



Agri-Waste Technology, Inc.

Management System Policy and GHG Statement of Qualifications for ARB Project Verifications

Version 1.0 (May 10, 2016)



*Please access the AWT MSP from our website
(<http://agriwaste.com/services/carbon-offsets/verification/>) to insure you
are referencing the latest version.*

i. Table of Contents

i. Table of Contents

ii. Revision History

1. Legal Status and Company Overview

Legal and Contractual Matters

Verification Roles and Responsibilities

Commitment to Impartiality

Avoidance of Conflicts of Interest

Mechanism for Oversight to Impartiality

2. Competencies

Management and Personnel

External Expertise

Competencies of Personnel

Deployment of Personnel

Use of Contracted Verifiers

Personnel Records

3. Confidentiality and Control of Records

Confidentiality

Control of Records

4. Verification Process

5. Verification Team

6. Complaints, Appeal and Disputes

Complaints

Appeals and Disputes

7. Accreditation

8. Authorization of Management System Policy

Attachments

- A. Organizational Charts
- B. Internal COI/Impartiality
- C. Contracting of V/V Services
- D. Confidentiality/Non-Disclosure
- E. Control of Documents and Records Policy
- F. Sampling Plan
- G. Verification Plan
- H. Complaints, Appeals and Disputes

Appendices

- 1. COI
- 2. NOVS

Please access the AWT MSP from our website (<http://agriwaste.com/services/carbon-offsets/verification/>) to insure you are referencing the latest version.

3. Verification Statement
4. Verification Report

ii. Revision History

Version 1.0 (November 4, 2015)

- Removed ARB related information out of the Management System Policy (Version 2.3) and created Version 1.0 of the MSP and Statement of Qualifications for ARB Project Verification

1. Legal Status and Company Overview

Agri-Waste Technology, Inc. (AWT) is a professional engineering and soils firm, specializing in environmental consulting. AWT is a private, registered small business that operates from its lone corporate office, located in Raleigh, North Carolina. AWT was incorporated on February 2, 1984 by the State of North Carolina.

AWT's ownership structure includes 5 shareholders:

- Jeffrey Vaughan, President
- Chris Mosley, Vice President
- Hal Langenbach, Secretary
- Kevin Davidson, Treasurer
- Chris McGee

The company structure is depicted in block diagram form in *Attachment A*. AWT has been providing engineering, agronomy, and soils consulting services, with extensive expertise in waste systems engineering and nutrient planning to residential, industrial, municipal, and commercial clients nationwide and internationally in Russia, China, India, Mexico and Canada, for over 25 years.

AWT's diverse and highly-skilled staff has 75 years of combined experience along with diverse educational backgrounds and continual industry related training. This diverse staff includes professional engineers, licensed soil scientists, agronomists, GIS/GPS computer mapping technicians, GHG verifiers and subsurface/surface waste system operators.

AWT is experienced with a variety of GHG offset protocols including those used by Chicago Climate Exchange, Climate Action Reserve, American Carbon Registry, Verified Carbon Standard, Pacific Carbon Trust and California Air Resources Board.

AWT follows the guidelines set forth in the Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms to Allow for the Use of Compliance Instruments Issued by Linked Jurisdictions (Specifically those in Subarticle 2 Section 95802 (Definitions), Subarticle 13 Section 95977-95979 and Subarticle 14 Section 95990 of Title 17, California Code of Regulations (CCR)), which are standards that provide clear and consistent specifications for verifying GHG emission offsets.

Since 2006, AWT has been providing independent verification to agricultural clients and carbon offset project developers nationwide and in India.

In early 2013, AWT was accredited as a verification body by the California Air Resources Board in the following category:

- Livestock

AWT maintains a website, www.agriwaste.com, which describes our services. The website provides an avenue for AWT to make pertinent verification documents publicly available. The owners of AWT also own two separate businesses, Advanced Septic, Inc. and Movalada, LLC which were both founded in 2010. Advanced Septic, Inc. provides septic system installation and repair services. Movalada, LLC owns the offices that AWT and ASI rent.

1.1 Legal and Contractual Matters

Once AWT is contacted by a client for verification of a GHG assertion, the V/V Director or anticipated Team Leader develops a quote (if a quote is requested):

A contract is developed during the early stages of the verification process. This contract outlines the level of assurance agreed upon with the client, scope of services, objectives, amount and type of evidence necessary to achieve the agreed level of assurance, methodologies for determining representative samples and risks for potential errors, omissions or misrepresentations.

Each verification project is bound by a signed and executed contract, which is developed by the Team Leader.

1.2 Verification Roles and Responsibilities

AWT's verification function requires 5 roles to be filled: V/V Director, Team Leader, Internal Peer Reviewer, Team Member and COI Auditor. The responsibilities assigned to each role are as follows:

1.2.1 V/V Director

- Development of operational policies
- Supervision of implementation of policies and procedures
- Supervision of finances
- Evaluation of adequacy of verification activities
- Delegation of authority to committees or individuals
- Providing adequate, competent resources for verification activities
- Selection of team leader/reviewer
- Development of proposals/quotes
- Records retention
- Personnel records
- Hiring of personnel
- Public information access
- Training requirements and implementation
- Program revisions

1.2.2 Team Leader

- Development of proposals/quotes
- Select team members
- Review of preliminary documentation, project design documents/monitoring

- plans/implementation documents and previous assessments (if applicable)
- Determine eligibility of projects
- Assess controls for sources of potential errors, omissions and misrepresentations
- Develop verification plan
- Develop sampling plan
- Negotiate/execute contract with contracted verifiers (if applicable)
- Negotiate/execute contract for verification services
- Develop verification statement
- Oversee the verification team including contracted verifiers
- Communicate with client
- Clearly establish roles/responsibilities of the team members
- Review and evaluation of GHG assertions
- Review supporting documentation
- Conduct field audits
- Project budget oversight
- Resolution of Appeals, Disputes and Complaints
- Technical expert for scope(s) in which technical competencies are demonstrated
- Report concerns and/or need for procedural changes to carry out assigned duties to the Director

1.2.3 Internal Peer Reviewer

- Technical review of the verification process at the project level
- Technical review of the verification report
- Technical review of the verification statement
- Technical expert for scope(s) in which technical competencies are demonstrated
- Report concerns and/or need for procedural changes to carry out peer review to the Director

1.2.4 Team Member

- Plan and prepare for field audits
- Conduct document review under the direction of the Team Leader
- Communication/coordination with other team members
- Develop verification report
- Report concerns that may arise during the verification process to the Team Leader

1.2.5 COI Auditor

- Assess corporate conflict of interest issues.
- Assess personal conflict of interest issues.
- Ensure assembled team is free from conflict of interest, can operate with impartiality and objectivity exists between the verification team, the client and responsible parties
- Report concerns and/or need for procedural changes to carry out oversight of impartiality to the Director

1.3 Commitment to Impartiality

AWT will act impartially and avoid unacceptable conflicts of interest in all verification projects, by management, staff members and contracted verifiers. AWT is able to avoid potential or actual organizational conflicts of interest in part because there are no other related entities involved (i.e. a parent company or subsidiaries). AWT utilizes a COI Auditor to oversee the mechanism for impartiality. The COI auditor is responsible for ensuring impartiality is maintained as verification activities are accomplished.

AWT will review all information received from clients and/or responsible parties to determine potential risks to impartiality. Potential personal conflicts of interest are determined and impartiality is documented through the utilization of an *Internal Conflict of Interest/Impartiality (Attachment B)* document that is signed by each verification team member for every verification project.

Specific risks to impartiality could include:

- Self interest: if any member of AWT acts partially for any financial benefit
- Familiarity: having a personal relationship with a client and not receiving proper verification evidence to complete the project
- Self review: having an individual on staff review their own work and/or by providing consultancy and then assessing their verification activities
- Sources of revenue: having a GHG project verification client who is also a client in other areas of the business
- Intimidation: an individual being coerced openly or secretly to do something that is not impartial

AWT is able to avoid impartiality by abiding by the following safeguards:

- AWT's value of their reputation and any legal liability they could face
- AWT's commitment to abide by the professional standards and regulatory requirements regarding independence
- By understanding the needs and expectations of our clients
- AWT's oversight by the COI Auditor
- By establishing and applying methods to determine the efficiency and effectiveness of each project, by having an internal audit performed by the internal peer reviewer
- By identifying potential conflicts of interest and dealing with them appropriately
- Commitment by team leader, team members, internal peer reviewer and appeals, complaints and disputes representative to support the verification process and to act impartially throughout the verification project activity.
- AWT has a strict policy when hiring, training and promoting personnel, which emphasizes the importance of impartiality, the potential risks that could arise and evaluating their impartiality regarding each client, so that they are successful at mitigating or eliminating any risks

AWT follows a zero-tolerance policy. If impartiality were compromised the following steps would take place:

Please access the AWT MSP from our website (<http://agriwaste.com/services/carbon-offsets/verification/>) to insure you are referencing the latest version.

- The team leader would discuss the findings with the COI Auditor
- A conference call would then be placed with the client
- AWT would then inform the protocol administrator about the findings
- A solution would try to be resolved to include:
 - Removing the particular team member who compromised impartiality, or
 - Declining the project altogether if a reasonable solution cannot be reached

1.4 Avoidance of Conflicts of Interest

AWT determines and reports any conflicts of interest or lack thereof to the administering program. AWT will strive to avoid any conflicts of interest for verification projects through the following measures:

- AWT and its subcontractors avoid any actual or potential conflicts of interest with the responsible party and the intended users of the information.
- AWT and its subcontractors will not verify GHG assertion where it provided GHG consultancy services to the responsible party that support the GHG assertion
- AWT and its subcontractors will be independent
- AWT and its subcontractors will not verify a GHG assertion where a relationship with those who provided GHG consultancy services to the responsible party that support the GHG assertion poses an unacceptable risk to impartiality which could 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 a new client
- AWT and its subcontractors will not verify a GHG assertion using personnel who were engaged by those who provided GHG consultancy services to the responsible party in support of the GHG assertion
- AWT and its subcontractors will not offer products or services that pose an unacceptable risk to impartiality
- AWT and its subcontractors will not outsource the review and issuance of the verification statement
- AWT and its subcontractors will not state or imply that verification of a GHG assertion would be simpler, easier, faster or less expensive if a specified GHG consultancy service were used
- AWT and its subcontractors will demonstrate competence and due professional care consistent with their roles and responsibilities
- AWT and its subcontractors will demonstrate ethical conduct throughout the verification
- AWT and its subcontractors will reflect truthfully and accurately verification activities, conclusions and reports
- AWT and its subcontractors will meet the requirements of Subchapter 10 Climate Change, Article 5, Subarticle 13, Section 95979

Specific procedures related to COI determination and mitigation for verification of ARB offset projects follow the requirements of Subchapter 10 Climate Change, Article 5, Subarticle 13, Section 95979.

