recognized authority with standards traceable to NIST.

Minimum

The following equipment records will be maintained:

Record	**Custodian**	Minimum Retention
Master Equipment List	Deputy Program Manager	7 Years
Calibration Record	Deputy Program Manager	7 Years
Maintenance Records	Deputy Program Manager	7 Years
Repair Records	Deputy Program Manager	7 Years
Software Verification Records	Program Manager	7 Years

22.0 Measurement Traceability

22.1.0 PURPOSE

Measurement traceability is a method of ensuring that measurement considers all uncertainties and is an accurate representation of an object being measured. This section describes the calibration, maintenance, and control of calibrated equipment and/or reference standards.

22.2.0 POLICY

All Quality Procedures are written to comply with GCT policy established in the Quality Manual.

22.3.0 APPLICATION

The Deputy Program Manager performs this section.

22.4.0 DEFINITIONS

N/A

22.5.0 REFERENCES

ISO/IEC 17025 Section 6.5

22.6.0 PROCEDURES

22.6.1 ANALYTICAL EQUIPMENT

All analytical equipment shall be calibrated and/or verified according to the manufacturer's specifications. The NIST calibration status of all equipment shall be displayed using calibration stickers. Calibration reports shall be maintained by the Deputy Program Manager in the Equipment Master List.

Any laboratory work done at GCT shall adhere to the following procedures:

1. The equipment user shall ensure that equipment is in current calibration status before use. This includes new and existing equipment.
2. Whenever possible, calibrations shall be made such that measurements can be traceable to NIST standards.
3. The laboratory shall only use approved subcontractors (if required) for calibration services.

22.6.2 REFERENCE MATERIALS

The Deputy Program Manager shall maintain a list of reference standards and record the location of the standards in the Equipment Master List.

Reference standards shall be marked and kept separate from sample storage areas. They shall be kept in a manner to preserve their integrity and used only by laboratory staff. The Deputy Program Manager shall maintain a record of the initial calibration of reference standards, along with handling, transportation, and storage, as necessary.

22.6.3 CHEMICALS AND CONSUMABLES

Chemicals shall only be handled by GCT employees who have been trained in the appropriate procedure. The Deputy Program Manager is responsible for confirming the lot number, storage conditions, and expiration date of chemicals used by GCT.

22.7.0 TECHNICAL AIDS

N/A

22.8.0 EXPLANATORY NOTE

N/A

23.0 PROCUREMENT

23.1.0 PURPOSE

The purpose of this section is to describe the procedures for ensuring that vendors are selected that meet GCT's quality standards and insurance requirements.

23.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

23.3.0 APPLICATION

This section is performed by the Deputy Program Manager.

23.4.0 DEFINITIONS

N/A

23.5.0 REFERENCES

N/A

23.6.0 PROCEDURES

23.6.1 VENDOR QUALIFICATION

The Deputy Program Manager will review a vendor's qualifications. The Deputy Program Manager shall review the following vendor qualifications:

1. Quality of Vendor's Products
2. Products meet GCT's technical and analytical requirements
3. Insurance
4. Shipping or Delivery Time
5. Technical Support
6. Conflict of interest

The Deputy Program Manager shall determine if the vendor meets GCT's qualifications.

23.6.2 VENDOR SELECTION

GCT personnel authorized for procurement may use any vendor on the vendor list provided that:

1. A minimum of two bids are received for items over $1000.
2. If less than two bids are received, approval is required from the Deputy Program Manager.
3. The Program Manager may select any vendor without receiving bids.
4. Bidding is not required for professional contracts. All professional work required by GCT will be determined by Qualification Based Selection.

23.6.3 VENDOR BIDDING PROCESS

For the purposes of this section, a bid is any quotation from a vendor on the GCT vendor list, written or oral, that is binding on the bidder.

23.6.4 VENDOR DISCLOSURE

Vendors are required to disclose, upon request from GCT, if any of their partners, owners, shareholders, principles, or employees have an ownership interest in any supplier whom GCT certifies. Any vendor failing to disclose the information upon request by GCT may be removed from the vendor list.

23.6.5 VENDOR DOCUMENTATION

All purchases by GCT shall be recorded on a purchase order form and all appropriate documentation attached to the purchase order form. The Deputy Program Manager shall retain the form pursuant to GCT's Document Control and Retention Procedure.

23.6.6 PURCHASE OF LABORATORY SUPPLIES

For consumable laboratory supplies, the Deputy Program Manager make the purchase request.

The Deputy Program Manager is responsible for ordering, receiving, and tracking all chemicals and reagents. Upon receipt, each chemical or reagent shall be inventoried by name, vendor, catalog number, lot number, date received, date opened, and inspection date. The Deputy Program Manager shall inspect the Certificate of Analysis, Reference Materials, or other information to ensure the chemicals and reagents meet the minimum requirement of the SOP and then shall be filed in the laboratory records log. The Deputy Program Director shall keep a record of the supplies purchased by the laboratory and shall be maintained pursuant to the Document Control and Retention Procedure.

If the manufacturer provides an expiration date, it shall be recorded on the container. Standards, reference materials, and reagents shall not be used after the expiration date.

23.7.0 TECHNICAL AIDS

N/A

23.8.0 EXPLANATORY NOTE

N/A

24.0 SUBCONTRACTOR SELECTION

24.1.0 PURPOSE

The purpose of this section is to describe the procedures for ensuring that subcontractors are selected that meet GCT's quality standards and insurance requirements.

24.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065.

24.3.0 APPLICATION

The Deputy Program Manager performs this section.

24.4.0 DEFINITIONS

N/A

24.5.0 REFERENCES

Standards
ISO IEC 17025 Section 4.24
ISO/IEC 17065:2012(E) Section 6.2.2

24.6.0 PROCEDURES

24.6.1 SUBCONTRACTOR QUALIFICATION

GCT shall outsource activities only to bodies that meet the applicable requirements of the relevant International Standards and as specified by the certification scheme, or other documents. The Deputy Program Manager will review a subcontractor's qualifications, including:

1. Experience of Sub-Contractor for tasks specified by GCT
2. Proper Licensing, Registration, and Accreditation
3. Insurance
4. If appropriate, knowledge of Standards
5. If analytical labs, ISO 17025 compliant
6. Potential Conflicts of interest

24.6.2 SUBCONTRACTOR SELECTION

The Deputy Program Manager is responsible for the selection of subcontractors. The Program Manager may select any subcontractor on GCT's Subcontractor list form.

24.6.3 SUBCONTRACTOR DISCLOSURE

Subcontractors are required to disclose, upon request from GCT, if any of their partners, owners, shareholders, principles, or employees have an ownership interest in any

supplier whom GCT certifies and sign GCT's Consulting and Subcontractor Agreement form. Any vendor failing to sign these agreements shall not be allowed to work for GCT. Additionally.

24.6.4 CONFIDENTIALITY

Contractors acting on GCT's behalf shall keep confidential all information obtained or created during the performance of their activities, except as required by law.

24.7.0 TECHNICAL AIDS

N/A

24.8.0 EXPLANATORY NOTE

N/A

26.0 MEASUREMENT OF UNCERTAINTY

26.1.0 PURPOSE

This section describes the process for the estimation of measurement uncertainty.

26.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

26.3.0 APPLICATION

This section is to be performed by the Quality Assurance Officer.

26.4.0 DEFINITIONS

Measurement of Uncertainty – a parameter associated with the result of a measurement that characterizes the dispersion of the values that could reasonably be attributed to the measurement. The uncertainty generally includes many components which may be evaluated from experimental standard deviations based on repeated observations (Type A evaluation) or by standard deviations evaluated from assumed probability distributions based on experience or other information (Type B evaluation).

Coverage Factor – the number that is multiplied by the standard uncertainty to produce an uncertainty estimate that will contain a large fraction of all the values that might be obtained on a test.

