Gulf Coast Testing, LLC

Laboratory and Certification Program Quality Procedures

Certification Office
5261 Highland Road Box 347
Baton Rouge, LA 70808

Laboratory & Test Site
14378 Park Avenue
Prairieville, LA 70769

Eric Holland, Laboratory Manager
225-397-0633
eric.holland@gctla.com

Written per
ISO/IEC 17065:2012 (E)
ISO/IEC 17025:2017
ISO/IEC 17020:2012
TNI Standard:2016

August 1, 2021

PREFACE

This Quality Procedures Manual is a compilation of the essential policies and procedures of Gulf Coast Testing, LLC for our product certification process. This manual outlines routine procedures necessary to fulfill the requirements of ISO/IEC 17065 (2012), ISO/IEC 17025 (2017), TNI Standard (2016), and the Standards and promote effective, efficient, and impartial operations at all levels. Policies, procedures and other information stated therein are derived from policies approved by ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) which form the specialized system for worldwide standardization. This manual also reflects Gulf Coast Testing LLC's Certification Policies for Wastewater Treatment Devices.

The purpose of this Quality Procedures Manual is twofold: first, to provide statements of policies and procedures for general guidance in conducting operations; and second, to provide specific instructions and guidelines for those personnel who are responsible for the preparation of necessary documents, forms, and other materials involved in the provision of quality services to our clients. The Program Manager and Quality Assurance Manager are responsible for coordinating the development of policy guidelines to ensure consistent formatting, coordination of revisions/additions to Gulf Coast Testing, LLC's policies and procedures, and the distribution of this information. It is the responsibility of the Program Manager to disseminate information pertinent to certification to Gulf Coast Testing, LLC's clients and to ensure that employees are aware of, understand and comply with all issued policies and procedures in this manual. The Quality Procedures Manual is located on Gulf Coast Testing, LLC's website in the client section of the website.

The previous policy and procedures are kept for historical and reference purposes on GCT's cloud server pursuant to Gulf Coast Testing, LLC's Document Control and Retention policy. Inquiries regarding this Policy and Procedures Manual can be directed to the Program Manager, William B. Daniel IV, P.E, at william.daniel@gctla.com or by calling (225) 281-3792.

William B. Daniel IV, Program Manager

8/1/2021
Date

Table of Contents

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

QF110 Management Review Form

1.6.0 PROCEDURES

1.6.1 Management Audit Inputs

The Program Manager shall conduct a review of GCT's quality system during the fourth 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
2. Document Review
3. The fulfilment of objectives 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. Changes that could affect the management system

8. Appeals and complaints
9. Changes in the volume and type of work
10. Data Integrity
11. 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, ISO/IEC 17025, and TNI Standard
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

NA

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 DEFINITION

N/A

2.5.0 REFERENCES

GCT QF117 Evaluation Plan Form

2.6.0 PROCEDURES

The overall GCT quality plan is to 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

N/A

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 existing units. GCT only performs certification of residential wastewater treatment units in accordance with the Standards and ISO/IEC 17065. GCT will not engage in any activity which would affect the confidentiality, objectivity, or impartiality of its testing. Furthermore, GCT will not design nor employ personnel that design residential treatment units or make recommendations concerning design or materials.

3.3.0 APPLICATION

This section is performed by the Program Manager.

3.4.0 DEFINITIONS

Certifier – The individual the certification body assigns to review all information and results related to the evaluation. The Certifier shall not be a person involved in the evaluation process and shall be employed by or under contract with the certification body.

3.5.0 REFERENCES

Standards
Application for Certification
Official Listing
Certification Certificate
Letter of Authority to Use Mark
Standard Performance Evaluation Report
In-Plant Audit Form
Manufacturer's Audit Checklist Form
Equipment Evaluation Form
Narrative Page
Corrective Action Form

3.6.0 PROCEDURES

3.6.1 SUBMISSION OF APPLICATION

The Client will sign an Application for Certification committing the Client to pay certain administrative, audit, evaluation, and testing fees. The Program Manager shall review all documentation prior to evaluation to insure that all the requirements for certification are clearly defined. If there are any differences between the Client and GCT, the Program Manager and the Client shall resolve the differences.

3.6.2 DOCUMENTATION

The Client will supply detailed product and ingredient information for the products for which certification is requested. The Deputy Manager shall verify with the Program Manager all applicable fees have been paid.

3.6.3 SCHEDULING AND TESTING

GCT shall schedule and test the residential wastewater treatment system specified in the application as required by the Standards pursuant to the Evaluation Process Procedure using the Evaluation Plan Form. GCT will perform an initial Client facility inspection as per the New and Continuing Compliance Reports Procedure and the In-Plant Audit Form, Manufacturer's Audit Checklist Form, and Equipment Evaluation Form.

3.6.4 CERTIFICATION

Once the evaluation and testing is completed, including any implementation of corrective actions, a draft Standard Performance Evaluation Report shall be written by the Program Manager pursuant to the Preparation of an SPE Report Procedure. The Program Manager shall then forward the report to the Certifier. If the Certifier determines the unit passes the standard to which it was tested, the Program Manager will finalize the Standard Performance Evaluation Report. The date the report is finalized shall be the date of the report. Under no circumstances can the date on the report precede the date on which the report is finalized by the Program Manager. A Certification Certificate is issued to the Client and made public. The Client also receives the Letter of Authority to Use the Mark.

Once the Certification Certificate has been issued, the Client will be listed on the GCT Website. The Official Listing shall be updated annually or as needed. The GCT Website shall include at a minimum the following information:

1. Company name and address,
2. Product description,
3. Trademark/model designation,
4. Class rating (if applicable),
5. Rated capacity (if applicable), and
6. Listing of each state in which the Certified Client has an authorized representative physically located (Standards only).

3.7.0 TECHNICAL AIDS

N/A

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 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

This section is performed by the Program Manager.

4.4.0 DEFINITION

N/A

4.5.0 REFERENCES

Standards
QF226 In-Plant Audit Form
QF227 Manufacturer's Audit Checklist Form
QF228 Equipment Evaluation Form
QF229 Narrative Page
QF230 Authorized Representative Inspection Report
QF231 Site Visit Inspection Report
QF234 Corrective Action Form

4.6.0 PROCEDURES

4.6.1 SCHEDULING OF CONTINUING COMPLIANCE AUDITS

Pursuant to the New and Continuing Compliance Reports Procedure, a date for a continuing compliance audit will be set to insure that the product continues to meet all the requirements of the Standards.