The potential for conflict of interest is deemed high where any of the situations described in Section 95979 (b) occur. The potential for conflict of interest is deemed low where any of the situations described in Section 95979 (c) occur. The potential for conflict of interest is deemed medium where any of the situations described in Section 95979 (d) occur.

AWT will not provide verification services for a client if the potential for conflict of interest is deemed high. If the potential for conflict of interest is deemed medium and AWT intends to provide verification services for the client, AWT will submit a plan to avoid, neutralize, or mitigate the potential conflict of interest situation. The mitigation plan will include: 1) demonstration that members with potential conflicts of interest have been removed and insulated from the project, 2) explanation of any changes to the organizational structure or company to remove the potential conflict of interest and 3) any other circumstances that addresses other sources for potential conflict of interest.

Prior to providing any offset verification services, AWT will submit an evaluation of the potential for conflict of interest (*Appendix 1*) that AWT, its staff, its related entities or any subcontractors may have with the potential client. The evaluation will include the following:

- Identification of whether the potential conflict of interest is high, low or medium
- Identification of whether any member of the offset verification team has previously provided offset verification services for the potential client and if so, which years.
- Identification of whether any member of the offset verification team or related entity has provided any non-offset verification services of any nature to the potential client during the past 3 years. If so, the following will also be submitted:
 - Identification of the nature and location of the work performed for the client and an evaluation of whether the work is similar to the type of work to be performed during the verification
 - Description of the nature of past, present or anticipated future relationships with the client including:
 - Instances when any member of the verification team has performed or intends to perform work for the client
 - Identification of whether work is currently being performed for the client and the nature of such work
 - Dollar value of work performed for the client in the last 3 years
 - Whether any member of the verification team has any contracts to perform work for the client or a related entity
 - Dollar value of work performed related to GHG reductions and removal enhancements for the client or related entities.
 - Explanation of how the amount and nature of work previously performed is such that any member of the verification team's credibility and impartiality should not be questioned.
 - A list of names of the staff that would perform verification services for the

client and a description of any instances of personal or family relationships with management or employees of the client that represent a potential conflict of interest

- Identification of any other circumstances known to AWT or the client that could result in conflict of interest
- Attest in writing the following: “I certify under penalty of perjury of the laws of the State of California the information provided in the Conflict of Interest submittal is true, accurate and complete.”

Conflict of Interest situations will be monitored during the process of providing verification services and for a period of 1 year after the completion of verification services for an ARB offset project. If any situations arise that increase the potential for conflict of interest, these will be made known to ARB in writing and will include the description of actions that AWT has taken or proposes to take in order to avoid, neutralize or mitigate the potential for conflict of interest. If AWT or any of the verification team members enters into a contract with the client within one year after verification services for an ARB offset project are completed, AWT will notify ARB of the contract and the nature of the work to be performed within 30 days. AWT will notify ARB of any emerging conflicts of interest during the time verification services are being offered. Additionally, AWT will report any changes to its organizational structure including mergers, acquisitions or divestitures to ARB if any occur within one year after completion of verification services.

1.5 Mechanism for Oversight of Impartiality

The COI Auditor, provides oversight to ensure that impartiality is being achieved throughout each verification project. The COI Auditor provides impartial monitoring and review to ensure independence. The following step-by-step procedures include:

- AWT is contacted by a client to provide verification services.
- The COI Auditor is then provided with contact information for all involved parties and research regarding impartiality and conflict of interest takes place.
- The COI Auditor researches each company to determine the client’s parent company and any subsidiaries.
- All staff members are then made aware of these findings at the initial team meeting to determine if impartiality will be compromised by any of the members.
- If it is determined that impartiality is not compromised and no potential conflicts of interest exist, the team leader, team members, internal peer reviewer and appeals, complaints and disputes representative then sign the *Internal Conflict of Interest/Impartiality (Attachment B)* document.
- If a conflict of interest is discovered or it is determined that impartiality is compromised at this point, AWT would determine the necessary steps to eliminate conflict of interest and compromises to impartiality entirely to include:
 - Removing the particular team member that poses a conflict of interest, or
 - Declining the project altogether.
- ARB COI evaluation forms are completed and submitted to the applicable registry for review and approval.

2 Competencies

AWT maintains all relevant competencies to offer verification services for livestock projects under the ARB program.

2.1 Management and Personnel

2.1.1 Procedure for Determining Required Competencies

It is the responsibility of the Director to determine competency requirements. The Director sets the competency requirements based on the requirements of the professional licensing board relevant to engineering professionals. AWT specifically utilizes the requirements of the North Carolina Board for Engineers and Land Surveyors. AWT must maintain a professional holding an active license issued by the North Carolina Board for Engineers and Land Surveyors.

2.1.2 Procedure to Demonstrate That Management, Verifiers and Technical Experts Have Appropriate Competencies in Activities Associated with the Verification

AWT personnel, whether they are employees or subcontractors, are required to exhibit the competencies relevant to their assigned verification activities. The Director verifies competencies in a variety of ways including 3rd party certifications, educational backgrounds, professional licensing, experience and training.

2.1.3 Procedure to Have Access to Relevant Internal or External Expertise

AWT requires internal expertise relevant to the ARB program. Team leaders and internal peer reviewers shall exhibit these competencies via training and testing based on the ARB requirements.

- Technical experts shall have knowledge of the ARB specific verification protocols under which they will be operating.
- Technical experts shall have knowledge of the ARB specific step-by-step process for accomplishing verification activities.
- Lead verifiers (Team Leaders) shall have received and successfully passed, at minimum, all applicable ARB specific training required by ARB for the specific protocols under which they will be operating.
- Lead verifiers (Internal Peer Reviewers) shall have received and successfully passed, at minimum, the ARB general verification training.
- Technical experts shall have sector specific competencies as demonstrated by an applicable active professional license or documented professional experience in the sector.

2.2 External Expertise

If AWT does not have internal technical expertise in a subset of a certain sector, external expertise will be utilized to fulfill scope specific competency requirements.

- **No external experts required.**

The experts listed above hold expertise of the technologies employed in these sectors and

Please access the AWT MSP from our website (<http://agriwaste.com/services/carbon-offsets/verification/>) to insure you are referencing the latest version.

not specific verification expertise. All verification expertise is provided internally.

2.3 Competencies of Personnel

AWT shall employ personnel having sufficient competence for managing the type and range of its verification activities. The Director is responsible for ensuring management of AWT's verification services is performed by those with sufficient competence for the full range of verification services offered.

AWT shall employ or have access to a sufficient number of verification team leaders, verifiers and technical experts to cover the range and volume of its verification activities. AWT shall maintain the following positions for handling verification activities.

AWT's V/V Roles and Responsibilities
Team Leader: Hal Langenbach
Appeals/Complaints/Disputes: Jeff Vaughan
Internal Peer Reviewer: Chris Mosley
Team Members (optional): Chris McGee Chris Love
COI Auditor: Lisa Tilley
Director: Chris Mosley

The only positions not critical for providing full verification services are the team member positions. Verification can be handled without the “team members” based on the competency requirements of the team leaders. Any changes in personnel requirements by ARB shall be monitored by the Director and implemented on a schedule, as required by ARB.

It is the responsibility of the Director to determine if additional personnel are required to execute the workload of verification activities. Should AWT fail to maintain sufficient staff to accomplish verification activities, AWT shall discontinue offering those services until sufficient personnel are added. The Director shall manage the hiring of additional staff and/or subcontractors, such that competencies are maintained in all verification activities for the ARB program.

AWT shall use verifiers and technical experts only for specific verification activities where they have demonstrated competence. It is the responsibility of the Director to determine competencies of verifiers and technical experts. Competencies required are detailed in Sections 2.1.1-2.1.3, 2.4.1 (team leaders and internal peer reviewers) and Sections 2.4.1 (team members).

AWT shall make clear to appropriate personnel relevant duties, responsibilities and authorities. Duties, responsibilities and authorities are described in detail for each position in Section 1.2. The Director has full authority to delegate to AWT personnel provided relevant competencies are demonstrated. The Director communicates broad expectations to each employee either through group training activities or individual conference. Additionally, team leaders communicate specific responsibilities to the team members during the initial project specific team meeting.

AWT selects, trains and formally authorizes verifiers. AWT selects technical experts used in the verification process based on the technical requirements of ARB. Both the team leader and internal peer reviewer for each verification project hold relevant technical expertise. Should specific technical expertise be required that is not exhibited by AWT staff, AWT will enlist external experts. Applicable technical expertise is documented via curriculum vitae or resume.

It is the responsibility of the Director to ensure that AWT verifiers have access to up-to-date information on GHG verification processes, requirements, methodologies, activities, ARB program provisions and applicable legal requirements. The Director maintains all of the latest process documents and GHG program provisions on file and communicates to AWT staff and subcontractors via email, internal meetings, teleconference or training, any modifications, additions or subtractions as necessary. Furthermore, verifiers must demonstrate knowledge of GHG verification processes, requirements, methodologies, activities, ARB program provisions and applicable legal requirements. AWT requires that the team leaders and internal peer reviewers have the competence to evaluate verification processes, related findings and recommendations of the team in order to write the verification statement. It is the responsibility of the team leaders to write the verification statements. However, the internal peer reviewer must review the statements.

It is the responsibility of the Director to identify training needs and provide training in order to keep all AWT staff and subcontractors abreast of verification processes, requirements, methodologies, activities and ARB program requirements. At a minimum, annual training will be provided to all AWT staff and subcontractors based on the roles/responsibilities they fulfill. The Director, as appropriate, may require additional training if deemed necessary.