26.5.0 REFERENCES

N/A

26.6.0 PROCEDURES

26.6.1 ESTIMATING UNCERTAINTY

26.6.1.1 RELATIVE STANDARD DEVIATION OF LAB CONTROL SAMPLES

1. Perform spiked determinations at different concentrations including tolerance limits
2. Calculate concentration and percent recovery
3. Calculate the standard deviation (S) and relative standard deviation (RSD) on results where the process is in statistical control (no outliers)
4. Calculate standard deviation at 95% confidence level as follows:

   $U = k \cdot RSD$ where U=uncertainty
   K=coverage factor
   RSD=Relative Standard Deviation
5. Calculate the measurement uncertainty interval for a measured value as follows:

Interval = U•c where C=concentration

26.6.1.1 ROOT SUM SQUARE METHOD

1. Clearly define what is being measured
2. Review the method and identify every possible source of uncertainty
3. Review the sources and determine whether or not the components are included when running lab control samples
4. Quantify all components including but not limited to:

    a. Method of validation studies
    b. Information from published methods or textbooks
    c. Calibration certification
    d. Manufacturer's specifications
    e. Experience

5. Consider the components. Assume the components are independent. Every component does not have to be evaluated if it is deemed insignificant. Components less than a fifth of the largest component can be eliminated.
6. Combine the components by squaring all the independent components, adding them, and take the square root of the sum. This is the combined standard uncertainty.
7. Expand the combined standard uncertainty by multiplying the combined uncertainty by a coverage factor based on the level of confidence needed. For a 95% confidence level, k=2.

26.6.2 REPORTING UNCERTAINTY ESTIMATES

The extent of the reporting of the uncertainty depends on the needs of the client, the specifications of the test, and the intended use of the result. Documentation shall be required when reporting.

If reported, the uncertainty is reported to the same number of significant figures as the result and in the same units.

26.7.0 TECHNICAL AIDS

N/A

26.8.0 EXPLANATORY NOTE

N/A

27.0 SUBCONTRACTOR MONITORING AND ASSESSMENT

27.1.0 PURPOSE

The purpose of this section is to describe the procedures for ensuring that subcontractors are monitored and regularly assessed to meet GCT's quality standards and insurance requirements.

27.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

27.3.0 APPLICATION

The Deputy Manager performs this section.

27.4.0 DEFINITIONS

Subcontracting and *outsourcing* are considered to be synonymous.

27.5.0 REFERENCES

ISO/IEC 17065 – Section 6.2.2.2

27.6.0 PROCEDURES

27.6.1 SUBCONTRACTORS ASSESSMENT

The Deputy Program Manager, with consultation from the Laboratory and Field Technical Manager as appropriate, will review a subcontractor's qualifications. The Deputy Program Manager shall review the following qualifications of the subcontractor:

1. Experience in area of work
2. Insurance (Subcontractor will supply proof of insurance)
3. Understanding GCT's technical and analytical requirements
4. Understanding of GCT's quality system
5. Safety Record (Subcontractor will supply safety policy if applicable)
6. Demonstrated continued education in area of technical expertise if applicable
7. Conflict of interest

If, in the sole discretion of the Deputy Manager or Program Manager, the subcontractor meets GCT's qualifications, the subcontractor shall be added to GCT's subcontractor list.

27.6.2 SUB-CONTRACTOR MONITORING

GCT personnel responsible for the subcontracted work shall monitor the subcontractor on an annual basis. Subcontractors shall be monitored for the following:

a. Expertise of Contractor's personnel
b. Subcontractor's adherence to GCT's Quality Manual and Quality Procedures (if applicable)
c. Subcontractor's compliance with health and safety regulations

GCT personnel, on an annual basis, shall fill out the Subcontractor Monitoring Form as evidence of their monitoring activities.

27.6.2 SUB-CONTRACTOR DISCLOSURE

Subcontractors shall sign the Consulting and Subcontractor Agreement Form. Vendors are required to disclose, upon request from GCT, if any of their partners, owners, shareholders, principles, or employees have an ownership interest in any Client whom GCT certifies. Any subcontractor failing to disclose the information upon request by GCT may be removed from the subcontractor list.

27.7.0 TECHNICAL AIDS

QF009.List of GCT Subcontractors
QF011.Subcontractor Monitoring Form

27.8.0 EXPLANATORY NOTE

N/A

28.0 NOTIFICATION TO CLIENTS OF NON-CONFORMITIES

28.1.0 PURPOSE

The purpose of this section is to ensure that clients are promptly notified of any non-conformities identified during the certification process.

28.2.0 POLICY

All Quality Procedures are written to comply with the Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

28.3.0 APPLICATION

This section is performed by the Deputy Program Manager.

28.4.0 DEFINITIONS

Non-conformity refers to the non-fulfillment of a requirement related to the certification process. This could involve deviations from specified standards, procedures, or regulations that are identified during audits, inspections, or reviews of client documentation.

28.5.0 REFERENCES

ISO/IEC 17065:2012(E) Section 7.4.6

28.6.0 PROCEDURES

28.6.1 information collection

GCT employees shall routinely capture data from all GCT's testing and evaluation activities, and capture data from the initial and compliance audits.

28.6.2 analyzing information

GCT employees shall identify non-conformities during audits, inspections, or reviews of client documentation based on the requirements of ISO/IEC 17065, GCT's policies and procedures, and the applicable Standard.

28.6.3 reporting a non-conformance

Non-conformities shall be documented using the Corrective Action form. The non-conformance shall be approved by the Program Manager prior to sending the form to the client.

The Corrective Action Form shall include the following information:

1. Description of the non-conformity
2. Reference to the relevant certification requirements
3. Required corrective action

4. Deadline for implementing corrective action

28.6.4 FOLLOW-UP AND VERIFICATION

The Deputy Program Manager shall follow up with the client to ensure that corrective actions are implemented within the specified deadline and verify the effectiveness of the corrective actions during subsequent audits or inspections. If the corrective actions are deemed insufficient, the Deputy Program Manager shall inform the Program Manager to determine further actions.

28.6.5 Documenting the Preventive Action

The Corrective Action Form will be used to assure that the preventive action is correctly implemented and is appropriate to the impact of the problem encountered. The corrective action will be implemented in a timely manner, and the QA/QA Manager shall confirm the effectiveness with a follow-up audit.

28.7.0 TECHNICAL AIDS

QF050.Corrective Action Form

28.8.0 EXPLANATORY NOTE

N/A

29.0 USE OF THE ANAB MARK

29.1.0 PURPOSE

The purpose of this section is to outline the procedure and conditions governing the use of the ANSI National Accreditation Board (ANAB) name and accreditation symbols and claims of accreditation by ANAB-accredited conformity assessment bodies (CABs) by GCT or a GCT certified manufacturer.

29.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065.

29.3.0 APPLICATION

This section is performed by the Deputy Program Manager.

29.4.0 DEFINITIONS

Accreditation Mark - Legally registered trademark applied or issued under the procedures of the accreditation system

CAB - ANAB-accredited conformity assessment body

Certified Client - A client that has been certified by GCT as meeting the requirements of a specific standard

29.5.0 REFERENCES

ANAB-PR-1018 - Policy on Use of ANAB Accreditation Symbols and Claims of Accreditation Status

29.6.0 PROCEDURES FOR GCT DISPLAYING THE ANAB MARK

29.6.1 GENERAL REQUIREMENTS

29.6.1.1 ANAB Accreditation Symbols and references to ANAB accreditation may be used only after accreditation has been granted. While GCT is accredited by ANAB, GCT shall have the right to use the accreditation certificate (including the scope of accreditation) and the ANAB Accreditation Symbol, and reference ANAB accreditation, in accordance with this policy.

29.6.1.2 GCT shall use only the ANAB Accreditation Symbol provided to it by ANAB. References to or descriptions of accreditation shall include, at a minimum:

a. Applicable accreditation program (e.g., testing, calibration, product certification, management systems, personnel certification)
b. Accreditation standard to which the CAB is accredited, and
c. Statement that the accreditation is issued by ANAB.

29.6.1.3 ANAB Accreditation Symbols and references to ANAB accreditation shall be used only under the name or registered trade name of the legal entity that holds the accreditation.