4.6.2 CLIENT REQUIREMENTS FOR CONTINUING CERTIFICATION

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

1. Pays all applicable certification fees
2. Continues to meet the requirements of the Standards
3. Complies with all program policies and contract provisions
4. Designates each certified system with a model designation that bears the GCT Mark.

5. Identifies components that are intended to be used with other components to form a complete functional system with the GCT Mark to indicate that particular device is a component.
6. Provides annually, by January 1, a listing of all certified systems and components for publication on GCT's website. Assures the Official Listing includes, at a minimum, the following information:

    a. Company name and address
    b. Production location, city and state, province/country, or other plant identification acceptable to GCT
    c. Product Description
    d. Trademark/Model Designation
    e. Class Rating
    f. Rated Capacity
    g. Listing of each state, province/country the Certified Client has an authorized representative

7. Provides all the information requested by GCT to conduct the annual audit
8. Follows the requirements of Evaluation Process Procedure for testing and evaluation in accordance with the Standards
9. Follows the requirements of Changes in Program Requirements Procedure for changes in requirements
10. Institutes corrective action for all items of non-compliance found during audits and inspections
11. Uses the GCT Mark in a proper manner on sales literature, technical publications, promotional materials, packaging, catalogs, and advertising

4.7.0 TECHNICAL AIDS

SO/IEC 17067:2013 Conformity Assessment - Fundamentals of Product Certification And Guidelines For Product Certification Schemes

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

Standards

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.
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

N/A

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 DEFINITION

N/A

6.5.0 REFERENCES

Standards
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 one or all of the Standard requirements change 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 the one or all of the Standard requirements changes, 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. Notify the Client by letter in the first quarter following the sixth year of certification.
2. Re-evaluate and or re-test the certified product(s) affected by expiration pursuant to the Evaluation Process Procedure.
3. 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).

SPE Report Identifier – a number assigned by the Program Manager for any application for evaluation by GCT. The SPE Report Identifier shall be specified as follows: SPEXXX where XXX is a sequence number.

Evaluators – the appropriate GCT personnel, sub-contractors, or combination thereof that performs evaluations on behalf of GCT.

Certifier – The individual the certification body assigns to review all information and results related to the evaluation. The Certifier shall not be a person involved in the evaluation process and shall be employed by or under contract with the certification body.

7.5.0 REFERENCES

QF215 Application for Certification
QF216 Contract for Specific Performance Evaluation
QF117 Evaluation Plan
QF228 Equipment Evaluation Form
QF234 Corrective Action Form
QF221 Certification Certificate
QF115 Official Listing
QF224 Letter of Authority to Use the Certification Mark
QF119 Standard Performance Evaluation (SPE) Report Template

7.6.0 PROCEDURES

Upon receipt of an Application for Certification, the Program Manager shall follow the New Application for Certification Procedure. Upon receipt of a signed Contract for Specific

Performance Evaluation from the Client, the Program Manager shall plan for the evaluation based on the type of evaluation below:

7.6.1 EVALUATION FOR APPLICATIONS FOR NEW CERTIFICATION WITHOUT PRIOR CERTIFICATION

7.6.1.1 SCHEDULING

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

The Program Manager shall meet with and inform the GCT staff a new Application for Certification has been received and shall assign the request a SPE Identifier Number. The Program Manager and the evaluators shall then complete the Evaluation Plan by assigning the appropriate staff the task of evaluating the Model against the requirements of the requested Standard(s). The Program Manager may outsource evaluation tasks in the evaluation process with the exception of 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 of the Program Manager pursuant to the Complaints, Disputes, and Appeals Documentation Procedure.

7.6.1.2 EVALUATION

The evaluators shall follow the Evaluation Plan to determine if the requirements of the Standard(s) are met. The evaluators shall test and evaluate the Model to the requested Standard pursuant to the Evaluation Plan. The evaluators shall identify each nonconformance on the Corrective Action Form. The Client is responsible for determining and implementing corrective actions and responding using the Corrective Action Form. The evaluators shall confirm the effectiveness of the corrective actions implemented by the Client. If the GCT evaluator agrees with the corrective action, he will sign the form. This action constitutes closure.

7.6.1.3 DECISION ON CERTIFICATION

The Program Manager shall receive the testing and evaluation reports submitted by the evaluators. The Program Manager shall prepare a draft SPE Report pursuant to the Preparation of an SPE Report Procedure. The Program Manager shall forward the draft report to the Certifier to determine if the requirements of the requested Standard(s) have been met. The Certifier shall compare the information in the report to the criteria of the Standard and document the reasons for the approval or rejection. If the Certifier determines the requirements have been met, the Program Manager shall certify the model and finalize the SPE Report. The date on the SPE Report shall always be the date the Program Manager finalizes the report. If the recommendation is rejection, the Program Manager may resubmit the SPE Report within ten (10) days. Failure to resubmit the SPE Report will cause the rejection to be final. If the Program Manager resubmits the SPE Report and the recommendation is rejection a second time, the rejection becomes final.

7.6.2.4 DOCUMENTATION

The Program Manager shall send the Client the final copy of the SPE Report and shall inform the Client if their request for new certification has been approved or explain why the request was not approved. The Client may appeal the decision of the Program Manager as per the Complaints, Disputes, and Appeals Documentation Procedure.

7.6.3 EVALUATIONS FOR EXTENDING SCOPE

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

7.6.3.1 SCHEDULING

The Program Manager shall meet with and inform the GCT staff a request for extending or reducing scope has been received and shall assign the request a SPE Identifier Number. The Program Manager and the evaluators shall then complete the Evaluation Plan by assigning the appropriate staff the task of evaluating the Model against the requirements of the requested Standard(s). The Program Manager may outsource evaluation tasks in the evaluation process with the exception of 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 of the Program Manager pursuant to the Complaints, Disputes, and Appeals Documentation Procedure.

7.6.3.2 EVALUATION

The evaluators shall follow the Evaluation Plan to determine if the requirements of the Standard(s) are met. The evaluators shall test and evaluate the Model to the requested Standard pursuant to the Evaluation Plan. The evaluators shall identify each nonconformance on the Corrective Action Form. The Client is responsible for determining and implementing corrective actions and respond using the Corrective Action Form. The evaluators shall confirm the effectiveness of the corrective actions implemented by the Client. If the GCT evaluator agrees with the corrective action, he will sign the form. This action constitutes closure.