2.4 Deployment of Personnel

2.4.1 General

Each member of the verification team has detailed knowledge regarding the ARB program and protocols. All members adhere to the following:

- Demonstrate competence and due professional care consistent with their roles and responsibilities.
- Provide ethical conduct and are independent.
- Avoid any actual or potential conflicts of interest with the responsible party and the intended users of the GHG information.
- Provide truthful and accurate verification activities, conclusions and reports.
- Meet the requirements of the standards of the ARB program

AWT typically accomplishes verification projects using a team made up of a team leader and team members. However, if the team leader exhibits all the competencies required for a particular verification project, then the team leader may function as the verification team. Competencies include sector competencies, management competencies, verification activity competencies and program competencies. An internal peer reviewer and AWT representative to handle appeals, complaints and disputes are always assigned to individual projects in addition to the team leader and team members or team leader acting as the verification team, whichever the case may be.

All personnel working on projects to be registered on ARB shall undergo training and competency testing and exhibit an understanding of applicable eligibility requirements, verification requirements and guidelines. ARB provides training for lead verifiers, internal technical reviewers, and verifiers. The Director provides training to junior staff prior to their involvement in verification activities.

2.4.2 COI Auditor Competencies

The COI auditor shall have the following competencies:

- Hold 4-Year College Degree
- Must be independent from all GHG projects
- Competent knowledge of all relevant COI requirements of GHG registries
- Ability to determine if COI exists and impartiality has been compromised and report to team leaders and Director accordingly

2.4.3 Director Competencies

The Director shall have the following competencies:

- Hold 4-Year College Degree
- Hold current professional license
- Minimum 2 years verification experience

2.5 Use of Contracted Verifiers

AWT shall take full responsibility for verification activities performed by contracted verifiers. This is demonstrated by language included in AWT's client contracts relative to contracted verifiers.

AWT requires contracted verifiers to sign a written agreement including the following:

- Commitment to comply with AWT's verification policies and procedures,
- Confidentiality requirements,
- Independence requirements,
- Notification requirements should there be any existing prior relationship to the client or responsible party.

This is demonstrated by:

- Language included in AWT's subcontractor contracts
- Requirement for subcontractors to sign internal conflict of interest/impartiality documents for each project in which they are involved

All contracted verifiers are required to sign a written agreement, by which they must comply with applicable policies and procedures, address confidentiality and independence from commercial and other interests and notify AWT of any conflicts of interest (*Contracting of Verification Services Document (Attachment C)*).

2.6 Personnel Records and Control

AWT maintains all employees' up-to-date information regarding education, professional certifications/licenses, training and qualifications.

3 Confidentiality and Control of Records

3.1 Confidentiality

AWT has developed a document titled, *Confidentiality/Non-Disclosure Agreement (Attachment D)*, which outlines the policies and procedures by which all team leaders, team members, internal peer reviewers, COI auditor, director and contracted verifiers must abide. AWT guarantees that all client information remains strictly confidential and that it will not disclose client information to a third-party without written consent. All employees have signed this agreement upon accepting employment with AWT, which ensures that no employee will disclose or use any client confidential information, either during or after their employment. Furthermore, no one is permitted to remove or make copies of any client records, reports or documents without prior management approval. AWT will inform the client and/or responsible party before placing any information in the public domain.

3.2 Control of Records

All verification related records are stored securely on AWT's internal server and appropriately identified, collected, indexed, filed, stored, maintained and disposed of properly as managed by the Director. All electronically transmitted records are transmitted via email or a password protected File Transfer Protocol (FTP) site that is only accessible by the Director, Team Leader, Team Members and the client. All reports to clients are transported via email or FTP site. Records are only transmitted to the program registry and/or clients via email or using the FTP site. All clients records will remain confidential and onsite at AWT's home office, located in Apex, North Carolina.

Upon request, records pertaining to the verification will be retained or destroyed in agreement between the participating parties and in accordance with the verification plan and any applicable ARB program requirements and contractual arrangements. In the absence of more stringent requirements, the ARB requirements shall be followed when determining the length of time to retain records. Each member of AWT has signed the *Control of Documents and Records Policy (Attachment E)*, which is placed in his or her personnel records.

AWT records include the following information:

- Management System Policy and related documents
- All project related data submitted by the client or responsible party.
- Contractual agreements signed by client or responsible party and AWT
- Confirmation of the completion of verification activities, including findings and information on material or non-material discrepancies
- Verification statements
- Records of complaints and appeals and any subsequent correction or corrective action, if applicable
- Personnel records, including evidence of the competence of verifiers and technical experts

4 Verification Process

The AWT verification process consists of the following general phases: pre-engagement, approach, verification and review and issuance of the verification statement. Additional process details for ARB are available on the ARB website:

<http://www.arb.ca.gov/cc/capandtrade/offsets/offsets.htm>

AWT sufficiently documents all verification activities to ensure consistency with all required ARB program criteria.

These procedures start after a participant has selected AWT as the verifier and a contract has been executed.

Note: The verification process for conversion of early action offset credits to ARB offset credits roughly follows this procedure. However, there are differences as set forth in Section 19550 of the cap and trade regulation. Where the following procedure and the regulation conflict, the regulation is followed.

1. Team Leader and COI Auditor prepare Internal Conflict of Interest/Impartiality document and obtain signatures from all team members. Team Leader prepares notice of verification services (*NOVS-Appendix 2*) and request for evaluation of conflict of interest (*COI-Appendix 1*) forms and submits to the COI Auditor for completion. COI Auditor determines if there are issues with COI and completes NOVS and COI forms. Team leader reviews these documents, signs and submits them to the offset project registry and/or ARB at a minimum of 30 business days prior to beginning any verification services (*submit updated COI form every year*).
2. Team leader holds a planning meeting with participants, which includes:
 - Introduction of the verification team
 - Review and confirmation of verification process and scope, objectives, level of assurance, criteria and materiality
 - Transfer of background information, underlying activity data and results of previous assessments (if applicable)
 - Review and confirmation of the verification process and schedule
3. Team leader prepares sampling plan (*Attachment F*). The sampling plan must include a ranking of GHG emission sources within the project boundary by amount of contribution to total CO₂e emissions and GHG reductions. The sampling plan must also include a ranking of GHG emission sources in order of calculation uncertainty. Internal peer reviewer reviews sampling plan. In addition, the sampling plan must include a narrative of uncertainty risk assessment for data acquisition equipment, data sampling and frequency, data processing and tracking, project baseline and annual GHG emissions and GHG reductions calculations, data reporting and management policies in developing offset project data reports. The sampling plan must include GHG emission sources that will be targeted for document reviews and data checks and an explanation of why they were chosen, methods used to conduct data checks

for each GHG emission source and a summary of information analyzed in the data checks and document reviews for each GHG emission source.

4. Team leader prepares the verification plan (*Attachment G*). The verification plan must include the date of planning meeting, date of site visit, types of proposed document and data reviews and expected date of completing verification services.
5. Conduct verification activities in accordance with the Article 5, Subarticle 13 and 14 of the cap and trade regulation.
 - Assess offset project eligibility
 - Review information submitted for listing of project
 - Confirm offset project boundary is appropriately defined
 - Review project baseline calculations and modeling
 - Assess operations, functionality, data control systems and review GHG measurement and monitoring techniques
 - Confirm that project conforms to the requirements of the offset project protocol
 - Interview key personnel involved in collecting offset project data and preparing the Offset Project Data Report
 - Make direct observations of equipment supplying data for GHG emissions sources in the sampling plan determined to be high risk
 - Verifying emission estimates
 - Confirm offset project conforms to all regulations including safety regulations
 - Perform data checks according to the sampling plan
6. Team leader prepares issues log based on the results of the site and desk audits, internal peer reviewer reviews list and team leader submits to client. The issues log must identify the section of the regulation or the offset protocol related to the nonconformance, must indicate whether the issues could have any bearing on material misstatement or conformance and must indicate that issues were corrected by the offset project operator or authorized project designee prior to completing verification services.
7. Team leader prepares and signs the verification statement (*Appendix 3*) and verification report (*Appendix 4*). The verification statement is a brief, one-page summary that confirms the verification activities and outcomes. The verification report includes the following elements at a minimum:
 - a. Verification plan
 - b. Detailed comparison of data checks
 - c. Issues log and resolutions
 - d. Qualifying comments
 - e. Calculations performed

8. Internal Peer Reviewer reviews the verification report, verification statement and accompanying documents to confirm that all verification activities have been completed, whether or not the GHG assertion is free of material discrepancy and whether or not the verification activities provide the agreed upon level of assurance. The internal peer reviewer signs the verification report and the verification statement.
9. Exit meeting is scheduled, so that the Team leader and participant can discuss the verification report and statement.
10. Upon approval, team leader uploads the issues log, verification report and verification statement to the offset project registry.
11. Recordkeeping--AWT will keep participants electronic copies of information utilized during the verification process for a minimum of fifteen years.

5 Verification Team

Team leaders are appointed for specific projects based on the competency requirements outlined in Section 2.1.3. It is the responsibility of the Director to authorize team leaders upon demonstration of competencies. The AWT staff members holding team leader competencies are listed in Section 2.3.

Verification team members are selected for specific projects based on the authorizations of the Director. It is the responsibility of the team leader to assemble the remaining team members (if needed) in addition to the internal peer reviewer, COI auditor, and complaints, appeals and disputes representative. AWT's verification team members include the following:

AWT's Verification Roles and Responsibilities
Team Leader: Hal Langenbach
Appeals/Complaints/Disputes: Jeff Vaughan
Internal Peer Reviewer: Chris Mosley
Team Members: Chris McGee Chris Love
COI Auditor: Lisa Tilley
Director: Chris Mosley

Director

Chris Mosley, P.E., Vice President/Senior Engineer

Chris Mosley, Vice President of AWT, received his B.S. in Biological and Agricultural Engineering in 1996 from North Carolina State University and M.S. in Agricultural and Biological Engineering in 1998 from Purdue University. Mosley is a registered Professional Engineer in the states of North Carolina, South Carolina, Alabama, Georgia, Ohio and Texas and a Chicago Climate Exchange (CCX) verifier for agricultural methane and combustion projects and an ARB accredited lead verifier. Mosley is also a NRCS TSP in North Carolina, South Carolina, Alabama, Georgia, Indiana, Kentucky, Michigan, Minnesota, Ohio and Wisconsin and is a North Carolina Technical Specialist and a Texas Nutrient Management Specialist.