29.6.1.4 When GCT refers to accreditation in any medium – including but not limited to advertising, marketing materials, quotes, proposals, certificates, reports, stationery, and literature in hard copy or electronic format or on websites – by use of an ANAB Accreditation Symbol, ANAB business name, or ANAB business acronym, GCT shall ensure:

a. The accreditation symbol or statement used is specific to the applicable ANAB accreditation program.
b. The symbol, name, or acronym is used only in relation to activities within the scope of accreditation and not associated with other activities in which GCT may be involved.
c. Such reference is neither misleading nor includes any unauthorized representation of accreditation status.
d. Such reference includes no implication that ANAB accepts responsibility for or approves of results or any opinion or interpretation derived from those results.
e. Such reference includes no implication that a product, item, process, service (or any part of it), management system, or person is approved or certified by ANAB; and
f. The accreditation symbol is not affixed on its own to any product or its labeling or packaging.

29.6.1.5 GCT shall not use the ANAB Accreditation Symbol or make references to ANAB accreditation in any way that brings ANAB into disrepute and shall not make any statement regarding their accreditation that ANAB may consider inaccurate, misleading, or unauthorized.

29.6.2 TECHNICAL REQUIREMENTS

29.6.2.1 The ANAB accreditation mark shall be displayed only in an appropriate form and size as determined by ANAB-PR-1018. The ANAB accreditation mark shall only be displayed in the form, scaling, and color detailed by ANAB in ANAB-PR-1018.

29.6.2.2 Whenever GCT uses the ANAB Accreditation Mark, GCT shall print its accreditation number (203) centered immediately under the ANAB Accreditation Mark, as demonstrated below.

29.7.0 TECHNICAL AID

ANAB-PR-1018A

29.8.0 EXPLANATORY NOTE

N/A

30.0 IMPARTIALITY

30.2.0 PURPOSE

This Quality Procedure explains GCT's approach towards impartiality and describes the mechanisms in place which shall prevent us from partial decision-taking. Impartiality is a fundamental element of any credible certification system. The overall aim of certification is to give confidence to all parties that a product or a management system fulfills specified requirements. The value of certification is the degree of public confidence and trust that is established by an impartial and competent assessment by a third-party. Being impartial, and being perceived to be impartial, is necessary for a certification body to deliver certification that provides confidence.

GCT is committed to impartiality in certification activities and has the overall responsibility to ensure that certification is done in accordance with the ISO/IEC 17065, ISO/IEC 17025, and GCT's Quality Procedures.

30.3.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065, and ISO/IEC 17025.

30.4.0 APPLICATION

The Program Manager is responsible for managing conflict of interest. The Program Manager gathers possible cases, ensures that a decision on each case is taken and documents the proceedings.

30.5.0 DEFINITIONS

Impartiality - when decisions are based on objective criteria, rather than based on bias, prejudice, or preferring the benefit of one party over another. Impartiality is the result of the actual and perceived presence of objectivity.

Objectivity - means that conflicts of interest do not exist or are resolved so as not to adversely influence subsequent activities of the certification body.

Partiality - when the certification body's decisions are not based on objective evidence of conformity (or non-conformity), but instead its decisions are influenced by other interests or by other parties. Partiality may arise where there are:

1. Self-interest threats: threats that arise from a person or body acting in their own interest. By way of example, a concern related to certification, as a threat to impartiality, would be financial self-interest.
2. Self-review threats: threats that arise from a person or body reviewing the work done by themselves. Auditing the client to whom the certification body provided consultancy would be a self-review threat.
3. Familiarity (or trust) threats: threats that arise from a person or body being too familiar with or trusting another person instead of seeking audit evidence.

4. Intimidation threats: threats that arise from a person or body having a perception of being coerced openly or secretively, such as a threat from a person in a position of power, such as a superior in the organization. A relationship that threatens the impartiality of the certification body can be based on ownership, governance, management, personnel, shared resources, finances, contracts, marketing and payment of a sales commission or other inducement for the referral of new clients.

30.6.0 REFERENCES

ISO/IEC 17065, Section 4.2 and 5.

30.7.0 PROCEDURES

30.7.1.1 Pro-Active Reporting

A crucial step in safeguarding the impartiality of our certification services is to find an appropriate way to identify, analyze and document the possibilities for conflict of interests arising from provision of certification and the provision of other services – both related to, and independent from, GCT's certification services.

The basis of this Quality Procedure is the attached Conflict of Interest Risk Matrix which more precisely sets out possible risks, the assessed severity of the risk and the tools employed to mitigate the risk. This Risk Matrix will change from time to time, as the nature and severity of risks change. It is reviewed by GCT employees on an annual basis as part of the yearly Management Review.

Staff is asked to report to the Quality Manager:

1. Any cases where staff has identified political, financial, or other type of interference in the certification decision-making.
2. Any other case where they identified a potential conflict of interest; examples for this can be found in the Conflict-of-Interest Risk Matrix.
3. The cases should be referred to the Program Manager in writing. If the concerned staff member feels uncomfortable formalizing his/her concerns in writing (e.g., email or report), he/she can also ask for a confidential talk with the Program Manager.

30.7.1.2 Impartiality by Management

In the event management is not impartial in GCT's scheme, employees shall take independent action to preserve impartiality while respecting the client's right to confidentiality. Such independent action may include, but is not limited to, reporting to other management, regulators, auditors, and accreditors. Additionally, an input from management in conflict with the impartiality requirements of ISO/IEC 17065 shall not be followed.

30.7.1.3 Random Case Review

In addition to the above, the Program Manager will have the internal auditor perform a random check on two (2) cases that were not brought proactively. This will be

done during the Internal Audit. The two (2) cases should be drawn according to the following parameters:

1. An extraordinary certification result was achieved by a client's product.
2. The number of non-conformities raised during an audit dropped significantly from one year to another.
3. An exception has been granted to the client. Both certification and additional services have been sold to a client.

30.8.0 TECHNICAL AIDS

QF014.GCT Conflict of Interest Reporting Form
QF015.Risk Matrix
QF501.17065 Checklist for Impartiality Review

30.9.0 EXPLANATARY NOTES

N/A

31.0 Data Integrity

31.1. PURPOSE

The purpose of the Data Integrity Procedure is to develop a proactive program for the prevention and detection of improper, unethical, or illegal actions, to emphasize the importance of ethics in the performance of all analytical work, and to obtain the commitment of laboratory staff to the principle that all analyses shall be performed in a controlled and documented manner.

31.2. POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065, ISO/IEC 17025, and ISO/IEC 17020.

31.3. APPLICATION

The process of data integrity is under the responsibility of the QA/QC Manager.

31.4. DEFINITIONS

Data Integrity - Data that has been produced to the ethical and legal standards of the regulatory agencies and the wastewater industry, which is traceable and defensible.

Data Integrity Program - A system which combines technical and ethics training with active procedures designed to prevent unethical laboratory practices.

31.5. REFERENCES

ISO/IEC 17025:2017 (E) Section 7.11.3

31.6. PROCEDURES

31.6.1. ETHICS TRAINING

Ethics training is a required part of new employee orientation and is provided on an annual basis for all laboratory managers and staff by the GCT Program Manager. Initial training during orientation includes the overall organizational mission and its relationship to the absolute need for honesty and full disclosure in all analytical reporting and record-keeping.

The initial orientation is followed-up by the QA/QC Manager with the specifics of GCT's data integrity plan. Quality is reviewed with respect to proper procedure, data qualifiers, and adequacy of record keeping. The QA/QC Manager will

disclose that reports and the data generated to support them are subject to routine in-depth review.

The consequences to an employee found to be in violation of the data integrity plan may result in immediate termination, and/or civil/criminal prosecution. GCT's response to infractions of the data integrity plan will be discussed and employees shall understand that infractions will be investigated in a detailed way. Employee attendance will be documented in the training manual.

31.6.2. DATA INTEGRITY AND ETHICS AGREEMENT

Following initial ethics training and on-going annual training for laboratory managers and staff, all GCT employees shall sign a written ethics agreement. The agreement states that the signers will not engage in any unethical practices with respect to data integrity nor will they tolerate improper behavior in others if it is observed or suspected. By signing, GCT employees acknowledge their duties in upholding the spirit and intent of the data integrity system and in effectively implementing the specific requirements of the plan.