7.6.3.3 DECISION ON CERTIFICATION

The Program Manager shall receive the testing and evaluation reports submitted by the evaluators. The Program Manager shall prepare a draft SPE Report pursuant to the Preparation of an SPE Report Procedure. The Program Manager shall forward the draft report to the Certifier to determine if the requirements of the requested Standard(s) have been met. The Certifier shall compare the information in the report to the criteria of the Standard and document the reasons for the approval or rejection. If the Certifier determines the requirements have been met, the Program Manager shall certify the model and finalize the SPE Report. The date on the SPE Report shall always be the date the Program Manager finalizes the report. If the recommendation is rejection, the Program Manager may resubmit the SPE Report within ten (10) days. Failure to resubmit the SPE Report will cause the rejection to be final. If the Program Manager

resubmits the SPE Report and the recommendation is rejection a second time, the rejection becomes final.

7.6.3.4 DOCUMENTATION

The Program Manager shall send the Client the final copy of the SPE Report and shall inform the Client if their request for new certification has been approved or explain why the request was not approved. The Client may appeal the decision of the Program Manager as per the Complaints, Disputes, and Appeals Documentation Procedure.

7.6.4 EVALUATION FOR RE-EVALUATION

When the requirements for certification have changed or when a certified residential wastewater system has been in operation for six years, GCT shall re-evaluate or re-test the system per the following procedure:

7.6.4.1 SCHEDULING

The Program Manager shall meet with and inform the GCT staff an existing certification is up for re-evaluation and shall assign the request a SPE Identifier Number. The Program Manager and the evaluators shall then complete the Evaluation Plan by assigning the appropriate staff the task of evaluating the Model against the requirements of the requested Standard(s). The Program Manager may outsource evaluation tasks in the evaluation process with the exception of 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 of the Program Manager pursuant to the Complaints, Disputes, and Appeals Documentation Procedure.

7.6.4.2 EVALUATION

The evaluators, separate from the Program Manager, shall conduct an evaluation to determine if the certified residential wastewater system's certification can be renewed through an evaluation or if the system requires re-testing. The evaluators shall evaluate all changes which have taken place, including material and component Clients, manufacturing processes, and design modifications. The SPE Report Identifier will be placed on all documents utilized in the evaluation.

7.6.4.3 DECISION ON CERTIFICATION

The Program Manager shall receive the testing and evaluation reports submitted by the evaluators. The Program Manager shall prepare a draft SPE Report pursuant to the Preparation of an SPE Report Procedure. The Program Manager shall forward the draft report to the Certifier to determine if the requirements of the requested Standard(s) have been met. The Certifier shall compare the information in the report to the criteria of the Standard and document the reasons for the approval or rejection. If the Certifier determines the requirements have been met, the Program Manager shall certify the model and finalize the SPE Report. The date on the SPE Report shall always be the date the Program Manager finalizes the report. If the recommendation is rejection, the Program Manager may resubmit the SPE Report within ten (10) days. Failure to resubmit the SPE Report will cause the rejection to be final. If the Program Manager

resubmits the SPE Report and the recommendation is rejection a second time, the rejection becomes final.

7.6.4.4 DOCUMENTATION

The Program Manager shall send the Client the final copy of the SPE Report and shall inform the Client if their request for new certification has been approved or explain why the request was not approved. The Client may appeal the decision of the Program Manager as per the Complaints, Disputes, and Appeals Documentation Procedure.

7.7.0 TECHNICAL AIDS

N/A

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, ISO/IEC 17025, and TNI 2009.

8.3.0 APPLICATION

This section is performed by the Program Manager.

8.4.0 DEFINITION

N/A

8.5.0 REFERENCES

QF119 Standard Performance Evaluation Report

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 or oversight
    b. The impact of the error 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

N/A

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 responsible entities 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 GCT policy established in the Quality Manual section with which this section corresponds and ISO/IEC 17065.

9.3.0 APPLICATION

This section is performed by the QA/QC Manager.

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

QF109 Internal Audit Checklist Form
QF234 Corrective Action Form
QF229 Narrative Page Form

9.6.0 PROCEDURES

9.6.1 SCHEDULING

During the fourth quarter of 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. This individual will be independent of the certification activities of GCT and no auditor shall audit their own work. The Lead Auditor will schedule the audit and select additional auditors, if necessary, to conduct the scheduled audit. The QA/QC Manager will insure 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 applicable requirements are being met by the certified body
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 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: GCT2003-01 will mean it was the first audit for Gulf Coast Testing, LLC in 2013. 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.

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 nonconformance 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 their findings. This action constitutes closure. The QA/QC Manager will document closure of each corrective action on the Non-conformance Report.

9.6.4.3 USING THE AUDIT OBSERVATIONS REPORT

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

9.6.5 AUDIT REPORT

The Lead Auditor will prepare the final audit report within seven (7) days from the date of the audit. 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 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

ISO 19011:2018 Guidelines for Auditing Management Systems

9.8.0 EXPLANATORY NOTE

N/A

10.0 CORRECTIVE ACTIONS

10.1.0 PURPOSE

The purpose of this section is to describe how corrective action eliminates the cause of non-conformity.

10.2.0 POLICY

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

10.3.0 APPLICATION

This section is performed by the QA/QC Manager.

10.4.0 DEFINITION

Corrective Action - Identification and elimination of the causes of a problem, thus preventing its recurrence.

Nonconformance **-** An observation or finding that indicates a policy or practice is contrary to the requirements of ISO/IEC 17065, ISO/IEC 17025, or GCT's Quality Procedures.

10.5.0 REFERENCES

QF234 Corrective Action Form

10.6.0 PROCEDURES

10.6.1 Identifying a Nonconformance

All GCT employees are required to follow all GCT Quality Procedures and SOP's. In the event a nonconformance occurs following a procedure, SOP, or any part of the GCT Quality System, the GCT employee is required to immediately report the nonconformance using the Corrective Action Form.

10.6.2 Identifying the Root Cause of a Nonconformance

Root cause analysis is a process by which GCT employees identify the true cause of a nonconformance. Common causes of nonconformities include:

1) Poor communication;
2) Faulty or missing procedures;
3) Equipment malfunction or lack of maintenance;
4) Lack of training;
5) Lack of understanding of requirements;
6) Failure to enforce rules;
7) Previous corrective actions fail to address root causes of problems

10.6.3 Correcting the Nonconformity

The Corrective Action Form will be used to assure that corrective actions are documented, implemented, do not reoccur, and the corrective action 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.

In the event the root cause analysis casts doubt on the GCT laboratory's compliance with GCT policies and procedures, or on GCT's compliance with its Standards, GCT shall schedule an internal audit as soon as possible.