Mosley's daily responsibilities include: nutrient management planning, waste management system design, engineering design and specifications for commercial and residential septic systems, permitting, irrigation planning, stormwater design and sediment and erosion control design. Mosley's main verification responsibilities include: selection of team leader/reviewer, delegation of authority to committees or individuals, internal audits, records retention, personnel records, testing of competencies, evaluation of financial risk, management system policy, development of operational policies, hiring

of personnel, website updates, training requirements/training implementation, program revisions, supervision regarding policies and procedures and finances.

Team Leaders

Hal Langenbach, P.E., Senior Project Engineer

Hal Langenbach, Senior Project Engineer, received his B.S. in Biological and Agricultural Engineering with a concentration in Soil and Water/Environmental Engineering from North Carolina State University in 1995. Langenbach maintains his Professional Engineering licenses for the states of North Carolina, Oklahoma, Illinois, Wisconsin and Kentucky. Langenbach also holds certifications in the following: NCSU Stormwater BMP Inspector and NPPC Environmental Odor Assessor, NC Technical Specialist and NRCS TSP in Alabama, Florida, Georgia, Illinois, Indiana, Kentucky, Michigan, Minnesota, Mississippi, North Carolina, South Carolina, Ohio, Tennessee and Wisconsin. His greenhouse gas project verification related certifications include: Climate Action Reserve Lead Verifier (Livestock, Landfill, Organic Waste Composting, Organic Waste Digestion) and ARB Lead Verifier (Livestock)

Langenbach's daily responsibilities include: waste system design, nutrient management planning, agricultural facility site audits, wetland determination and delineation, permitting and annual reporting. Langenbach's main verification responsibilities include: selecting team members for the following projects: livestock and waste handling and disposal, developing the verification plan, developing the sampling plan, developing the verification statement, signing the statement, overseeing the team members, overseeing the contracted verifiers, communication with clients, contracts, field audits and desk audits.

Langenbach is qualified and can represent AWT as the entire verification team for livestock and waste handling and disposal projects, based on his team leader competencies.

Team Members

Chris McGee, Associate Agronomist/Soil Scientist

Chris McGee is an Associate Agronomist/Soil Scientist for AWT. McGee received his B.S. in Environmental Science with a concentration in Soil Science in 2006 from North Carolina State University. In 2009, McGee became a certified verifier of greenhouse gas for CSA America, Inc. (Certification was held from 2009 through 2012). In 2010, McGee was certified as a licensed soil scientist in North Carolina. In 2012, McGee was certified as a certified professional soil scientist (national certification). McGee is also certified as a lead verifier for Climate Action Reserve Forestry, Urban Forestry, Rice Cultivation and Nitrogen Management projects.

McGee's daily responsibilities include: septic and well inspections, soils evaluations, saturated hydraulic conductivity and infiltration testing, drain field layouts and nutrient management. McGee's main verification responsibilities include: desk audits and preliminary reporting for livestock and waste handling & disposal projects.

Chris Love, E.I.

Chris is a Project Engineer for AWT. Love received his B.S. and M.S. degrees from North Carolina State University in Biological and Agricultural Engineering in 2009 and 2012, respectively. Love's daily responsibilities include: nutrient management planning, waste treatment system design and technical support for the senior project engineers. Love's main verification responsibilities include: desk audits and preliminary reporting for livestock and waste handling & disposal projects.

Internal Peer Reviewers**Chris Mosley, P.E., Senior Project Engineer**

Mosley's main verification responsibilities when functioning as an internal peer reviewer include: technical review of the verification process at the individual project level and signing the verification statement.

COI Auditor**Lisa Tilley, Office Manager**

Lisa Tilley received her undergraduate degree from Meredith College in Raleigh and her master's degree from the University of North Carolina at Chapel Hill. Tilley's main responsibilities include: scheduling site visits / inspections, tracking accounts payable and receivable, and coordinating office operations to ensure organizational effectiveness. Tilley's main verification responsibilities include: assessing conflict of interest issues, impartiality and sources of income.

Staff Resumes

Resumes of all Staff Associated with Verification Services follow.

Jeffrey David Vaughan**EDUCATION**

Ph.D. Soil Science, December, 1997.

North Carolina State University, Raleigh, North Carolina.

M.S. Crop and Soil Environmental Sciences, December 1994.

Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

B.S. Agronomy, May 1991.

Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

Concentration: Crop Science and Turfgrass Management. Minor: Agricultural Economics.

EXPERIENCE

President/Senior Agronomist/Soil Scientist-Agri-Waste Technology, Inc., Raleigh, NC, March 1998 - Present.

- Oversee a comprehensive records management system (called the Nutri-Link System or NLS) developed for managing/monitoring livestock farming operations and insuring compliance with federal/state/local regulations. Assess all waste management records in NLS to insure proper farm management/compliance and make recommendations for corrective action when needed. The types of records maintained with this system include waste/effluent land application, waste/effluent analysis, field maps and identifications, crop types, crop yield/analysis, soil analysis, well water analysis, freshwater irrigation, precipitation, livestock water use, waste lagoon levels, and waste lagoon pumping. Farms in the following states use NLS: Illinois, Kansas, Kentucky, Missouri, North Carolina, Oklahoma, Texas, and Wisconsin. The following companies participate in the NLS: Cargill Pork, Inc., DeKalb Swine Breeders, Inc., Hanor Company, Inc., Iowa Select Farms, Inc., Land O' Lakes Ag Services, Inc., National Farms, Inc., New Dominion Farms, Inc., Pig Improvement Company, Inc., Seaboard Farms, Inc., and Vall, Inc.
- Oversee weekly management of 21 MGD municipal wastewater land application system on approximately 4500 acres.
- Develop expert reports and presentations and provide depositions regarding soils, agronomy, land application of waste, etc., for clients involved in litigation.
- Develop cropping systems and nutrient application recommendations for livestock waste management plans, nutrient management plans, environmental permits, and pollution prevention plans.
- Make fertility and liming recommendations for a variety of crop/soil systems in the United States. These recommendations are made using soil analyses and up-to-date crop and soils information on a site and/or state specific basis.

- Diagnose crop abnormalities and suggest corrective action(s).
- Make sampling, handling, and analysis recommendations for soils, crops, waste, and freshwater (ground and surface).
- Provide basic information on crops (types, management, etc.) and soils (management, nutrient transformations, etc.) to clients as needed.
- Audit waste application systems and cropping systems for livestock farming operations and recommend necessary management upgrades/changes.
- Interact with federal/state/local regulatory officials to insure compliance with recordkeeping/monitoring requirements and in the preparation of livestock waste (nutrient) management plans, environmental permits, and pollution prevention plans.
- Interact with laboratory personnel to insure proper quality assurance and control. The labs dealt with include A&L Analytical Laboratories, Inc., Midwest Laboratories, Inc., North Carolina Department of Agriculture-Agronomic Division, Prairie Analytical Systems, Inc., Southern Testing and Research Laboratories, Inc., and Servi-Tech Laboratories, Inc.
- Conduct soil evaluations and develop soil scientist reports for wastewater (industrial, municipal, residential) system suitability as well as permit applications and wastewater system design.
- Conduct wastewater system inspections in the central NC area.
- Manage nine full-time and two part-time employees.
- Participate in the marketing of company services through client contact and mailing materials development.
- Verification of land use carbon offset projects.

Ph.D. Graduate Student, Soil Science Department, North Carolina State University, Raleigh, North Carolina, January 1995 - December 1997.

- Dissertation title: Assessment of Winter Cover Crops and Manure for Supplying Nitrogen to Corn and Burley Tobacco.
- Planned and designed Ph.D. research project with the assistance of Dr. G.D. Hoyt.
- Investigated the effectiveness of soil testing and plant analysis for predicting burley tobacco and corn nitrogen needs following winter cover cropping or manure application.
- Investigated cover crop residue decomposition and N mineralization patterns in conventional and no-till corn systems using nylon mesh bags.
- Prepared research presentations for the National Meetings of the American Society of Agronomy and the state meetings of the Soil Science Society of North Carolina.
- Assisted in planting, fertilization, and soil sampling (using a Giddings Soil Probe) operations associated with Ph.D. research project.
- Sampled plant tissue and soil at specific plant growth stages for Ph.D. research project.
- Conducted 2M KCl soil extractions and plant tissue drying and grinding associated with doctoral research project.

- Analyzed soil and plant samples for nitrate-nitrogen using the Nitrate Quick Test kit developed by Hawk Creek Laboratory in conjunction with Pennsylvania State University.
- Statistically analyzed data from Ph.D. research project using the Statistical Analysis System (SAS).

M.S. Graduate Student, Crop and Soil Environmental Sciences Department, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, August 1991 - December 1994.

- Thesis title: Management and Assessment of Winter Cover Crop Systems for Supplying Nitrogen to Corn in the Mid-Atlantic Region of the United States.
- Planned and designed master's research project with the assistance of Dr. G.K. Evanylo.
- Studied the ability of soil testing and plant analysis to predict nitrogen contributions from winter cover crops to corn.
- Studied the influence of winter cover crop spring kill time, particle size, and soil incorporation on the nitrogen availability from winter cover crops to corn.
- Assisted in the preparation of research presentations for the National Meetings of the American Society of Agronomy.
- Assisted in tillage, planting, fertilization, and spraying operations associated with master's research project.
- Sampled plant tissue and soil at specific plant growth stages for master's research project.
- Executed lab work including 2M KCl soil extractions, plant tissue drying and grinding, plant tissue digestion for total Kjeldahl nitrogen (TKN) analysis, and prepared buffer solutions, color reagents, and other reagents for various laboratory analyses.
- Analyzed soil samples for nitrate-nitrogen using the Nitrate Quick Test kit developed by Hawk Creek Laboratory in conjunction with Pennsylvania State University, N-Trak Quick Test kit developed by the Hach Company in conjunction with Iowa State University, and the Cardy Nitrate Quick Test kit developed by Spectrum Technologies.
- Operated a Lachat Quikchem Automated Ion Analyzer for soil nitrate-nitrogen and ammonium-nitrogen analysis and plant tissue TKN analysis.
- Managed an undergraduate student worker from May 1992 - September 1992 and March 1993 - May 1994.
- Statistically analyzed data from master's research project using the Statistical Analysis System (SAS).

Undergraduate Research Student, Agronomy Department, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, May 1990 - February 1991.

- Studied yield potential of prolific corn hybrids as influenced by plant population.

- Assisted in tillage, spraying, and data collection operations associated with undergraduate research project.

Lab Technician (Mechanic) A, Agricultural Engineering Department, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, summers of 1987 - 1990.