31.6.3. DOCUMENTATION

All data integrity incidents must be documented, including investigative findings and disciplinary actions. Corrective actions are recorded. If client disclosure is determined to be necessary by the Program Manager, then such disclosures and outcomes are recorded.

All data integrity documents, plans, personal records and records of investigations shall be maintained for a period of five years. Documents are subject to GCT's Document Control and Retention Procedure.

31.6.4. CONFIDENTIALITY

The QA/QC Manager shall assure confidentiality and a receptive environment in which to privately discuss personal ethical dilemmas with staff or observed unethical practices by other members of the staff. In the event the QA/QC Manager determines the conduct of the lab employee compromises the integrity of the GCT laboratory, the QA/QC Manager shall immediately notify the Program Manager.

31.6.5. DATA INTEGRITY FOR MANAGEMENT

In the event management does not follow data integrity in GCT's scheme, employees shall take independent action to preserve data integrity while respecting the client's right to confidentiality. Such independent may include, but is not limited to, reporting to other management, regulators, auditors, and

accreditors. Additionally, an input from management in conflict with the data integrity requirements of this procedure shall not be followed.

31.7. TECHNICAL AIDS

QF013.Data Integrity and Ethics Agreement

31.8. EXPLANATORY NOTE

NA

32. MANAGEMENT OF COMPETENCIES AND TRAINING

32.1. PURPOSE

This section describes the policy for establishing, implementing, and maintaining the competencies of personnel involved in the GCT certification process including but not limited to, GCT's Quality Procedures, ISO/IEC 17065, and ISO/IEC 17025. This Standard Operating Procedure applies to all GCT employees. Additionally, section describes the procedures for ensuring that employees are appropriately trained and competent to perform GCT's certification activities.

32.2. POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

32.3. APPLICATION

Training is performed by the Program Manager and Deputy Program Manager. The process of managing competencies is the responsibility of the Deputy Program Manager. The Deputy Program Manager is responsible for GCT's training activities. Additionally, the Deputy Program Manager is responsible for raising the awareness of employees to increase their understanding of Quality Management System issues and the relevance of those issues to GCT's certification activities.

32.4. DEFINITIONS

Competency Training – the training of employees to enable them to fulfil their duties in a competent manner and consistent with the aims of GCT Certification Policy, and management systems

Awareness Training – raising the certification awareness of employees to increase their understanding of certification issues and the relevance of those issues to GCT's activities and services

32.5. REFERENCES

ISO/IEC 17065, Section 6.1.2.1
ISO/IEC 17025 Section 5.2
ISO/IEC 17065 Section 6.1

32.6. PROCEDURES

32.6.1. DETERMINATION OF COMPETENCIES

The Deputy Program Manager shall determine the criteria for the competence of personnel for each function in the certification process, considering the requirements of the Standards. The criteria for competencies are identified in the Quality Manual.

32.6.2. IDENTIFICATION OF TRAINING NEEDS

The Deputy Program Manager shall identify the training needs of all new and existing personnel within the organization and shall ensure personnel receive training on GCT's certification policies and function of GCT's management systems, particularly ISO/IEC 17065, GCT's Quality Manual, and GCT's Quality Procedures and the potential consequences of departing from those procedures.

32.6.3. DEMONSTRATION OF COMPETENCY

The demonstration of competency shall be documented using the training procedures in this document.

32.6.4. AUTHORIZATION OF PERSONNEL FOR FUNCTIONS IN CERTIFICATION PROCESS

The Deputy Program Manager shall determine and authorize personnel for the various functions in the certification process. The authorizations shall be documented in GCT's Quality Procedures and in GCT's organization chart.

32.6.5. PERFORMANCE MONITORING

Performance Monitoring shall be documented using the training procedures in this document.

32.7. TRAINING EMPLOYEES

32.7.1. NEW EMPLOYEE TRAINING

The Deputy Program Manager is responsible for ensuring that all new GCT employees are competent to perform GCT's certification activities. The Deputy Program Manager may assign appropriate personnel the task of providing training and guidance to the employees. The Deputy Program Manager shall provide appropriate supervision during the training period. The training will take place over a 30-day period or extended at the discretion of the Deputy Program Manager. work activities. This training will include a briefing on the GCT Quality Management System, Ethics, Computer Security, Facility Security and the Certification Program. The goal of the training is to evaluate the skills of the employee so the employee may independently perform their activities.

32.7.2. MANDATORY TRAINING OF ALL EMPLOYEES

The GCT employees will study the material provided by the Deputy Program Manager which shall include, but not be limited to, Data Ethics, Confidentiality, ISO/IEC 17065, ISO/IEC 17025, ISO/IEC 17020, and the Standards. The Deputy Program Manager or their designee shall explain the material to the employees.

32.7.3. ON-THE-JOB TRAINING OF ALL EMPLOYEES

On-the-job describes training that is given in a normal working situation, typically conducted by one employee for another, using the actual tools, equipment, documents, or materials that they will use when fully trained.

32.7.4. TRAINING DOCUMENTATION

All training will be documented in the Training Documentation Log and signed by the trainer (if applicable), the Deputy Program Manager, and the employee.

32.8. TECHNICAL AIDS

QF002.Organization Chart
QF003.Job Descriptions
QF006.Annual Employee Performance Evaluation
QF007.GCT Training Documentation Log

32.9. EXPLANATORY NOTE

N/A

33.0 SAMPLE COLLECTION AND PROCESSING

33.1.0 PURPOSE

This section describes the activities for sample collection by GCT employees.

33.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

33.3.0 APPLICATION

This section is performed by the Deputy Program Manager.

33.4.0 DEFINITION

N/A

33.5.0 REFERENCES

ISO/IEC 17025:2017(E) Section 7.3, 7.4

33.6.0 PROCEDURES

33.6.1 SAMPLE COLLECTION

Samples shall be collected as required by the Standards or client. The samples shall be collected by or under the supervision of GCT personnel. GCT shall have a sampling plan and method prior to sample collection. The sampling method shall describe:

a) The selection of samples or sites;
b) the sampling plan;
c) the preparation and treatment of sample(s) from a substance, material or product to yield the required item for subsequent testing.

33.6.2 SAMPLE RECORDS

The laboratory shall retain records of sampling data that forms part of the testing that is undertaken. These records shall include, where relevant:

a) reference to the sampling method used;
b) date and time of sampling;
c) data to identify and describe the sample (e.g. number, amount, name);
d) identification of the personnel performing sampling;
e) identification of the equipment used;
f) environmental or transport conditions;
g) diagrams or other equivalent means to identify the sampling location, when appropriate;

h) deviations, additions to, or exclusions from the sampling method and sampling plan.

33.6.3 SAMPLE PROCESSING

GCT records every sample in the GCT Water Quality Log.

GCT follows Standard Methods or EPA guidelines for tests on samples done by GCT for the transportation, receipt, handling, protection, storage, retention, and disposal, including all provisions necessary to protect the integrity of the test and to protect the interests of the GCT and the customer.

GCT uses a chain of custody on all items transported to external laboratories. Precautions shall be taken to avoid deterioration, contamination, loss or damage to the item during handling, transporting, storing/waiting, and preparation for testing or calibration. Handling instructions provided with the item shall be followed.

33.7.0 TECHNICAL AIDS

QF303.Daily Sample Log
Chain of Custody

33.8.0 EXPLANATORY NOTE

N/A

34.0 CALIBRATION PROCEDURE

34.1.0 PURPOSE

This section describes the activities for calibration of GCT equipment.

34.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

34.3.0 APPLICATION

This section is performed by the Deputy Program Manager.

34.4.0 DEFINITIONS

N/A

34.5.0 REFERENCES

ISO/IEC 17025:2017 (E) Section 6.4

34.6.0 PROCEDURES

34.6.1 LIQUID GLASS THERMOMETERS

34.6.1.1 All thermometers are calibrated using a NIST traceable thermometer. Record the model number and calibration dates on the Thermometer Calibration Log, QF405.