10.7.0 TECHNICAL AIDS

N/A

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 DEFINITION

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
ISO/IEC 9001: Auditing Practices Group Guidance on: Remote Audits
GCT Certification Policies for Wastewater Treatment Devices
QF226 In-Plant Audit Form
QF227 Manufacturer's Audit Checklist Form
QF227R Manufacture’s Audit Checklist Form (Remote Audit)
QF228 Equipment Evaluation Form
QF228R Equipment Evaluation Form (Remote Audit)
QF229 Narrative Page
QF230 Authorized Representative Inspection Report
QF231 Site Visit Inspection Report
QF234 Corrective Action Form

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 06-01 will mean the first audit of Smith Manufacturing for the year 2006. 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 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 06-01-ACS identifies the first non-conformance (01) in the audit report of Smith Manufacturing for the year 2006 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

IAF Mandatory Document for the Use of Information and Communication Technology for Auditing/Assessment Purposes

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/outside of the Client or GCT.

12.2.0 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.

12.3.0 APPLICATION

This section is performed by the Program Manager.

12.4.0 DEFINITION

N/A

12.5.0 REFERENCES

Standards
GCT Certification Policies for Wastewater Treatment Devices
QF233 Complaint Documentation Form

12.6.0 PROCEDURES

12.6.1 DOCUMENTATION OF COMPLAINTS

12.6.1.1 COMPLAINTS ABOUT GCT ACTIVITIES

GCT will require the Client/client to file the request to 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 Quality Assurance Officer shall identify each complaint with a complaint number as follows: Gulf Coast Testing, LLC C01-2006. This will mean the first complaint against Gulf Coast Testing, LLC in 2006. 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.

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. A formal complaint is 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 C01-2006. This will mean the first complaint against Company Name in 2006. 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 corrective actions implemented by the employee and sign the document. The Quality Assurance Officer shall than 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 from 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 meeting.

12.7.0 TECHNICAL AIDS

N/A

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

QF102 Organizational Chart Form
QF103 Job Description and Qualification Form
QF104 Management Resume Form
QF105 Employee Confidentiality and Disclosure Agreement Form
QF107 Annual Employee Performance Evaluation Form

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

N/A

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, ISO/IEC 17020, and the TNI Standard.

14.3.0 APPLICATION

This section is performed by the Program Manager.

14.4.0 DEFINITION

Reserved

14.5.0 REFERENCES

Quality Manual
GCT Certification Policies for Wastewater Treatment Devices

14.6.0 PROCEDURES

14.6.1 Document Control

The document control program shall have as its objective, the continued functionality, relevance, security, and economical operation of all documents used by GCT. 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.
2. Maintenance of security measures and back-up control so that documents can be replaced in case of fire or theft.
3. Periodic review to ensure functionality and relevance of all documents available in the current system.
4. Use electronic documents whenever possible and transition to replacing paper documents with electronic ones.
5. Availability of relevant documents to employees and customers of GCT.
6. Ensure the confidentiality of records
7. Correction of Mistakes in Records
8. Compliance with GCT's Quality Policy Manual, Quality Procedures, ISO/IEC 17065, ISO/IEC 17025, and ISO/IEC 17020
9. Security of Records
10. Compliance with all federal, state, and local laws

14.6.2 Correction of Mistakes

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

1. Bench Sheets – 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 GCT's Data Management Procedure.

14.6.3 Responsibilities of the Program Manager

The Program Manager shall administer the Document Library in GCT's electronic document program. The Program Manager shall:

1. Institute a competent filing system by:
    a) Requiring only PDF versions of documents are published
    b) Instituting a file naming system to identify documents that includes the type of document, the date of the document, and a brief description of the contents or purpose of the document. The format shall be as follows:

        DocumentType.Date.Document.Name.Description

    c) Make relevant documents available to the employees through the GCT Website
    d) Archiving older versions of the same documents

2. Ensure, for all documents generated by GCT, a footer be placed on the document identifying the document to determine the most current version of the document.

Header:

GULF COAST TESTING, LLC Type Document Wastewater Treatment Plant Certification Program

Footer:

Published Date page/total pages Printed Documents May be Out of Date
Replacement Date

3. All documents are stored on GCT's cloud service.
4. Arrange to have electronic versions of the documents available as required for the operations of GCT. Electronic copies of documents will be organized as per Table 1 in Technical Aids of this document.
5. Original laboratory report documents will be scanned and stored on GCT's cloud service.
6. The Quality Manager will ensure all documents created by the Program Manager have the correct footer by reviewing all the documents on a quarterly basis. The review shall be documented on the Document Table Checklist. The Quality Manager will also ensure any documents on the

website are the correct version of the document and document the review in GCT Master File List.

All GCT generated documents will have a Preface showing the following information.

GCT GULF COAST TESTING, LLC	**Gulf Coast Testing, LLC**	DOCUMENT CODE	**GCT-DOCXXX**
	Document	REVISION	**XX**
		EFFECTIVE DATE	**Date**
	PREFACE		

The Program Manager shall safeguard the physical integrity and confidentiality of the records of GCT:

1. Identify confidential records and differentiate them from records that are not confidential.
2. Arrange to store paper confidential records in secure areas and lockable file cabinets.
3. Arrange to have electronic versions of the records shielded from unauthorized users.

14.6.5 Document Retention

GCT retains documents to meet the requirements of:

a) ISO/IEC 17065 and ISO/IEC 17025
b) TNI Standard
c) The Standards
d) Federal, State, and Local Agencies

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

14.6.5 Laboratory Data

GCT retains records of original observations, derived data, and sufficient information to establish and audit trail, calibration records, staff records and a copy of each test report or calibration certificate issued for seven years. The records shall contain sufficient information to facilitate, if possible, identification of factors affecting the uncertainty and to enable the test or calibration to be repeated under conditions as close as possible to the original. The records shall include the identity of personnel responsible for the sampling, performance of each test and/or calibration and checking of results.

14.6.6 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 the information was released.

14.6.7 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 identify the completeness as intended by the signer.

14.6.8 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.

14.6.9 Public records

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.

14.7.0 TECHNICAL AIDS

Document Naming System		
Type	**Date**	**Document Name**
Annual Compliance Audits	Year.Month.Day	Audit.Date.Description
ANSI Audit	Year.Month.Day	ANSI.Date.Description
Complaint	Year.Month.Day	Complaint.Date.Description
ISO Documents	Year.Month.Day	Standard.Date.Description
Management Audit	Year.Month.Day	Management Audit.Date.Description
Product Standard	Year.Month.Day	Standard Name.Date.Description
QM	Year.Month.Day	Quality Manual.Date.Description
Quality Procedure	Year.Month.Day	QP Number.Date.Description
Quality Forms	Year.Month.Day	QF Number.Date.Description
Standard Operating Procedures	Year.Month.Day	SOP Number.Date.Description
SPE Document	Year.Month.Day	SPE Number.Date.Description
Correspondence	Year.Month.Day	Correspondence.Date.Description
Invoice	Year.Month.Day	Invoice.Date.Description

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 DEFINITION

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

GCT Certification Trademark
QF221 Certification Certificate Form
QF224 Letter of Authority to Use Certification Mark Form
QF225 Letter for Revocation of Use of the Certification Mark Due to Misuse

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 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

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 laboratory tests run by Gulf Coast Testing, LLC comply with ISO/IEC 17025, TNI Standard, and the NSF/ANSI Standards for the testing of residential wastewater treatment units.