- Assisted in building and assembling machine components for various projects (i.e. used metal and woodworking shops).
- Assisted in planting, tillage, harvesting, and drying various crops including corn, sweet sorghum, grain sorghum, broccoli, cabbage, peanuts, and various forage crops.
- Worked on projects dealing with sustainable agriculture, conservation tillage, energy use, and soil compaction.

Data Entry Operator, Virginia Geographic Information Systems (VirGIS) Project, Agricultural Engineering Department, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, summers of 1985 - 1989 and March 1990 - May 1991.

- VirGIS was a project studying the non-point source pollution runoff into the Chesapeake Bay.
- Interpreted maps including United States Geographical Service 7.5 minute topographic sheets, county soil surveys, and high altitude infrared aerial photographs.
- Digitally encoded data (manually and electronically) using IBM PC and IBM 3090 mainframe computers and Numonics Electrical Digitizing Tablets.

Publications/Presentations

Vaughan, Jeffrey D., Greg D. Hoyt, and Arthur G. Wollum. 2008. Assessment of Burley Tobacco Nitrogen Needs after Cover Cropping and Manure Application. *Tobacco Sci.* 47:1- 10.

Vaughan, Jeffrey D. and Greg D. Hoyt. 2008. Evaluation of a Quick Test Method for Tobacco Petiole Nitrate Analysis. *Tobacco Sci.* 47:11-12.

Vaughan, J.D., G.D. Hoyt, and A.G. Wollum, II. 2000. Cover crop nitrogen availability to conventional and no-till corn: soil mineral N, corn N status, and corn yield. *Commun. Soil Sci. Plant Anal.* 31:1017-1041.

Vaughan, J.D. and G.K. Evanylo. 1999. Soil nitrogen dynamics in winter cover crop-corn systems. *Commun. Soil Sci. Plant Anal.* 30:31-52.

Vaughan, J.D. and G.K. Evanylo. 1998. Corn response to cover crop species, spring desiccation time, and residue management. *Agron. J.* 90:536-544.

Vaughan, J.D. and G.D. Hoyt. 1997. Nitrogen dynamics in conventional and no-till corn systems following winter cover cropping. *Soil Sci. Soc. North Carolina Proc.* 40:47-60.

Vaughan, J.D., G.D. Hoyt, and A.G. Wollum. 1997. Mineralization of cover crop and manure nitrogen in burley tobacco production systems. *Agron. Abstr.* p. 295.

I presented a poster of the same title at the 1997 National Meetings of the American Society of Agronomy in Anaheim, California.

Hoyt, G.D., J.D. Vaughan, and A.G. Wollum. 1997. Cover crop decomposition and nitrogen release in conventional and no-till corn. *Agron. Abstr.* p. 296.

I presented a poster of the same title at the 1997 National Meetings of the American Society of Agronomy in Anaheim, California.

Vaughan, J.D. and G.D. Hoyt. 1996. Nitrogen dynamics in conventional and no-till corn systems following winter cover cropping. *Agron. Abstr.* p. 294.

Vaughan, J.D. and G.K. Evanylo. 1994. Nitrogen cycling in cover crop-corn rotations. *Agron. Abstr.* p. 351.

Evanylo, G.K. and J.D. Vaughan. 1993. Nitrogen availability to corn under varying cover crop management. *Agron. Abstr.* p. 271.

I presented a poster of the same title at the 1993 National Meetings of the American Society of Agronomy in Cincinnati, Ohio.

Vaughan, J.D. and G.K. Evanylo. 1993. Soil and tissue testing to determine nitrogen availability from cover crops to corn. *Agron. Abstr.* p. 290.

I presented a talk of the same title at the National Meetings of the American Society of Agronomy in Cincinnati, Ohio.

Ess, D.R., D.H. Vaughan, J.D. Vaughan, and G.K. Evanylo. 1992. Nutrient management strategies for sustainable cropping systems. ASAE Paper No. 928509.

Vaughan, J.D. and G.K. Evanylo. 1992. Nitrogen dynamics in reduced-till corn following winter cover cropping. *Agron. Abstr.* p. 294.

I presented a poster of the same title at the 1992 National Meetings of the American Society of Agronomy in Minneapolis, Minnesota.

Vaughan, J.D., J.R. McKenna, and S.T. Reed. 1991. Evaluation of genetic-population interactions as they relate to prolificacy and silk delay in corn. *Agron. Abstr.* p. 3.

I presented a talk of the same title at the 1991 Southern Branch Meetings of the American Society of Agronomy in Fort Worth, Texas.

Teaching

Taught Soils Laboratory (SSC 012) in Spring Semesters of 1995 - 1996 and Fall Semesters of 1995 and 1997 in the Soil Science Department at North Carolina State University.

- Prepared and administered weekly lectures and laboratory experiments, prepared and graded tests and homework assignments, and assigned final grades associated with this lab.
- Received an overall rating of 4.63 out of 5.00 by student evaluation.

Taught Soils Laboratory (CSES 3124) in Fall Semesters of 1991 - 1993 and Spring Semesters of 1993 - 1994 in the Crop and Soil Environmental Sciences Department at Virginia Polytechnic Institute and State University.

- Prepared and administered weekly lectures and laboratory experiments, prepared and graded tests and homework assignments, and assigned final grades associated with this lab.
- Assisted or taught in some lectures, prepared test questions, and graded quizzes associated with Soils (CSES 3114) in Fall Semesters of 1991-1993 and Spring Semesters of 1993-1994.
- Received an overall rating of 3.50 out of 4.00 by student evaluation.

Teaching Assistant for Soil Fertility and Management (CSES 4214) in Spring Semesters of 1993 - 1994 in the Crop and Soil Environmental Sciences Department at Virginia Polytechnic Institute and State University.

- Prepared, administered, and graded homework assignments.
- Prepared and presented one lecture each semester.
- Assisted in exam preparation, administration, and grading.
- Assisted in assigning final grades.

HONORS/ACTIVITIES - All items are from Virginia Polytechnic Institute and State University unless otherwise specified.

- Selected to attend the Tenth Annual Graduate Student Professional Development Workshop in 1996 for North Carolina State University, College of Agriculture and Life Sciences, graduate students.
- Selected to present my research at the 1996 Chancellor's Circle for North Carolina State University scholarship donors.
- William Walton Stevens and Emily Insoe Stevens Conservation Graduate Fellowship from North Carolina State University, 1996 - 1997.
- Fred Bond Graduate Scholarship from North Carolina State University, 1996 - 1997.
- Graduate Teaching Assistant Award Honorable Mention, 1994.
- David R. Spence Graduate Scholarship, 1993.
- Moderator for the "Cover Crops for Soil Fertility" section of the 1992 Virginia Sustainable Agriculture Conference.
- Alpha Zeta Outstanding Senior in Crop and Soil Environmental Sciences, 1991.
- Sigma Xi Undergraduate Research Award, 1991.

- John Lee Pratt Animal Nutrition Scholarship, 1990.
- Agronomy Club Scholarship, 1988.
- John Lee Pratt Memorial Scholarship, 1987.
- Treasurer of Agronomy Club, 1989 - 90.
- Chair of Agronomy Club annual fundraiser for two years, 1989 - 90.
- Member of Agricultural Club Council, 1990 - 1991.
- Representative for the Dean of the College of Agriculture and Life Sciences at my former high school recruiting potential students, 1990.

MEMBERSHIPS/TITLES

- Certified Crop Advisor (CCA), Certified Professional Agronomist (CPAg), and Certified Professional Soil Scientist (CPSSc) as certified by ARCPACS, A Federation of Certifying Boards in Agriculture, Biology, Earth and Environmental Sciences.
- Technical Service Provider (TSP) for the Natural Resources Conservation Service.
- CAR Lead Verifier for Forestry, Urban Forestry, Rice Cultivation and Nitrogen Management Protocols, 2011-2015
- CCX Verifier for Agricultural Soil Carbon Sequestration and Rangeland Soil Carbon Sequestration, 2006-2015
- CSA America, Inc. Verifier for Greenhouse Gas (2009-2012)
- Licensed Soil Scientist as licensed by the North Carolina Board for Licensing of Soil Scientists.
- Certified Professional Soil Scientist as certified by Virginia Board for Professional Soil Scientists and Wetland Professionals.
- Certified Soil Classifier as certified by the South Carolina Department of Natural Resources.
- Licensed Professional Geoscientist (Soil Science) as licensed by the State of Texas Board of Professional Geoscientists.
- Subsurface Water Pollution Control System Operator as certified by the North Carolina Water Pollution Control Systems Operators Certification Commission.
- Certified Septic System Inspector as certified by the North Carolina Onsite Wastewater Contractors and Inspectors Certification Board.
- Nutrient Management Consultant as licensed by the State of Maryland, Maryland Department of Agriculture, Office of Resource Conservation.
- Certified Nutrient Management Planner as certified by the Commonwealth of Virginia, Department of Conservation and Recreation, Division of Soil and Water Conservation.
- Soil Science Society of North Carolina President, 2012.
- Continuing Education Committee Chair for Soil Science Society of North Carolina, 2006 – 2011.
- Member of Annual Meeting Planning Committee for 2010 North Carolina On-site Wastewater Conference.
- Member of American Society of Agronomy.
- Member of Soil Science Society of America.

- Member of Soil and Water Conservation Society.
- Member of Alpha Zeta, Gamma Sigma Delta and Phi Sigma

Christopher T. Mosley

- Education** North Carolina State University (1996)
Degree: Bachelor of Science in Biological and Agricultural Engineering
Concentration: Soil and Water / Environmental
GPA: 3.8 / 4.0 Summa Cum Laude
- Purdue University (1998)
Degree: Master of Science in Agricultural and Biological Engineering
Concentration: Soil and Water / Environmental
GPA: 3.9 / 4.0
- Work Experience**
- September 2000-
Present **Agri-Waste Technology, Inc.**
Vice President/Senior Project Engineer
Responsibilities: Project management, engineering design and specifications for animal waste management systems and residential septic systems, nutrient management planning, waste management planning, permitting, irrigation planning, greenhouse gas offset quantification and verification, director of verification services
- August 1998-
September 2000 **North Carolina State University**
Research Assistant
Responsibilities: Data collection, management, and analysis; equipment maintenance and troubleshooting; hydrologic model testing and evaluation; redesign of gypsum dispenser.
- August 1996-
August 1998 **Purdue University**
Graduate Research Assistant
Responsibilities: Master's thesis research; teaching DRAINMOD to graduate and undergraduate students; organizing and gathering data for long-term agricultural research center; and field work.
- Summer 1996 **Precision Partners, Hope, IN**
Position: *Crop Scout*
Responsibilities: Checked corn and soybeans for crop growth, weeds, and injury; wrote reports for farmers; and advised farmers of potential problems.
- Summer 1994 **Will Connell, Agricultural Consultant**
PO Box 422, Greenville, NC 27835-0422
Position: *Crop Scout*
Responsibilities: Checked tobacco, peanuts, and cotton for crop growth, weeds, and injury.