34.6.1.1 Ensure all thermometers are labeled with a thermometer specific identification number. Record the thermometer identification number on the Thermometer Calibration Log, QF405.

34.6.1.2 Place the NIST certified thermometer and all laboratory liquid glass thermometers (refrigerator) in a beaker of ice water.

34.6.1.3 Ensure no thermometers are touching each other during or resting on the bottom of the beaker during the calibration. Allow all thermometers to equilibrate for a minimum of 20 minutes.

34.6.1.4 Following equilibration, record all thermometer readings to the nearest whole degree (^{o}C) in the Thermometer Calibration Log.

34.6.1.5 Should a thermometer reading be more or less than the desired reading, the thermometer will be assigned a correction factor.

NOTE: If the correction factor is more than +/- 2 ^{o}C, the thermometer will be taken out of service and disposed of properly.

34.6.2 DOSING CAN VOLUMES

34.6.2.1 Using a 1-gallon polypropylene beaker measure five (5) gallons into the dosing can.

34.6.2.2 Note the top of the liquid level in relation to the drainpipe. The five gallons should come up to the top of the PVC drainpipe located inside the bucket. If the five-gallon test volume matches the PVC drainpipe in the dosing can, record the result in the GCT Calibration Logbook.

34.6.2.3 If the five-gallon test volume does not match the PVC drainpipe in the dosing can, make the necessary adjustments to the length of the PVC drainpipe. Record the adjustment in the Dosing Can Calibration Log, QF411.

34.6.2.4 Repeat 34.6.2.1 through 36.2.4 for each test site dosing can.

34.6.3 SPER SCIENTIFIC SOUND METER

34.6.3.1 Use Sper Scientific Acoustical Calibrator 850016 to calibrate the meter. Perform the calibration at temperatures between 15~25°C. The calibrator and meter should be at the same temperature. Record the temperature on the calibration log.

34.6.3.2 Remove the WINDSCREEN and turn on the meter by pressing the POWER button.

34.6.3.3 Turn the acoustical calibrator on to 94.0 dB and place it onto the MICROPHONE.

34.6.3.4 With the meter in FAST response mode and A (dBA) weighting, press and hold the A/C button.

34.6.3.5 Without releasing the A/C button, press and hold the HOLD button. The display will go blank.

34.6.3.6 Release both buttons and sound volume is displayed.

34.6.3.7 Repeat the calibration process until the meter reads the "94.0" ± 0.2.

34.6.3.8 Record the results in Quality Form QF415.

34.7.0 TECHNICAL AIDS

QF405.Thermometer Calibration Log
QF411.Dosing Can Calibration Log
QF415.Sound Meter Calibration Log
Sper Scientific Manual

34.8.0 EXPLANATORY NOTE

N/A

35.0 OILY FILM AND FOAM PROCEDURE

35.1.0 PURPOSE

This section describes the activities to document the visual check for oily film and foam.

35.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

35.3.0 APPLICATION

This section is performed by the Deputy Program Manager.

35.4.0 DEFINITIONS

Oil and grease is the term given to the combination of fats, oils, waxes, and other related constituents found in wastewater which causes a sheen on the surface. A sheen is a shiny or iridescent appearance on the surface of the water. Sheens can be caused by petroleum products finding their way into the water, or they can be the result of naturally occurring phenomena.

Foam is a sticky, brown mass of bubbles that forms on the top layer of water.

35.5.0 REFERENCES

NSF/ANSI Standard 40 Section 8.2.4, 8.4.2.4

35.6.0 PROCEDURES

During the 6-mo testing and evaluation, a total of three effluent samples shall be assessed for oily film and foam. The assessment shall be conducted on effluent composite samples selected randomly during the first phase of design loading (Weeks 1 to 16), the period of stress loading (Weeks 17 to 23.5), and the second phase of design loading (Weeks 23.5 to 26). Use the following steps to determine the oily film and foam.

1. Collect a composite sample in a collection jar.

2. Dilute the effluent composite sample to 1:1000 with deionized water.

3. Visually check the sample for oily film or foaming on the surface of the diluted effluent sample.

4. Record the findings on the Oily Film Analytical Data Record.

35.7.0 TECHNICAL AIDS

QF344.Oily Film and Foam

35.8.0 EXPLANATORY NOTE

N/A

36.0 ODOR PROCEDURE

36.1.0 PURPOSE

This section describes the activities to record odor.

36.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

36.3.0 APPLICATION

This section is performed by the Deputy Program Manager.

36.4.0 DEFINITIONS

Wastewater odor is any unpleasant smell that comes from the waste itself or from the process of treating it. Odors can be caused by the anaerobic decomposition of organic compounds in the wastewater and can include sulfur or nitrogen-based compounds, organic acids, aldehydes, and ketones. Some common odors associated with wastewater treatment plants include rotten eggs, ammonia, garlic, and earthy or organic smells.

36.5.0 REFERENCES

NSF/ANSI Standard 40 Section 8.2.4, 8.4.2.3
Standard Methods 2150

36.6.0 PROCEDURES

During the 6-mo testing and evaluation, a total of three effluent samples shall be assessed for odor. The assessment shall be conducted on effluent composite samples selected randomly during the first phase of design loading (Weeks 1 to 16), the period of stress loading (Weeks 17 to 23.5), and the second phase of design loading (Weeks 23.5 to 26). Use the following steps to determine odor:

1. Fill a glass sample jar with DI water (the DI blank).
2. Collect a composite sample.
3. Fill a glass sample jar with the composite sample.
4. Perform the test as soon as possible after sample collection.
5. Assemble five people for the odor test.
6. Allow each of the five people to smell the DI sample and the composite sample and label each one as “Offensive” or “Non-offensive”.
7. Record the findings on the Odor Analytical Data Record.

Note: There are no criteria that these values shall meet.

36.7.0 TECHNICAL AIDS

Quality Form QF343.Odor

36.8.0 EXPLANATORY NOTE

N/A

37.0 FAILURE SENSING DEVICE PROCEDURE

37.1.0 PURPOSE

This section describes the activities to record the ability of the system to possess a mechanism or process capable of detecting failures of electrical and mechanical components critical to the treatment processes, including a high-water signal, and delivering a visible and audible signal to notify the owner or user of the failure.

37.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

37.3.0 APPLICATION

This section is performed by the Deputy Program Manager.

37.4.0 DEFINITIONS

N/A

37.5.0 REFERENCES

NSF/ANSI Standard 40 Section 5.8

37.6.0 PROCEDURES

The Deputy Program Manager shall select three GCT observers.

37.6.1 VISUAL ALARM TEST

37.6.1.1 Disable the audio portion of the alarm.

37.6.1.2 The three observers shall stand 49 feet from the alarm and turn their backs to the alarm such that they cannot see the visual portion of the alarm.

37.6.1.3 The Deputy Program Manager shall randomly select an off or on condition.

37.6.1.4 The Deputy Program Manager shall instruct the observers to face the alarm and ask them to determine if the alarm is on or off.

37.6.1.5 The Deputy Program Manager will then record the responses on GCT Quality Form QF038.

37.6.1.6 Repeat steps 37.6.1.2 through 37.6.1.5 two additional times ensuring that the alarm is off and on at least once during the test.

37.6.2 AUDIBLE ALARM TEST

37.6.2.1 Three observers shall stand 49 feet from the alarm and turn their backs to the alarm such that they cannot see the visual portion of the alarm.

37.6.2.2 Calibrate the Sper Scientific Sound Meter Model 850014 pursuant to QP34, the GCT Calibration Procedure. Measure the ambient noise level where the observers are standing. If the ambient noise level is below 60 dbA, augment the ambient noise with a steady tone between 100 and 1000 Hz.

37.6.2.3 Disable the visual portion of the alarm.

37.6.2.4 The Deputy Program Manager shall randomly select an off or on condition.

37.6.2.5 The Deputy Program Manager shall instruct the observers to face the alarm and ask them to determine if the alarm is on or off.

37.6.2.6 The Deputy Program Manager shall record the responses on GCT Quality Form QF038.

37.6.2.7 Repeat steps 37.6.2.2 through 37.6.2.5 two additional times ensuring that the alarm is off and on at least once during the test.