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 Laboratory Manager.

16.4.0 DEFINITION

Proficiency Testing (PT) – a means to evaluate a laboratory's performance under controlled conditions relative to a given set of criteria, through analysis of unknown samples provided by an external source.

Field of Proficiency Testing (FoPT) – analytes for which a laboratory is required to successfully analyze a PT sample in order to obtain or maintain accreditation, collectively defined as: matrix, technology/method, analyte.

Proficiency Testing Sample – a sample, the composition of which is unknown to the laboratory and is provided to test whether the laboratory can produce analytical results within the specified criteria.

16.5.0 REFERENCES

NSF/ANSI Standards
TNI Standards
ISO/IEC 17025
Standard Methods for the Examination of Water and Wastewater
Title 40 Part 136 of the Code of Federal Regulations

16.6.0 PROCEDURES

16.6.1 Test Methods and SOP's

1. All SOP's used by GCT laboratory tests run for an NSF/ANSI standard 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.
2. All SOP's shall be written following the NELAP example procedure.
3. All GCT reports shall reference the method or GCT SOP used to perform the test.

16.6.2 Outsourcing Testing

In the event GCT uses an outsourced laboratory to perform tests, GCT shall notify the client in advance of such use. GCT shall manage the outsourced resources in accordance with its evaluation plan. GCT shall:

1. Take responsibility for all activities outsourced;
2. Ensure impartiality of the outsourced laboratory;
3. Monitor the qualifications and assessment of the outsourced laboratory; including ensuring the laboratory is ISO/IEC 17025 certified or follows the guidelines of ISO/IEC 17025; and
4. Have a signed contract with the laboratory.

16.6.4 Proficiency Testing

GCT shall conduct its proficiency testing according to the following guidelines:

1. Analyze two PT samples per calendar year for each field of proficiency accreditation. The field of proficiency accreditation is located in GCT's Quality Manual. The analysis dates of successive PT samples for the same field of proficiency accreditation shall be at least five months apart but not greater than seven months apart, unless the PT sample is being used for corrective action in which case the analysis dates shall be at least fifteen (15) days apart. GCT shall notify the PTP the sample being requested is for corrective action.
2. Maintain a history of at least two (2) successful performances out the most recent three (3) attempts.
3. Obtain the PT samples from any PTPA –accredited Proficiency Testing Provider.
4. Maintain the PT results in accordance with GCT's Document Control and Retention Procedure.

16.7.0 TECHNICAL AIDS

NELAP Example Procedure

16.8.0 EXPLANATORY NOTE

N/A

17.0 Distribution of Laboratory Data

17.1.0 PURPOSE

The primary purpose of the laboratory data distribution procedure is to document and communicate the results of each test carried out by the laboratory and/or the results of the performance of the test unit relative to the Standards.

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 and ISO/IEC 17065, ISO 17025, and TNI 2016.

17.3.0 APPLICATION

This section is to be performed by the Laboratory Manager, Field Technician, and Quality Assurance Officer

17.4.0 DEFINITION

N/A

17.5.0 REFERENCES

Standards
Standard Methods for the Examination of Water and Wastewater
ISO/IEC 17025
TNI 2016
QP14 Record and Document Control Procedure

17.6.0 PROCEDURES

17.6.1 Results of Test Data

The results of test reports be accurately, clearly, unambiguously reported in accordance with any specific requests by the client.

Each test report shall include the following information:

1. Title of Report
2. Name and Address of the Laboratory
3. NELAP Registration Number
4. Unique Identification of the test report on each page to ensure that each page is recognized as part of the test report
5. Name and Address of the Customer
6. Identification of the Method Used
7. Unambiguous description, condition, and identification of the sample tested
8. Sampling plan information if the plan is relevant to the sample tested
9. Sampling results

10. Name or equivalent identification of person authorizing the test report
11. A statement to the effect that the results only relate to the sample tested
12. The deviations from, additions to, or exclusions from the test method, and information on specific test conditions, such as environmental conditions;
13. Where relevant, a statement of compliance/non-compliance with requirements and/or specifications;
14. 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;
15. A complete chain of custody with the Sample ID as a match in the test report;
16. Additional information which may be required by specific methods, customers or groups of customers.

17.6.1 Test Report Compilation

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

1. The test report shall be compiled each week by the Laboratory and Field Technician. Compiling consists of transferring the raw data from the bench sheets into the GCT cloud server. If there is data from outside laboratories, that data, as well as the Chain of Custody Reports, will be transferred into the GCT LIMS as well.
2. The Laboratory and Field Technical Manager will review the data for accuracy by checking the compiled data against the raw data. He/she will forward the data to the Quality Assurance Officer.
3. The Quality Assurance Officer will review the data for accuracy and precision. He/she will clearly mark any data that does not meet the GCT precision and accuracy against the established control limits. Data that does not meet the established accuracy and precision controls limits must be clearly noted at the time of transfer by the use of the symbol “R” with an explanation in the comment section.
4. The Quality Assurance Officer shall forward the final data to the Program Manager.
5. Laboratory data that is missing from the final report and should have been collected pursuant to the Standard, shall be denoted using the following explanations:
    a. a=weather
    b. b=Lab Problem
    c. c=Test Site Problem
    d. d=Not Required by Standard
6. The Program Manager shall approve the data by transferring the data to the laboratory database. 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.

17.6.2 Data Distribution

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

17.6.1 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.

17.7.0 TECHNICAL AIDS

N/A

17.8.0 EXPLANATORY NOTE

An example of a rejection of data would be as follows: $CBOD_5$ LCS which was below the lower control limit. In this case, all $CBOD_5$ results for samples within the analytical batch are rejected. Furthermore, all influent and effluent parameters on the days corresponding to the rejected results are rejected. A note is made in the comment section stating "R = reject data due to low $CBOD_5$ LCS".

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 DEFINITION

N/A

18.5.0 REFERENCES

Standards
QP14 Record and Document Control Procedure
QF119 Standard Performance Evaluation (SPE) Report Procedure

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, 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 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 REPORT DISTRIBUTION

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

18.6.5 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 Record and Document Control Procedure.