Professional Licenses and Certifications

- 2005-Present: North Carolina, Professional Engineer (License #029424)
- 2006-Present: South Carolina, Professional Engineer (License #025556)
- 2008-Present: Alabama, Professional Engineer (License #29693-E)
- 2008-Present: Ohio, Professional Engineer (License #73355)
- 2009-Present: Texas, Professional Engineer (License #102607)
- 2015-Present: Georgia, Professional Engineer (License #040297)
- 2006-Present: NRCS Technical Service Provider
- 2006-Present: NC Technical Specialist
- 2007-2010: Chicago Climate Exchange (CCX) Verifier for Agricultural Methane & Combustion and Landfill Methane
- 2009-2012: CSA America, Inc. Verifier for Greenhouse Gas
- 2012-Present: Texas Nutrient Management Specialist
- 2015-Present: California Air Resources Board Lead Verifier (H2-15-205)

Publications

Master's Thesis, Title: "*Prediction of subsurface drain flow and water table depth in southern Indiana.*"

Wang, X, C.T. Mosley, J.R. Frankenberger, E.J. Klavivko. 2006. "Subsurface drain flow and crop yield predictions for different drain spacings using DRAINMOD" *Agricultural Water Management* 79(2006):113-136.

Deerhake, M., P. Peterson, N. Ubaka-Blackmoore, J. M. Rice, C. Mosley. Achieving Livestock and Poultry Nutrient Runoff Reductions through Voluntary Farm Assistance Programs. 2010 American Society of Civil Engineers, Madison, WI. August 23-27, 2010.

Deerhake, M., J.M. Rice, K.Schaffner, N.Ubaka-Blackmoore, A.Wesley-Snider, P. Peterson, C. Mosley. CLEAN EASTTM Project: Performance of a Voluntary Approach to Environmental Protection at Livestock and Poultry Operations – Final Project Results. 2012 American Society of Agricultural and Biological Engineers Annual International Meeting. Dallas, TX. August 2011.

Schaffner, K., N. Ubaka-Blackmoore, A. Wesley-Snider, P. Peterson, J.M. Rice, C. Mosley. CLEAN EASTTM Project: Final Results from Nutrient Management Planning and Other Environmental Services to More Than 400 Animal Feeding Operations. 2012 American Water Resources Association Annual Meeting, Jacksonville, FL. November 2012.

Deerhake, M., A. Wesley-Snider, J.M. Rice, K. Schaffner, N. Ubaka-Blackmoore, C. Mosley. What Motivates Farmers to Protect Water Quality? – Analysis of a Voluntary Nutrient Management Planning Project. 2012 American Water Resources Association Annual Meeting, Jacksonville, FL. November 2012.

Technical Skills

- Computer-aided drawing software (AutoCAD)
- Water quality modeling software including GLEAMS, DRAINMOD, AGNPS, ANSWERS, and SWAT.
- Nutrient Management Software (AWM, AFOPro, MMP, NutMan, WatNut, NC, TX, GA)
- Erosion Software (RUSLE2)

Honors

- Graduate research assistantship offers from Purdue University, Texas A&M, and Virginia Tech (1996).
- Graduate fellowship offer from the University of Illinois at Urbana-Champaign (1996).
- Phi Kappa Phi honor society (1996).
- Charles W. Suggs, R.J. Reynolds, and NC Section ASAE scholarships (1993-1996).

Hal Langenbach

Education North Carolina State University (1995)
Degree: Bachelor of Science in Biological and Agricultural Engineering
Concentration: Soil and Water / Environmental

Work Experience

1995-Present **Agri-Waste Technology, Inc., Raleigh, NC**
Senior Project Engineer

- Project management
- Engineering design and specifications for anaerobic lagoon systems for the treatment of livestock waste
- Development of Nutrient Management Plans for livestock operations throughout the United States
- Perform site visits for routine and construction inspections
- Develop and provide training to managers of livestock operations
- Develop construction plans and specifications for compacted clay liners and flexible membrane liners
- Provide coordination between clients and regulatory authorities
- Greenhouse gas offset verification (livestock, waste handling/disposal)

Professional Licenses and Certifications

- North Carolina, Professional Engineer (License #25452)
- Oklahoma, Professional Engineer (License #23308)
- Kentucky, Professional Engineer (License #25955)
- Illinois, Professional Engineer (License #62060717)
- Wisconsin, Professional Engineer (License #396826)
- NC Stormwater BMP Inspector
- NPDC Environmental and Odor Assessor
- NRCS Technical Service Provider
- Climate Action Reserve (CAR) Lead Verifier: Livestock
- CAR Lead Verifier: Landfill (2012-2015)
- CAR Lead Verifier: Organic Waste Digestion
- CAR Lead Verifier: Organic Waste Composting
- ARB Lead Verifier: Livestock

Training and Technical Skills

- Computer-aided drawing software (AutoCAD)
- Erosion Software (RUSLE2)
- North Carolina Nutrient Management Software
- Wetland delineation of jurisdictional wetlands in coastal and piedmont soils
- Sediment and erosion control design and inspections
- Low impact development design for construction projects
- Stormwater wetland design
- Soil mechanics and damage prevention during excavation
- Nutrient Management Software (AWM, MMP)

Christopher E. McGee, LSS, CPSS**Education**

North Carolina State University (2001-2006)
Degree: Bachelor of Science in Environmental Science
Concentration: Soil Science
GPA: 3.6 / 4.0

Work Experience

October 2005-
Present

Agri-Waste Technology, Inc., Raleigh, NC

Associate Agronomist/Soil Scientist

- Assist with Comprehensive Nutrient Management Plans (CNMPs) for the NRCS in Ohio, South Carolina, and Virginia
- Conduct soil evaluations and delineations for on-site wastewater disposal systems
- Wetland and stream delineation
- Perform septic/well inspections, collect soils samples, and conduct in-situ saturated hydraulic conductivity tests
- Routine septic system design/layout for on-site wastewater systems
- Greenhouse Gas offset project verification

Professional Tools

- Nutrient Management Software (AWM, AFOPro, MMP, NutMan, WatNut)
- Erosion Software (RUSLE2)
- Coursework with ArcGIS and Solidworks

Honors and Activities

- North Carolina Licensed Soil Scientist #1324
- Climate Action Reserve (CAR) Approved Lead Verifier – Forestry, Urban Forestry, Rice Cultivation and Nitrogen Management (2011-2014)
- Soil Science Society of America (ARCPACS) - Certified Professional Soil Scientist
- CCX Verifier for Agricultural Soil Carbon Sequestration and Rangeland Soil Carbon Sequestration (2006-2015)
- CSA America, Inc. Verifier for Greenhouse Gas (2009-2012)
- Certified North Carolina Septic Inspector – North Carolina On-Site Wastewater Contractors and Inspectors Certification Board (NCOWCICB)
- Certified North Carolina Water Pollution Control System Operator – Subsurface
- Member of the Soil Science Society of North Carolina
- Member of the NCSU Soil Judging Team (2006)
- Recipient of the 2006 Hubert J. Byrd Memorial Scholarship from the Soil Science Society of North Carolina
- Member National Beta Club, EAA Young Eagles Program, and Who's Who Among America High School Students

Lisa Tilley

Education

University of North Carolina at Chapel Hill (2000)

Master's Degree in Special Education with an emphasis in Early Childhood Intervention and Family Support

Meredith College, Raleigh, North Carolina, May, 1993

Bachelor of Arts Degree in Spanish & Concentration in Mathematics

Work Experience

Agri-Waste Technology, Inc., February, 2009 – Present

- Manages budgets and financial responsibilities by tracking accounts payable and accounts receivable
- Runs monthly employee payroll & ensures paycheck direct deposit
- Runs & submits monthly payroll taxes, quarterly taxes, privilege taxes, & yearly property tax returns
- Oversees the renewal of state PE Licenses & COA registrations required by states, completing and submitting the periodic, quarterly, and annual reports required by the states
- Schedules & Develops contracts for Well, Well / Septic, Septic, and Soil Evaluations
- Coordinates / Communicates with company Accountant as necessary
- Answers phone, copies papers, binds documents, mails correspondence, and makes calls as necessary
- Ensures “Impartiality” and avoids personal and organizational “Conflict of Interest” in client relations

Wake County Public School System, July, 2004 – February, 2009

The Literacy Connection Project Assistant & Data / Evaluation Coordinator, Project Enlightenment

- Planned, implemented, and evaluated all Project Enlightenment services
- Completed summative evaluation activities including data collection, preparation of quarterly data reports
- Managed day-to-day business operations of programs including statistical reporting, purchasing, accounting, contracts, payroll, and recruitment and payment of substitute teachers
- Tracked budget expenditures, ran and interpreted budget and personnel reports
- Created Service Agreements, Purchase Orders, Direct Pays, and Invoices
- Extensive experience with Microsoft Word, Microsoft Excel, Microsoft Access, Oracle, MySequel, and NC Wise data systems

Wake County Public School System, August, 2000 – July, 2004**Lead Teacher, Title I Prekindergarten Programs & Migrant Education Program**

- Provided intervention services to Title I Prekindergarten students and Migrant Education students, grades K-12
- Planned, implemented, and evaluated summer Migrant Education program for grades K-5
- Hired and daily supervised approximately 20 staff members at summer Migrant program
- Assisted Prekindergarten teachers in the implementation of developmentally-appropriate practices
- Trained Title I Prekindergarten staff on the implementation of various pre-kindergarten screening tools

The Agency for Public Telecommunications, March, 2002 – June, 2005**Bilingual Telephone Operator**

- Answered the telephone and directed English and Spanish language calls to the live call-in programs of *Open Net* and *Open Net en Español*
- Operated the teleprompter for English and Spanish program broadcasts

Wake County Public School System, January, 1997 – July, 2000**Pre-Kindergarten Teacher**