37.6.2.8 The Deputy Program Manager shall then place the alarm at a distance of 25 feet away from any permanent structure. Using the Sper Scientific Sound Meter, the Deputy Program Manager shall measure the audible portion of the alarm at a distance of 10 feet. The results shall then be recorded on GCT Quality Form QF038.

37.7.0 TECHNICAL AIDS

Sper Scientific Sound Meter Model 850014 Manual
QF038

37.8.0 EXPLANATORY NOTE

N/A

38.0 AERATOR TESTING

38.1.0 PURPOSE

This section describes the activities for the measurement of air pressure and air volume of an aerator pursuant to the Standards.

38.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

38.3.0 APPLICATION

This section is performed by the Deputy Program Manager.

38.4.0 DEFINITIONS

N/A

38.5.0 REFERENCES

NSF/ANSI Standard 40 Section 5.11, 8.1.8, 8.1.9, and 8.1.10

38.6.0 PROCEDURE

38.6.1 Prior to initiation of design loading, the air delivery component, the air compressor, or blower, shall be connected to the system and run for a minimum of 4 hours.

38.6.2 The air pressure shall be measured by a pressure gauge installed near the exhaust port of the air compressor or blower. Record the pressure on GCT Quality Form QF040, Aerator Testing.

NOTE: When it is not possible to measure pressure on the system under test, the measurement may be completed with a separate air delivery component plumbed to a different tank. All plumbing and air distribution components used in the tested system shall be installed with the air delivery component. Potable water or wastewater shall be used. Air distribution outlets or diffusers shall be located at the same depth as in the tested system. The air delivery component shall be run for a minimum of 4 h. Air pressure shall be measured by a pressure gauge installed near the exhaust port of the air delivery component and that reading recorded.

38.6.3 Following the pressure measurement, the air compressor blower shall be plumbed into the Aerator Tester. Adjust the backpressure to the pressure measured in Section 38.6.2 and run the air compressor or blower for a minimum of 4 hours. After the 4-hour minimum run time, ensure the backpressure matches the pressure in Section 38.6.2 and make any necessary adjustments.

38.6.4 Record the air flow rate on GCT Quality Form QF040, Aerator Testing.

38.7.0 TECHNICAL AIDS

QF040.Aerator Testing
QF041.GCT Aerator Testing Device Schematic

38.8.0 EXPLANATORY NOTE

N/A

39.0 WASTEWATER TREATMENT SYSTEM SCALING

39.1.0 PURPOSE

This section describes the activities for scaling up wastewater treatment systems.

39.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17039.

39.3.0 APPLICATION

This section is performed by the Engineering Manager and the Program Manager.

39.4.0 DEFINITIONS

N/A

39.5.0 REFERENCES

NSF/ANSI Standard 40 – Section 1.2, 1.3, 1.4
NSF/ANSI Standard 40 – Section N-1.2
NSF/ANSI Standard 245 – Section 1.2, 1.3, 1.4
NSF/ANSI Standard 350 – Section 1.2, 1.3, 1.4
NSF/ANSI Standard 385 – Section 1.2, 1.3

39.6.0 PROCEDURES

39.6.1 REQUEST FOR SCALE-UP

Upon receipt of a request for scale-up, the Deputy Program Manager starts the evaluation process using Quality Procedure QP07 – Evaluation Process using the following steps:

1. The Deputy Program Manager assembles the following information for the Engineering Manager:

    a. Dimensioned system drawing of model to be scaled-up
    b. New Model name
    c. Full specifications of model to be scale-up
    d. Standard applied for scale-up
    e. Originally tested model

2. The Engineering Manager shall review the treatment process description and drawings, including but not limited to:

    a. Tank Volume and Geometry
    b. Aeration including the diffuser system
    c. Media
    d. Filtration

e. Circulation
f. Additives
g. Membranes
h. Pumps
i. Surface Loading Rate

3. The Engineering Manager shall determine if the proposed system is proportional to the originally tested system. Exact proportionality is not required, but the engineering analysis shall consider:

    a. Tolerance for aeration is +30% to -10%; Air delivery components with flows lower, or higher, than the stated range of 90 to 130% may be considered for qualification by GCT based on system performance testing.
    b. Tank tolerances are dependent on technology and the results of the originally tested unit. Tank tolerance will be determined on a case-by-case basis and specific rationale will be provided if the tolerance exceeds the limits shown in the table below.

	Activated Sludge	Trickling Filter	Sequencing Batch Reactor	Membrane
Pretreatment	-5 to +50%	-5 to +50%	-5 to +50%	-5 to +50%
Anoxic	-5 to +50%	NA	NA	NA
Aeration	-5 to +10%	NA	NA	NA
Clarification	-5 to +30%	NA	NA	NA
Process Tank	NA	-5 to +30%	-5 to +30%	-5 to +30%

    c. Structural integrity of the tanks will be evaluated and included in the evaluation report. Structural integrity may be demonstrated by:

        i. Professional Engineer Review
        ii. CSA B66
        iii. IAPMO/ANSI Z1000
        iv. IGC 262

4. In the event it is not possible to justify a scale-up on proportionality due to the technology of the manufacturer, a limited testing program may be considered to demonstrate performance to the Standard. A testing plan will be designed and approved in writing by the manufacturer and GCT. At the completion of the testing program, the system will be reevaluated based on the test results.

39.6.2 Report

GCT will prepare a Supplemental SPE Report documenting the approval process and results. The report will contain the following sections:

1. Preface - The preface contains the Scope of the Standard allowing the modification to the existing unit, any other sections of the Standard applicable to the evaluation. The Preface also contains the family of

models of the proposed scale-up and references the originally tested model SPE Report

2. Signed and Dated Certification Certificate
3. Proposed Change
4. Description of the Tested System
5. History of the Tested System
6. Tank Design Analysis with compartment geometry and sizing
7. Aeration Capability
8. Conclusion

39.7.0 TECHNICAL AIDS

N/A

39.8.0 EXPLANATORY NOTE

N/A

40.0 DAILY PROCEDURES

40.1.0 PURPOSE

This section describes the activities for the daily procedures done at the GCT wastewater test site.

40.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

40.3.0 APPLICATION

This section is performed by the Deputy Program Manager.

40.4.0 DEFINITIONS

N/A

40.5.0 REFERENCES

N/A

40.6.0 PROCEDURES

40.6.1 ENTERING THE FACILITY

1. Environment Check

    a. Confirm gate is secure
    b. Confirm power is on at site
    c. Check for evidence of tampering at fences or gate
    d. Gather rainfall and ambient temperature data.
    e. Record information in Daily Log.

2. Equipment Check

    a. Influent Tank Check
    b. Power to dosing panels
    c. Sewer Return Tank
    d. Refrigerators at test locations functioning and at appropriate temperature
    e. Record the information in the Daily Log and Sewage Dosage Measurement Spreadsheet

3. Exiting the facility

    a. Ensure samples are properly stored
    b. Lock building doors
    c. Lock storage building doors

d. Lock test site gate

40.7.0 TECHNICAL AIDS

N/A

40.8.0 EXPLANATORY NOTE

N/A

41.0 DISTRIBUTION OF LABORATORY DATA

41.1.0 PURPOSE

The primary purpose of the laboratory data distribution procedure is to document and communicate the results accurately, clearly, unambiguously and objectively.

41.2.0 POLICY

All Quality Procedures are written to comply with GCT policy established in the Quality Manual Section with which this section corresponds and ISO/IEC 17065 and ISO 17025.

41.3.0 APPLICATION

This section is to be performed by the Deputy Program Manager.