18.7.0 TECHNICAL AIDS

N/A

18.8.0 EXPLANATORY NOTE

N/A

19.0 Installation/Adjustment/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 is to be performed by the Lab Manager or Field Technician.

19.4.0 DEFINITION

N/A

19.5.0 REFERENCES

Standards
QF218 Test Installation/Adjustment/Removal Form

19.6.0 PROCEDURES

19.6.1 INSTALLATION

The wastewater treatment system should be installed according to the manufacturer's installation manual.

1. Using the equipment part list, insure that all required parts are available.
2. Select the next available location at the test site. See the Test Site Layout.
3. Excavate a hole approximately one (1) foot larger than the treatment plant and depth that will allow for sufficient coverage. The influent delivery pump line will determine the depth of the plant.
4. Carefully place the unit into the hole. The influent end of the unit will be connected to the influent delivery pump line, and the effluent end of the unit will be connected to the discharge line.
5. Connect all appropriate pipes, pumps, and electrical components.
6. Backfill the excavated hole around the unit.
7. GCT personnel shall record the installation in the Test Installation/Adjustment/Removal 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 GCT personnel shall make

or supervise the adjustment. 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

N/A

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

NA

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:

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

3. 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.

20.6.2 RANDOM SAMPLING

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

1. The Laboratory and Technical Manager 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 Laboratory and Technical Manager shall ask the Quality Assurance Officer to generate a random number from that range using the Excel random number generator.
3. The Laboratory and Technical Manager shall use that number for the sample collection.

20.7.0 TECHNICAL AIDS

ISO/IEC 17020

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.

21.3.0 APPLICATION

This section is to be performed by the Field/Laboratory Technicians.

21.4.0 DEFINITIONS

N/A

21.5.0 REFERENCES

Maintenance Log Form

21.6.0 PROCEDURES

21.6.1 ANALYTICAL EQUIPMENT

All analytical equipment is calibrated and/or verified according to the manufacturer's recommendations and/or the requirements of the applicable standard operating procedure. The Laboratory Technical 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 and software is uniquely identified with a GCT property number or a manufacturer serial number.

21.6.2 INTERMEDIATE CHECKS

The Laboratory Technical Manager determines the requirements for intermediate checks on calibrated equipment. If such checks are required, it shall be found in the operation manual or in the Standard Operating Procedure for the instrument used.
The Laboratory Technical Manager determines the requirements for correction factors for measuring equipment.

21.6.3 MAINTENANCE AND REPAIR

The primary instrument operator will document maintenance and repair using the Maintenance Log. The Laboratory Technical Manager will determine whether maintenance and repair services will be outsourced or performed by laboratory personnel. For outsourced maintenance and repair services, the Laboratory

Technical Manager will select and use an approved subcontractor. For maintenance and repair performed by laboratory personnel, the Laboratory Technical Manager will ensure that a procedure exists for the maintenance and repair of equipment, and that the procedures are followed.

The primary instrument operator ensures that equipment is re-calibrated after maintenance and repair, if required, and updates the maintenance and repair records.

An entry will be made to the Maintenance Log when an item of equipment is damaged. This entry will describe the damage, repair, re-calibration information, or reason for not re-calibrating. Damaged or improperly working equipment will be clearly identified as "Out of Service" until repairs are completed. The damaged equipment will be re-calibrated if the damage was such that the calibration has been rendered suspect.

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.

The following equipment records will be maintained:

Record	Custodian	Minimum
Master Equipment List	Laboratory Manager	7 Years
Calibration Record	Laboratory Technical	7 Years
Maintenance Records	Laboratory Technical	7 Years
Repair Records	Laboratory Technical	7 Years
Software Verification Records	Program Manager	7 Years

22.0 Measurement Traceability

22.1.0 PURPOSE

This section describes the calibration, access, storage, maintenance and control of 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

This section is to be performed by the Field Technical Manager and the Field and/or Laboratory Technicians.

22.4.0 DEFINITIONS

N/A

22.5.0 REFERENCES

QP21 Equipment Control and Maintenance Procedure

22.6.0 PROCEDURES

22.6.1 ANALYTICAL EQUIPMENT

All analytical equipment shall be calibrated and/or verified according to the Equipment Control and Maintenance Procedure, the manufacturers' recommendation, and/or the requirements of any applicable technical standard. The NIST calibration status of all equipment shall be displayed using calibration stickers. Calibration reports shall be maintained by the Laboratory Technical Manager on the appropriate calibration form.

Laboratory employees 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. Qualified laboratory staff shall perform internal calibrations according to documented technical procedures and work instructions.
4. The laboratory shall only use approved subcontractors (if required) for calibration services.

22.6.2 REFERENCE MATERIALS

The Laboratory Technical Manager shall maintain a list of reference standards. Reference materials shall be handled by authorized personnel, only, at the direction of the Laboratory Technical Manager.

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 Laboratory Technical Manager shall maintain a record of the initial calibration of reference standards, along with handling, transportation, and storage, as necessary. Re-calibration of reference standards shall be at the discretion of the Laboratory Technical Manager

.

22.6.3 CHEMICALS AND CONSUMABLES

Chemicals shall be handled by an employee who has been trained in the appropriate procedure, only. Each laboratory employee is responsible for confirming the lot number, storage conditions, expiration date, and certified grade or purity of each chemical critical to the analysis.

22.6.4 PREPARATION OF STANDARD SOLUTIONS AND TEST REAGENTS

Instructions for preparation of stock, working, and test solutions are contained in the SOP's. The lot number or the batch number, and the date opened, of the reagents used in the preparation of the solutions are documented to allow traceability from QA data results to reagent documentation.

22.7.0 TECHNICAL AIDS

ISO/IEC 17025

22.8.0 EXPLANATORY NOTE

NA

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 to be performed by the Program Manager.

23.4.0 DEFINITION

N/A

23.5.0 REFERENCES

Vendor List in GCT SOP's

23.6.0 PROCEDURES

23.6.1 VENDOR QUALIFICATION

The Program Manager, with consultation from the Laboratory and Field Technical Manager, will review a vendor's qualifications. The 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

If in the sole discretion of the Program Manager the vendor meets GCT's qualifications, the vendor will be added to GCT's Vendor List Form.

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 $500
2. If less than two bids are received, approval is required from the Program Manager or Deputy Manager

3. The Program Manager may select any vendor on the vendor list 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 purchased by GCT shall be recorded on a purchase order form and all appropriated documentation attached to the purchase order form. The form shall be filed pursuant to GCT's recordkeeping procedures. All professional work shall be documented by the resume of the professional or firm hired by GCT and a contract on GCT's standard contract form.