- Developed developmentally, age-appropriate activities for migrant and at-risk preschoolers
- Assessed, supervised, and taught approximately sixteen at-risk pre-kindergarteners
- Translated for weekly and monthly parenting classes

North Carolina Primary Health Care Association & Dept. of Environment, Health, and Natural Resources, Division of Health Promotion, August, 1996 – January, 1997**Farmworker Health Library Database Coordinator & Bilingual Materials Specialist**

- Reviewed, abstracted, and entered farmworker health materials into the Farmworker Health Library database
- Organized the layout of the Farmworker Health Library
- Contacted state agencies to request bilingual materials
- Collected, evaluated, and abstracted all incoming bilingual materials
- Developed the NC Health and Human Service's electronic database of bilingual materials

Office Specialist, December, 1995 – April, 1996**Administrative Assistant**

- Formulated and typed forms, letters, graphs, spreadsheets, reports, etc. for corporate office personnel
- Edited records, kept detailed files, and typed 60 WPM

- Extensive experience using WordPerfect, Microsoft Word, Excel, PowerPoint, and Q&A Database
- Translated for Latin American negotiations

Prospect Hill Migrant Head Start, June, 1994 – November, 1995

- Provided translation, transportation services, and other services to migrant farmworker families
- Prepared and maintained all forms, reports, and parent and child records
- Formed partnerships and collaborated with local agencies and resources
- Scheduled, planned, and conducted parent activities, training sessions, and meetings
- Hired, trained, evaluated and daily supervised six transportation staff
- Developed bus routes and implemented changes as necessary

Piedmont Community College, June, 1994 – September, 1995

Family Literacy & English-as-a-Second Language Instructor

- Taught an English-as-a-Second Language & Family Literacy course to adult migrant farmworkers
- Coordinated weekly transportation services to and from the classes

North Carolina Teaching Licensure

Spanish K-12, English-as-a-Second Language K-12, and Graduate Level Birth – Kindergarten

Chris Love, E.I.

Education

- M.S. North Carolina State University, Raleigh, NC
Biological Engineering
GPA: 3.6/4.0
- B.S. North Carolina State University, Raleigh, NC
Biological Engineering, Environmental Engineering Concentration
GPA: 3.6/4.0 Major GPA: 3.9/4.0

Master's Thesis

Transpired solar duct for tempering air in North Carolina turkey brooder barn and swine nursery

Relevant Coursework

Agricultural waste management, soil and water engineering, ArcGIS, open channel flow, water quality modeling, surveying, hydraulics, research statistics, solar thermal and electric systems

Experience

- Assistant Project Engineer, September 2012-Current
Agri-Waste Technology, Inc.
 - Write Comprehensive Nutrient Management Plans (CNMPs) for farmers
 - Create maps for plans, with extensive use of ArcGIS
 - Waste treatment system design
 - Carbon offset verification
- Masters Student, October 2010 – August 2012
Department of Biological and Agricultural Engineering, North Carolina State University
 - Researched impact of a transpired solar collector duct (thermal collector) on propane consumption and animal performance at two animal farms in eastern N.C.
 - With a faculty advisor, managed all aspects of project, including construction, field data collection, data analysis, interaction with integrators and producers, and report writing
- Research Assistant, September 2008 – September 2010 (Full time May 2009 – September 2010)
Department of Biological and Agricultural Engineering, North Carolina State University
 - Assisted with start-up and ongoing maintenance for various research projects including measuring ammonia adsorption on activated carbon, chicken house air pollution reduction, swine lagoon purification, and others
 - Independently managed and carried out research for projects and formulated reports

Skills

- ArcGIS and ArcSWAT
 - Excel, SAS, Matlab
 - AutoCAD and Civil 3D
 - HEC-RAS, Retscreen
-

Publications

- Love, C. D., P. Kolar, J. J. Classen, and L. Das. 2011. Adsorption of ammonia on ozonated activated carbon. *Transactions of the ASABE* 54(5): 1931-1940.
- Shah, S. B., P. Kolar, C. D. Love. 2012. Feasibility of extracting ammonia from broiler litter and scale-up considerations. *Applied Engineering in Agriculture* (in press).
- Love, C.D., S. B. Shah. 2011. Transpired solar duct for tempering air in North Carolina turkey brooder barn and swine nursery. ASABE Paper No. 1110875. St. Joseph, Mich.: ASABE.

Activities

- American Society of Agricultural and Biological Engineers member
- Engineers Without Borders - Bolivia Water Sanitation Committee (Head for fall '08 – spring '09)
 - Traveled to Bolivia during July of '09 to implement rainwater collection system

6 Appeals, Complaints and Disputes (*Attachment H*)

AWT's objective is to ensure that all GHG information represents a true and fair account, by analyzing each GHG verification project with respect to relevance, completeness, consistency, accuracy, transparency and conservativeness. In the event that a client deems that an aspect of their verification project is not compliant, AWT will commit to the following procedures to ensure a timely, independent and effective resolution. AWT is responsible for all decisions at all levels and ensures that decisions based on complaints, appeals and/or disputes will not result in any discriminatory actions against the client.

6.1 Complaints

AWT will commit to the following regarding complaints:

- All clients must notify AWT in writing of their complaint and outline their objections, in which AWT will acknowledge to have received, via email
- The Project Manager assigned to the project will field the complaint and provide the client with a copy of AWT's *Complaints, Appeals and Disputes* document, via email. AWT will safeguard the confidentiality and subject of the complaint
- Clients must acknowledge that they have received the *Complaints, Appeals and Disputes* document and return the signed form to AWT within 5 business days
- Upon receipt of complaint, AWT will confirm whether the complaint relates to verification activities and whether the verification body is responsible
- Jeff Vaughan will review the complaint and determine a resolution, within 30 business days.
- Once a resolution has been made, the Project Manager will contact the client in writing with AWT's outlined conclusion and any necessary modifications to the verification statement or report
- The client has 5 business days to notify AWT in writing whether or not the complaint has been resolved
- If the matter cannot be resolved between AWT and the client, a formal Appeal by the client will be made

6.2 Appeals and Disputes

AWT will commit to the following regarding all appeals:

- All clients must notify AWT in writing of their appeal and outline their objections, in which AWT will acknowledge to have received, via email.
- The Project Manager assigned to the project will field the appeal and provide the client with a copy of AWT's *Complaints, Appeals and Disputes* document, via email. AWT will safeguard the confidentiality and subject of the complaint.
- Upon receipt of appeal, AWT will confirm whether or not the following should occur:

- To require additional documentation from aggregator or project owner for review
- Determine whether another site visit is required
- Jeff Vaughan will review the appeal and determine a resolution, within 30 business days.
- Once a resolution has been made, the Project Manager will contact the client in writing with AWT's outlined conclusion and any necessary modifications to the verification statement or report.
- The client has 5 business days to notify AWT in writing whether or not the appeal/dispute has been resolved.
- If the matter can't be resolved between AWT and the client, AWT will at that point contact the GHG registry and determine appropriate action.

If a dispute still can't be resolved at this point, both parties must state their consent to submit irreconcilable differences for review to ARB. At that point, their appointed Dispute Resolution Committee will make the final decision.

7. Accreditations

AWT is currently accredited for the following:

Verification Body ARB Accreditation

Executive Order H2-13-012

Lead Verifiers

Hal Langenbach (H2-12-104)

Chris Mosley (H2-15-205)

Offset Project Specialists (Livestock)

Hal Langenbach (H2-12-104)

8. Authorization of Management System Policy

This management system policy outlines the roles, responsibilities and procedures of AWT for validation and verification projects. Top management, employees and contracted verifiers acknowledge, understand and have committed to act impartially and will avoid conflicts of interest.

This document is authored by: _____
Chris Mosley, Vice President

The following top management personnel (board of directors) are committed to act impartially in all validation or verification activities and their signatures acknowledge approval of this document.