41.4.0 DEFINITIONS

N/A

41.5.0 REFERENCES

ISO/IEC 17065:2012(E) Section 8.3
ISO/IEC 17025:2017(E) Section 7.8.2

41.6.0 PROCEDURES

41.6.1 OUTSIDE LABORATORIES' TEST DATA RESULTS

Data results received by GCT shall be provided accurately, clearly, unambiguously and objectively, usually in a report and shall include all the information agreed required on the Chain of Custody and necessary for the interpretation of the results and all information required by the method used. Every test report shall include the following information:

1. Title of Report;
2. Unique Identification of the test report on each page to ensure that each page is recognized as part of the test report;
3. Identification of the Method Used;
4. Unambiguous description, condition, and identification of the sample tested;
5. Sampling results;
6. Name or equivalent identification of person authorizing the report;
7. A statement to the effect that the results only relate to the sample tested;
8. The deviations from, additions to, or exclusions from the test method, and information on specific test conditions, such as environmental conditions;

9. Where relevant, a statement of compliance/non-compliance with requirements and/or specifications;

10. Where applicable, a statement on the estimated uncertainty of measurement; information on uncertainty is needed in test reports when it is relevant to the validity or application of the test results, when a customer's instruction so requires, or when the uncertainty affects compliance to a specification limit;

11. A complete chain of custody with the Sample ID as a match in the test report;

12. Additional information which may be required by specific methods.

41.6.2 TEST REPORT RECORDS

The following procedure shall be followed for recording the laboratory data:

1. GCT staff will enter the Water Quality Form data into the GCT Master List as the data is collected. GCT staff shall scan the Water Quality Forms into the GCT Cloud Server monthly.

2. GCT staff will then enter the outside laboratory data into the GCT Master List as reports are received. The test reports received from outside laboratories shall be scanned into the GCT Cloud Server on a monthly basis based on the sample collection date.

3. Days for which laboratory data is not collected shall be denoted using the following explanation codes:

    a. a = Weather
    b. b = Lab Problem
    c. c = Test Site Problem
    d. d = Not Required by Standard
    e. e = Sample has been submitted or will be submitted

4. All days on the Master List shall be filled with either data or an explanation code listed above.

5. The Quality Assurance Officer will review the Master List for accuracy using the compiled data.

6. Once the data is transferred to the laboratory database, it cannot be altered except by the Program Manager and then only by retaining the original data and an explanation as to why the data was altered.

7. The Quality Assurance Officer shall forward the weekly recorded data to the Program Manager for review.

8. After the Program Manager reviews the data, the Deputy Program Manager shall distribute the data to the client.

41.6.3 DATA DISTRIBUTION

The data is available on GCT's cloud server to all authorized parties through a password system.

41.6.4 DATA RETENTION

The Deputy Manager will retain the data in accordance with Gulf Coast Testing's Record Retention Policy as outlined in the Record and Document Control Procedure.

41.7.0 TECHNICAL AIDS

N/A

41.8.0 EXPLANATORY NOTE

N/A

42.0 AUTOMATED DOSING SYSTEM

42.1.0 PURPOSE

This section describes the GCT automated system to dose the units at the test site. This document describes procedures to be used by GCT field personnel for the automated dosing system.

42.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual and conformity to ISO/IEC 17065.

42.3.0 APPLICATION

The Deputy Program Manager is in charge of the day-to-day operations of the automated system.

42.4.0 DEFINITIONS

N/A

42.5.0 REFERENCES

Standards

42.6.0 PROCEDURES

The automated system consists of the wet well, the influent tank, the Zoeller Control Panel, the Cox Research Control Systems, the dosing stands, and the test site discharge tank. This equipment, along with the associated pumps and valves, comprise the dosing system. This equipment is critical to the certification process as well as any other tests being performed. The system is completely automated. The systems are designed to dose the units according to the Standards.

42.6.1 Wet Well

The wet well is the start of the automated dosing system. The wet well collects the raw sewage from the subdivision. GCT diverts some of the raw sewage to the GCT influent tank through a two inch plastic line from the wet well to the influent tank. This is accomplished using a Zoeller dual grinder pump system. The two Zoeller grinder pumps are activated by the Zoeller Control Panel at the test site. See the attached Technical Aid labeled Test Site Schematic. The wet well is checked as part of the Daily Field Procedures and its condition noted on the Daily Log Form.

42.6.2 Influent Tank

The influent tank receives the raw sewage from the wet well. The amount of influent in the tanks is controlled by the Zoeller Control Panel using floats located in the influent tank. Four sewage discharge pumps are in the bottom of the discharge tank which distribute the influent to the dosing sites. Pump 1 distributes to sites A1-A3. Pump 2 distributes to sites

A4-A6. Pump 3 distributes to sites B1-B3. Pump 4 distributes to sites B4-B6. The influent tank is checked as part of the Daily Field Procedures and its condition noted on the Daily Log Analytical Data Record.

42.6.3 Zoeller Control Panel

The Zoeller Control Panel directly operates the Zoeller grinder pumps in the wet well as a dual system of alternating pumps. First Pump 1 fills the tank. The next time the tank is filled, Pump 2 fills the tank. The pumps are turned on and off by a three float system in the influent tank. When the middle float is activated, the Zoeller Control Panel turns on one of the grinder pumps. When the top float is activated, the Zoeller Control Panel turns off the grinder pump. The bottom float is the emergency float. When the bottom float is activated, the Zoeller Control Panel turns on both pumps and activates an alarm on the control panel.

42.6.4 Cox Research Control Panels

There are five Cox Research control panels in the automatic dosing system. The main panel controls the influent tank pumps. There are four satellite panels which control A1-A3, A4-A6, B1-B3, and B4-B6, respectively. These four control panels control the “Fill” and “Dose” valves located at each unit. The “Fill” and “Dose” allow the units to be properly dosed pursuant to the Standards.

42.6.4.1 Main Panel

The Main Panel controls the four pumps in the influent tank. The pumps are operated according to the requirements of the Standards but can also be operated in manual mode. The pumps operate pursuant to the requirements of the Standard.

42.6.4.2 Satellite Panels

The satellite panels control the Fill and Dose valves for each individual test site. The operator selects the size of the tank and appropriate dosing mode, either Design Loading or Stress Loading. The control panel then operates the valves pursuant to the requirements of the Standard, but the valves can also be operated in manual mode. The valves are also used to circulate the influent tank. When the Fill valves are closed, a circulating valve is open which circulates the influent throughout the tank ensuring the influent is well mixed.

42.6.5 Dosing Stands

The dosing stands are an aluminum structure which holds the dosing can and dose valve. The raw sewage from the influent tank is pumped into the dosing can by the corresponding sewage pump in the influent tank. The pump fills the dosing can located on the top of the dosing stand. Each dosing can is calibrated to hold exactly five gallons. The can has a drainpipe at the five-gallon level, and the excess sewage drains out of the tank through the drainpipe to the discharge tank. The control panel then opens the Dose Valve and the sewage in the dosing can gravity flows into the aerobic treatment unit.

42.6.6 Discharge Tank

The discharge tank is the final component of the Automated Dosing System. The discharge tank receives the raw sewage from the dosing stands and the treated effluent from the units through an underground piping system. There are two pumps in the discharge tank operating on a float system. When the tank level rises, the floats cause the pumps to turn on and pump the raw sewage and treated effluent to the oxidation pond located behind the Gulf Coast Testing, LLC property.

42.7.0 TECHNICAL AIDS

Test Site Schematic

42.8.0 EXPLANATORY NOTE

N/A

43.0 FLOW TEST MEASUREMENT PROCEDURE

43.1.0 PURPOSE

This section describes the flow measurement test. The flow measurement test consists of measuring a volume of flow through from the unit, usually through the UV light or other disinfectant device. The flow measurement test is conducted to meet certain local, state, and/or federal regulations, specifically the state of Washington. The flow test is also conducted for Client's R&D purposes.

43.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual and conformity to ISO/IEC 17065 and ISO/IEC 17025.

43.3.0 APPLICATION

This procedure is performed by the Deputy Program Manager.