23.6.6 PURCHASE OF LABORATORY SUPPLIES

For consumable laboratory supplies, the purchase request is made by the Laboratory Manager if the supply is part of an existing Standard Operating Procedure. If the request is not part of an existing Standard Operating Procedure, the request must be approved by the Laboratory Technical Manager of the Program Manager.

The Laboratory 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 Certificate of Analysis, Reference Materials, or other information shall be inspected to ensure the chemicals and reagents meet the minimum requirement of the SOP and then shall be filed in the certification notebook.

If an expiration date is provided by the manufacturer, 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

GCT Standard Contract

23.8.0 EXPLANATORY NOTE

N/A

24.0 Sub-Contractor Selection

24.1.0 PURPOSE

The purpose of this section is to describe the procedures for ensuring that sub-contractors 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

This section is to be performed by the Program Manager.

24.4.0 DEFINITION

N/A

24.5.0 REFERENCES

Standards
ISO IEC 17025
TNI Standard
QF 111 Sub-Contractor List Form
QF112 Agreement for Professional Services

24.6.0 PROCEDURES

24.6.1 SUB-CONTRACTOR QUALIFICATION

The Program Manager, with consultation from the Laboratory and Field Technical Manager and Deputy Manager, will review a sub-contractor's qualifications. The Program Manager shall review the following qualifications:

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

If in the sole discretion of the Program Manager the vendor meets GCT's qualifications, the vendor will be added to GCT's Sub-Contractor list.

24.6.2 SUB-CONTRACTOR SELECTION

The Program Manager is responsible for the selection of sub-contractors. The Program Manager may select any sub-contractor on GCT's Sub-Contractor list form.

24.6.3 SUB-CONTRACTOR DISCLOSURE

Sub-contractors 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 Sub-Contractor Agreement form. Any vendor failing to sign these agreements shall be removed from the sub-contractor list.

24.7.0 TECHNICAL AIDS

N/A

24.8.0 EXPLANATORY NOTE

N/A

25.0 TRAINING

25.1 PURPOSE

The purpose of this section is to describe the procedures for ensuring that employees are appropriately trained and competent to perform GCT's certification activities.

25.2 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, ISO/IEC 17020 and the 2009 TNI Standard.

25.3 APPLICATION

This section is to be performed by the Technical Manager.

25.4 DEFINITION

Initial Demonstration of Capability - a procedure used to demonstrate that the laboratory and analyst can perform an analysis with acceptable precision, accuracy, sensitivity and specificity pertaining to that particular method.

Ongoing Demonstration of Capability - the continual demonstration that the laboratory and analyst continue to show the technical ability to perform the method; usually determined by using the Proficiency Testing

25.5 REFERENCES

2009 TNI Standard Section 1.62, 1.63, 5.2
ISO/IEC 17025 Section 5.2
ISO/IEC 17065 Section 6.1
QF108 GCT Training Log

25.6. PROCEDURES

25.6.1 Training of New Employees

The Technical Manager is responsible for ensuring that all new GCT employees are competent to perform GCT's certification activities. The Technical Manager will assign to appropriate personnel the task of providing training and guidance to the employees. The Technical 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 Technical Manager. Additionally, prior to any

laboratory employee performing a laboratory test for a client, the laboratory employee shall perform an Initial Demonstration of Capability.

GCT training consists of three phases:

1. Test Methodology Study
2. Hands on Training
3. Certification of Activity

25.6.1.1 Phase 1: Test methodology study

The GCT employees will study the Procedure for a given parameter such BOD Calibration. The QA/QC Manager or his/her designee shall explain the parameter to the employees. The QA/QC Manager or his/her designee shall be responsible that the appropriate reference material is available for the parameter.

25.6.1.2 Phase 2: Hands on Training

Following the completion of Phase 1, the QA/QC Manager or his/her designee instructs the employee in Hands-On Training. This activity consists of two steps. In the first step, the QA/QC Manager or his/her designee performs the activity. In the second step, the employee performs the activity while the QA/QC Manager or his/her designee observes.

25.6.1.3 Phase 3 - Certification

Following the completion of Phase 2, the employee performs the activity to the satisfaction of the QA/QC Manager or his/her designee. In the case of an analytical activity, the employee must demonstrate accuracy and precision. Training is completed when the employee successfully completes Phase 3.

25.6.1.4 Initial Demonstration of Capability

GCT conducts an initial demonstration of capability (IDC) at least once, by each analyst, before analysis of any sample, to demonstrate proficiency to perform the method and obtain acceptable results for each analyte. The details of initial demonstration of capability are provided in the method of choice, specify and reference the method or procedure used for demonstrating capability.

25.6.1.5 Continuing Demonstration of Capability

The Technical Manager is also responsible for the continuing training of new employees. The QA/QC Manager will hold quarterly training programs for all existing and new employees. The Laboratory Manager and laboratory analysts will demonstrate their competency using Proficiency Testing.

25.6.2 Documentation

All training will be documented in the Training Documentation Log and signed by the trainer (if applicable), the QA/QC Manager, and the employee. The Demonstration of Capability will be documented in the Demonstration of Capability Certification Statement.

25.7 TECHNICAL AIDS

Demonstration of Capability Certification Statement

25.8 EXPLANATORY NOTE

Reserved

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, ISO/IEC 17025, and the TNI Standard.

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

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 Sub-Contractor Monitoring and Assessment

27.1.0 PURPOSE

The purpose of this section is to describe the procedures for ensuring that sub-contractors 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.

27.3.0 APPLICATION

This section is to be performed by the Deputy Manager.

27.4.0 DEFINITIONS

N/A

27.5.0 REFERENCES

QF111 List of GCT Subcontractors
QF112 Consulting and Sub-Contractor Agreement Form
QF113 Sub-Contractor Monitoring Form

27.6.0 PROCEDURES

27.6.1 SUB-CONTRACTORS ASSESSMENT

The Deputy Manager, with consultation from the Laboratory and Field Technical Manager, will review a sub-contractor's qualifications. The Deputy Manager shall review the following qualifications of the sub-contractor:

1. Experience in area of work
2. Insurance (Sub-contractor will supply proof of insurance)
3. Understanding GCT's technical and analytical requirements
4. Understanding of GCT's quality system
5. Safety Record (Sub-contractor 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 sub-contractor meets GCT's qualifications, the sub-contractor shall be added to GCT's sub-contractor list.