43.4.0 DEFINITIONS

N/A

43.5.0 REFERENCES

Washington Administrative Code On-site Sewage Systems Chapter 246-272A

43.6.0 PROCEDURE

Calculate the effluent flow for the state of Washington test using the following steps:

1. Open the pump tank compartment or access port after the UV light or other disinfectant device and position the receiving container below the point of outfall.
2. Reset the stopwatch to zero (if necessary).
3. Start the stopwatch when the receiving container begins to fill.
4. Stop the stopwatch at the exact moment the water level reaches the pre-calibrated one-gallon mark on the graduated cylinder or container.
5. Document the elapsed time on the Flow Rate Measurement.
6. Empty the receiving container.
7. Repeat steps 1 through 6 as required by the regulatory scheme or client.
8. Average the flow measurements to determine a mean flow rate.
9. Document the measurements on the Flow Test Measurement Analytical Data Log.

43.7.0 TECHNICAL AIDS

QF340.Flow Measurement Analytical Data Form

43.8.0 EXPLANATORY NOTE

N/A

44.0 INFILTRATION/EXFILTRATION PROCEDURE

44.1.0 PURPOSE

This section describes the infiltration/exfiltration test to meet the Standards requirement all systems are tested to preclude the infiltration of groundwater into the system and exfiltration of wastewater out of the system.

44.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual and conformity to ISO/IEC 17065 and ISO/IEC 17025.

44.3.0 APPLICATION

This procedure is performed by the Deputy Program Manager.

44.4.0 DEFINITIONS

N/A

44.5.0 REFERENCES

NSF/ANSI Standard 40 Section 5.3
NSF/ANSI Standard 245 Section 5.3
NSF/ANSI Standard 350 Section 5.3

44.6.0 INFILTRATION AND EXFILTRATION RESISTANCE PROCEDURE

The infiltration and exfiltration resistance procedure is performed using the following steps:

1. Install Tank according to manufacturer's specifications;
2. The manufacturer shall sign and date the tank installation form;
3. Install a short section of sewer pipe on the influent and effluent ports. Cap the pipe sections. Ensure the capped sections are leak free;
4. Fill the tank with fresh water, filling all compartments of the unit with tap water to the ceiling of the tank;
5. Measure the height of the water in each isolated compartment, and record the height and the time on the QF034 - Infiltration-Exfiltration Analytical Data Record;
6. Wait 24 hours and measure the height of the water in each compartment;
7. Calculate the loss (if any) of the water.

If the change in water volume is less than 0.5%, the model has passed the infiltration exfiltration test. If the change in water volume is greater than 0.5%, the model has failed the infiltration exfiltration test.

44.7.0 TECHNICAL AIDS

QF034.Infiltration/Exfiltration Analytical Data Form

44.8.0 EXPLANATORY NOTE

N/A

45.0 NOISE PROCEDURE

45.1.0 PURPOSE

This section describes the activities to measure noise to ensure the systems meet the noise requirements referenced by the Standards.

45.2.0 POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065 and ISO/IEC 17025.

45.3.0 APPLICATION

This section is performed by the Deputy Program Manager.

45.4.0 DEFINITIONS

Noise is an unwanted or excessive sound. Noise for a wastewater treatment unit is primarily produced by the aerator for the system.

45.5.0 REFERENCES

NSF/ANSI Standard 40 Section 5.4
NSF/ANSI Standard 245 Section 5.4
NSF/ANSI Standard 350 Section 5.4

45.6.0 PROCEDURES

Noise is measured for wastewater treatment units using the following steps:

1. Calibrate the Sper Scientific Sound Meter pursuant to QP034 Calibration.

2. Measure the background noise level with all electrical and mechanical components of the system turned off. Attempt to minimize the background noise level below 50 dBA. When the system is operating below 60 dBA, no correction is required.

3. If the background noise level cannot be reduced below 50 dBA, use the chart below to correct the final operating noise level for high background noise.

Difference between total and background sound readings in dBA	Number to subtract from total to yield corrected noise level
0 to 2	reduce background levels
3	3
4 to 5	2
6 to 10	1
> 10	0

4. Using the Sper Scientific Sound Meter, measure the noise level of the system 47 inches above the ground surface and 236 inches from the system in four directions, at 90°, 180°, 270°, and 360° from the system and its appurtenances.

5. The Deputy Program Manager will then record the responses on GCT Quality Form QF345.

45.7.0 TECHNICAL AIDS

QF345.Noise

45.8.0 EXPLANATORY NOTE

N/A

46.0 Document Creation and Maintenance

46.1. PURPOSE

Documents structure and organize how information flows at GCT, ensuring consistent adherence to ISO/IEC 17065 and the Standards. Key quality documents include GCT's Quality Manual, Certification Procedures, Quality Procedures, and Quality Forms.

46.2. POLICY

All Quality Procedures are written to comply with Gulf Coast Testing policy established in the Quality Manual section and conformity to ISO/IEC 17065, ISO/IEC 17025, and ISO/IEC 17020.

46.3. APPLICATION

The Deputy Program Director, under guidance from the Program Director, creates the documents for GCT's Quality System.

46.4. DEFINITIONS

Quality Procedure - a detailed, step-by-step guide that outlines how to perform a specific task to ensure consistency and meet organizational standards. A Quality Procedure functions to help employees execute routine operations correctly, achieve quality output, and reduce errors and miscommunication. Quality procedures are essential for maintaining and improving the quality of products or services, and they include key elements like purpose, scope, responsibilities, and specific action steps.

Quality Form - a structured document used to evaluate and monitor whether a product, service, or process meets specific quality standards. Quality Forms are essential tools in quality management for documenting observations and providing a systematic way to assess compliance.

46.5. REFERENCES

GCT Quality Procedures
GCT Quality Forms

46.6. QUALTITY PROCEDURES AND FORMS MANAGEMENT

46.6.1. Quality Procedures

GCT creates Quality Procedures to ensure that, every time a process is performed, the same information, methods, skills and controls are used and

applied in a consistent manner in all analytical reporting and record-keeping to ensure GCT achieves it compliance goals.

46.6.2. Quality Procedures Creation and Change

GCT's Quality Procedures are located in Dropbox at GCT/Current Documents/17065 Quality Procedures/Source Documents. These individual forms comprise the GCT Quality Procedure Document.

New forms created during the year, or changes made to individual Quality Procedures during the year are placed in this folder. New documents are designated by QPXXX.Date.Filename. Changed documents are designated by the file name followed by "-1".

In the third quarter of each year, the GCT Program Director and Deputy Program Director will approve the changed documents. The approved changed Quality Procedures are inserted into the Quality Procedures document with the footer date on the changed procedure reflecting the date this operation is performed. The replaced document will be moved to the archived folder at GCT/Archived Documents/Archived Quality Procedures.

The GCT Quality Procedure document will be published on GCT's website no later than the last day of September. The date on the cover of the Quality Procedure Document will reflect the publication date. The Quality Procedure document will be placed in Dropbox in GCT/Quality Procedures/YEAR with YEAR represented by the numerical values.

46.6.3. Template

Page Layout:	Top: 1"	Bottom: 1"
	Left: 1"	Right: 1"
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46.6.4. Quality Forms

GCT creates Quality Forms to ensure that, every time a process is performed, the same information, methods, skills and controls are used and applied in a consistent manner in all analytical reporting and record-keeping to ensure GCT achieves its compliance goals.

46.6.5. Quality Form Creation and Change

GCT's Quality Forms are located in Dropbox at GCT/Current Documents/17065 Quality Forms/Source Documents. These individual forms comprise the GCT Quality Form Document.

New forms created during the year, or changes made to individual Quality Forms during the year are placed in this folder. New documents are designated by QFXXX.Date.Filename. Changed documents are designated by the file name followed by "-1".

In the third quarter of each year, the GCT Program Director and Deputy Program Director will approve the changed documents. The approved changed Quality Forms are inserted into the Quality Forms document with the footer date on the changed procedure reflecting the date this operation is performed. The replaced document will be moved to the archived folder at GCT/Archived Documents/Archived Quality Procedures.

The GCT Quality Form document will be published on GCT's website no later than the last day of September. The date on the cover of the Quality Procedure Document will reflect the publication date. The Quality Form document will be placed in Dropbox in GCT/Quality Forms/YEAR with YEAR represented by the numerical values.

46.6.6. Template

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46.7. TECHNICAL AIDS

QF013.Data Integrity and Ethics Agreement

46.8. EXPLANATORY NOTE

NA