27.6.2 SUB-CONTRACTOR MONITORING

GCT personnel responsible for the sub-contracted work shall monitor the sub-contractor on an annual basis. Sub-Contractors shall be monitored for the following:

1. Expertise of Contractor's personnel
2. Sub-contractor's adherence to GCT's Quality Manual and Quality Procedures (if applicable)
3. Sub-contractor's compliance with health and safety regulations

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

27.6.2 SUB-CONTRACTOR DISCLOSURE

Sub-Contractors shall sign the Consulting and Sub-Contractor 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 sub-contractor failing to disclose the information upon request by GCT may be removed from the sub-contractor list.

27.7.0 TECHNICAL AIDS

N/A

27.8.0 EXPLANATORY NOTE

N/A

28.0 PREVENTATIVE ACTIONS

28.1.0 PURPOSE

The purpose of this section is to describe how to perform preventative actions to prevent nonconformity or problems with the Quality System.

28.2.0 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, ISO/IEC 17025, and the TNI Procedure.

28.3.0 APPLICATION

This section is performed by the QA/QC Manager.

28.4.0 DEFINITION

Preventative Action is any action taken to eliminate the cause of a potential non-conformity or other potentially undesirable situation. Whereas a corrective action is taken to prevent reoccurrence, a preventative action is taken to prevent occurrence.

28.5.0 REFERENCES

Corrective Action Form

28.6.0 PROCEDURES

The preventative action procedure will collect information, analyze information, and investigate quality problems.

28.6.1 Identification of Potential Nonconformities

1. GCT personnel are committed to having a Quality System and are responsible for making any corrections to existing Quality Procedures and SOP's to ensure that potential problems are recognized in advance of occurrence.
2. GCT shall routinely capture data from all its activities, procedures, audits, and complaints and examine the data to determine if a Quality System is being maintained.
3. GCT shall review the audit observations for opportunities to improve the Quality System.
4. GCT shall review the observations of the management reviews to improve the Quality System.
5. GCT shall encourage customers to make observations of the GCT Quality system and discuss any potential preventative action requests with GCT personnel.

28.6.2 Evaluating the Need for Preventative Action

The QA/QC Manager, the Laboratory and Technical Manager, or the Program Manager will review the preventative action request. One of three determinations shall be made by the QA/QC Manager:

1. The request is valid and should be implemented.
2. The request requires more detailed analysis.
3. The request will not provide the proposed preventative measure and will not be implemented.

28.6.3 Identifying the Root Cause of a Nonconformance

To initiate a preventative action request, GCT employees will complete the Corrective Action Form and give the form to the QA/QC Manager. The QA/QC Manager, the Laboratory and Technical Manager, or the Program Manager will review the preventative action request. One of three determinations shall be made by the QA/QC Manager:

1. The request is valid and should be implemented.
2. The request requires more detailed analysis.
3. The request will not provide the proposed preventative measure and will not be implemented.

28.6.4 Implementing the Preventative Maintenance

In the event the Preventative Action is to be implemented, the QA/QC Manager will meet with appropriate GCT personnel to implement the proposed preventative action. The implementation will consider the effects of implementing the change during a process in progress and the effect on the Quality Management System if such a change is made.

28.6.5 Documenting the Preventative Action

The Corrective Action Form will be used to assure that the preventative 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

N/A

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 Quality Assurance Officer.

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 EXPLANATORY NOTE

N/A

30. IMPARTIALITY

30.1. Purpose

This section describes the process for conducting reviews of the impartiality of GCT's scheme. 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, and GCT's Quality Procedures. GCT declares that it understands the importance of impartiality in carrying out its certification activities, has mechanisms in place to identify and manage conflicts of interest, and therefore ensures the impartiality of GCT's certification activities. This Standard Operating Procedure applies to all GCT employees.

30.2. 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 TNI Standard.

30.3. Application

The process of handling conflict of interests is under the responsibility of the Program Manager. The Program Manager gathers possible cases, ensures that a decision on each case is taken and documents the proceedings.

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.

This Quality Procedure explains GCT's approach towards impartiality and describes the mechanisms in place which shall prevent us from partial decision-taking.

30.4. 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 of 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.
5. 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.

30.5. References

ISO/IEC 17065, Section 4.2 and 5.2

30.6. Procedures

30.6.1. Proactive 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.
Basis of this Standard Operating 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 or some 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; and
3. The cases should be referred to the Program Manager in writing. If the concerned staff member feels uncomfortable

in formalizing his/her concerns in writing (e.g. email or report), he/she can also ask for a confidential talk with the Program Manager.

30.6.2. 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 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.

30.6.3. 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 extra-ordinary 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.

31.6. Technical Aids

Risk Matrix
GCT Conflict of Interest Reporting Form

31.7. Explanatory Note

NA

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, ISO/IEC 17020 and 2009 TNI Standard.

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

2009 TNI Standard, Section 4.2.8.1
QF120 Data Integrity and Ethics Agreement

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 the laboratory's data integrity plan. Quality Procedures and laboratory SOP's are 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.

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. 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. 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. Monitoring

Reports and the data used to support them are randomly selected by the QA/QC Manager for auditing. Each calendar quarter the QAO audits 5 % or 5 data packages, whichever is more. The purpose of the review is to verify that all data integrity requirements are met.

31.6.4. 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, SOPs, 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.

31.6.5. 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.

31.6.6. 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

NA

31.8. Explanatory Note

NA

32. MANAGEMENT OF COMPETENCIES

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, GCT's SOP's, ISO/IEC 17065, ISO/IEC 17025, and the TNI Standard. This Standard Operating Procedure applies to all GCT employees.

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, ISO/IEC 17025, and TNI Standard.

32.3. Application

The process of managing competencies is under the responsibility of the Program Manager and Technical Manager. The Program Manager is responsible for allocating time and resources to allow training to be carried out. Additionally, the 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.

The Technical Manager is responsible for ensuring that all new GCT employees are competent to perform GCT's certification activities and assign to appropriate personnel the task of providing training pursuant to Quality Procedure 25.

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
Standards
GCT Quality SOP's
GCT Quality Form QF102 – Organization Chart
GCT Quality Form QF103 – Job Descriptions
GCT Quality Form QF107 – Annual Employee Performance Evaluation

32.6. Procedures

32.6.1. Determination of Competencies

The Program Manager, in consultation with the Technical 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 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.

The Technical Manager shall identify the technical training needs of all new and existing personnel within the organization and shall ensure personnel receive training on the technical aspects of GCT's certification procedures, particularly GCT's SOP's.

32.6.3. Demonstration of Competency

The demonstration of competency shall be documented using GCT Quality Procedure QP25 – Training Procedure.

32.6.4. Authorization of Personnel for Functions in Certification Process

The Program Manager, in consultation with the Technical 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 GCT Quality Procedure QP25 – Training Procedure.

32.7. Technical Aids

NA

32.8. Explanatory Note

NA