Kevin Davidson, Chairman _____
Date

Jeff Vaughan, Member _____
Date

Chris Mosley, Member _____
Date

Hal Langenbach, Member _____
Date

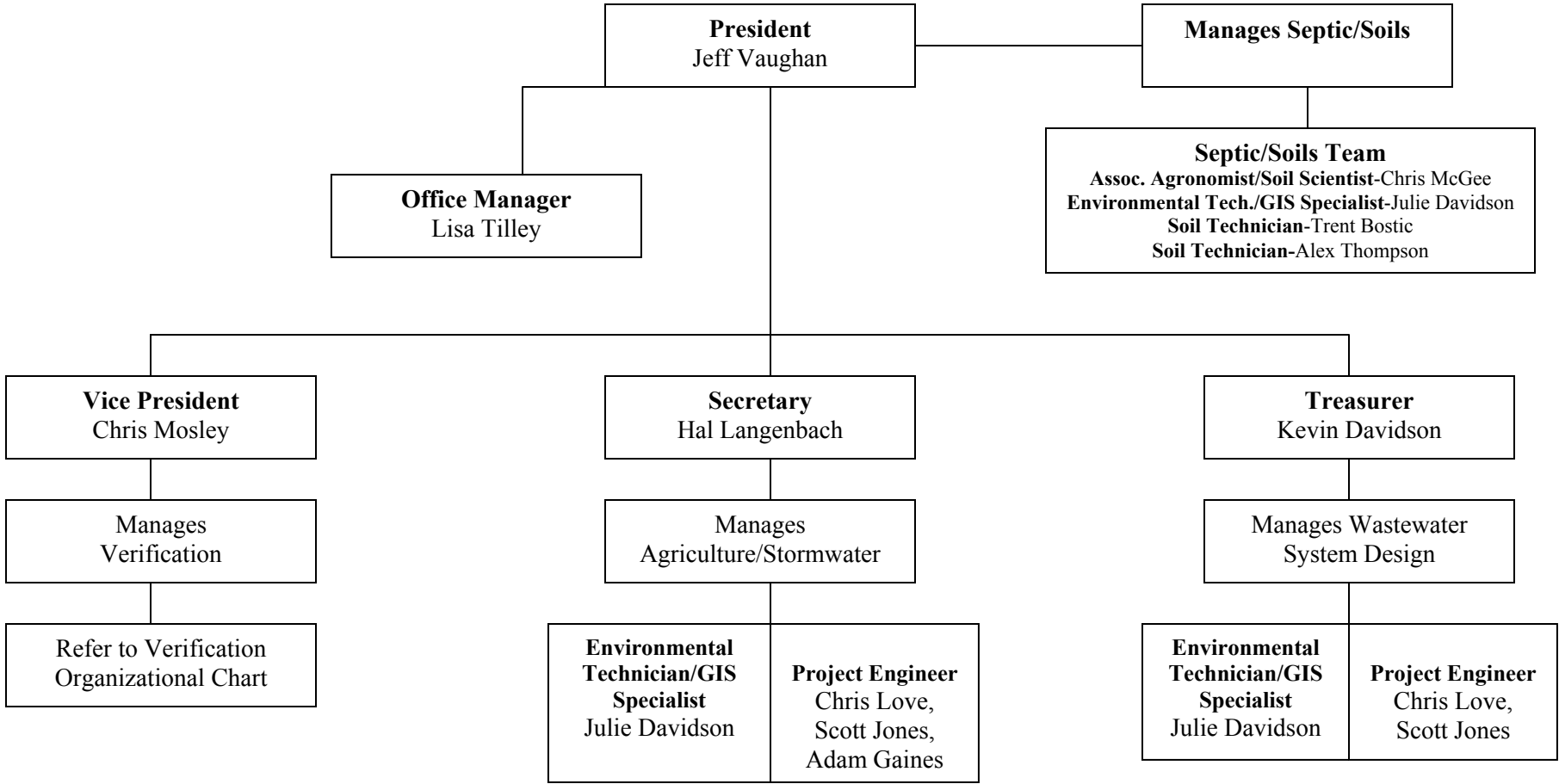
Chris McGee, Member _____
Date

Attachments

- A. Organizational Charts
- B. Internal COI/Impartiality Form
- C. Contracting of V/V Services
- D. Confidentiality/Non-Disclosure
- E. Control of Documents and Records Policy
- F. Sampling Plan
- G. Verification Plan
- H. Complaints, Appeals and Disputes

Attachment A.
Organizational Charts

Agri-Waste Technology, Inc. Organizational Chart



President
Jeff Vaughan

Manages Septic/Soils

Office Manager
Lisa Tilley

Septic/Soils Team
Assoc. Agronomist/Soil Scientist-Chris McGee
Environmental Tech./GIS Specialist-Julie Davidson
Soil Technician-Trent Bostic
Soil Technician-Alex Thompson

Vice President
Chris Mosley

Secretary
Hal Langenbach

Treasurer
Kevin Davidson

Manages Verification

Manages Agriculture/Stormwater

Manages Wastewater System Design

Refer to Verification
Organizational Chart

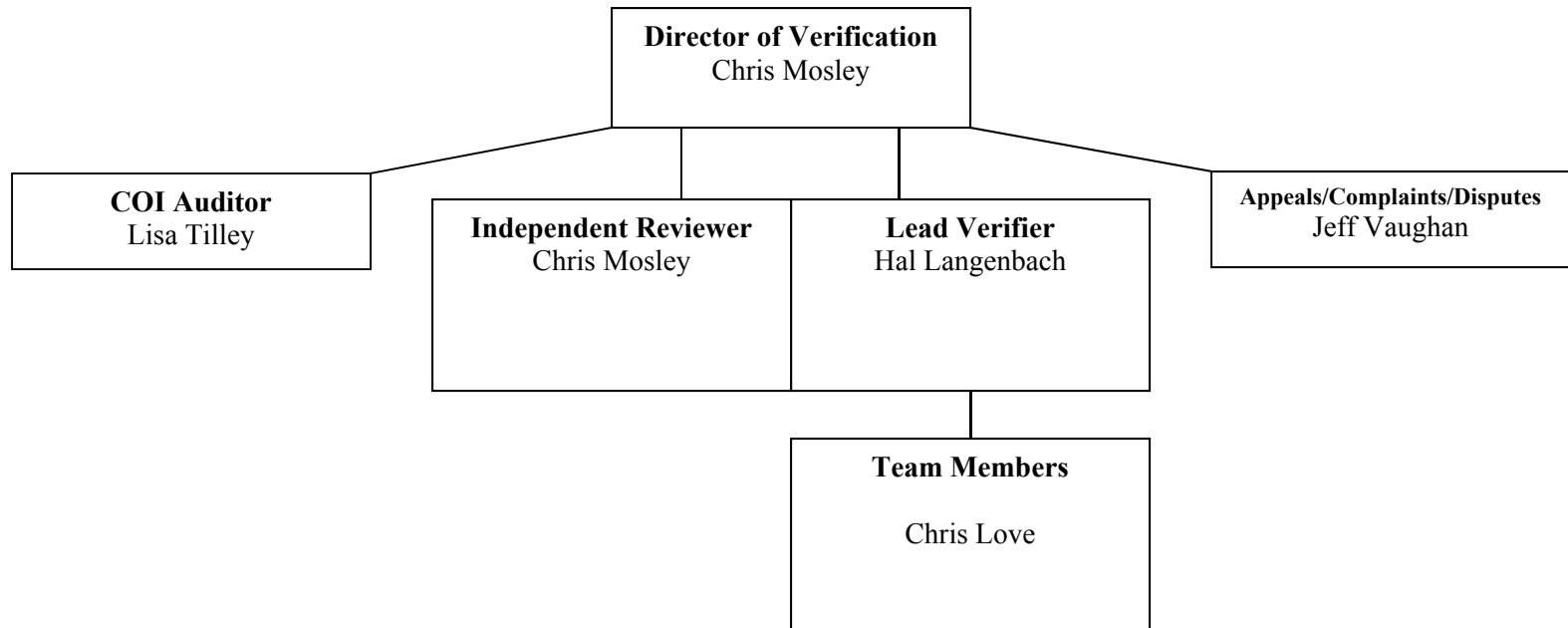
Environmental Technician/GIS Specialist
Julie Davidson

Project Engineer
Chris Love,
Scott Jones,
Adam Gaines

Environmental Technician/GIS Specialist
Julie Davidson

Project Engineer
Chris Love,
Scott Jones

**Agri-Waste Technology, Inc.
Verification Organizational Chart**



Attachment B.

Internal COI/Impartiality Form

Clients Name: _____

Client's Main Contact: _____ Phone: _____

Address: _____

Parent Company: _____ Subsidiaries: _____

Project Owner: _____

Project Name: _____

A conflict of interest is a situation in which, because of other activities or relationships, impartiality in performing verification activities is or could be compromised.

AWT will strive to avoid any conflicts of interest through the following measures:

- AWT and its subcontractors avoid any actual or potential conflicts of interest with the responsible party and the intended users of the information.
- AWT and its subcontractors will not verify a GHG assertion where it provided GHG consultancy services to the responsible party that support the GHG assertion
- AWT and its subcontractors will be independent
- AWT and its subcontractors will not verify a GHG assertion where a relationship with those who provided GHG consultancy services to the responsible party that support the GHG assertion poses an unacceptable risk to impartiality which could 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 a new client
- AWT and its subcontractors will not verify a GHG assertion using personnel who were engaged by those who provided GHG consultancy services to the responsible party in support of the GHG assertion
- AWT and its subcontractors will not offer products or services that pose an unacceptable risk to impartiality
- AWT and its subcontractors will not outsource the review and issuance of the verification statement
- AWT and its subcontractors will not state or imply that verification of a GHG assertion would be simpler, easier, faster or less expensive if a specified GHG consultancy service were used
- AWT and its subcontractors will demonstrate competence and due professional care consistent with their roles and responsibilities
- AWT and its subcontractors will demonstrate ethical conduct throughout the verification
- AWT and its subcontractors will meet the requirements of Subchapter 10 Climate Change, Article 5, Subarticle 13, Section 95979

Circumstances that Present an Actual or Potential Conflict of Interest:

Performance of the following services for a client may result in a conflict of interest for AWT wishing to provide verification services to that client:

- Designing, developing, implementing, or maintaining a GHG emissions inventory
- Designing or developing GHG information systems
- Developing GHG emissions factors or other GHG-related engineering analysis
- Designing energy efficiency, renewable, or other projects which explicitly identify GHG reductions as a benefit
- Preparing or producing GHG-related manuals, handbooks, or procedures specifically for the project developer, project owner or technical consultant.
- Appraisal services of carbon or GHG liabilities or assets
- Brokering in, advising on, or assisting in any way in carbon or GHG-related markets
- Management over health, environment and safety functions
- Legal and expert services unrelated to verification services

Conflicts of interest may occur if, in the previous 3 years, AWT, any related organizations such as parent or subsidiary companies or other organizations with which AWT has a long-standing financial or legal relationship, or any of the staff that will be providing the verification services (regardless of whether such staff were employed by AWT at the time) provided any of the services listed above.

In addition, AWT is not allowed to provide any of the services listed above for at least 1 year following the cessation of performance of verification services for the client.

AWT guarantees to act impartially and will avoid unacceptable conflicts of interest in all validation and verification projects, by management, staff members and contracted verifiers.

Specific risks to impartiality could include:

- Self interest: if any member of AWT acts partially for any financial benefit
- Familiarity: having a personal relationship with a client and not receiving proper verification evidence to complete the project
- Self review: having an individual on staff review their own work and/or by providing consultancy and then assessing their verification activities
- Sources of revenue: having a client pay for their verification of GHG assertions
- Intimidation: an individual being coerced openly or secretly to do something that is not impartial

AWT is able to maintain impartiality by abiding by the following safeguards:

- AWT's value of their reputation and any legal liability they could face
- AWT's commitment to abide by the professional standards and regulatory requirements regarding independence
- By understanding the needs and expectations of our clients

- AWT's oversight by the COI Auditor
- By establishing and applying methods to determine the efficiency and effectiveness of each project, by having an internal audit performed by the internal peer reviewer
- By identifying potential conflicts of interest and dealing with them appropriately
- Commitment by team leader, team members, internal peer reviewer and appeals, complaints and disputes representative to support the v/v process and to act impartially, by signing an *Internal Conflict of Interest/Impartiality* document for every verification project that they are a part of.
- AWT has a strict policy when hiring, training and promoting personnel, which emphasizes the importance of impartiality, the potential risks that could arise and evaluating their impartiality regarding each client, so that they are successful at mitigating or eliminating any risks

AWT follows a zero-tolerance policy. If impartiality is compromised the following steps would take place:

- The team leader would discuss the findings with the COI Auditor.
- A conference call would then be placed with the client.
- AWT would then inform the protocol administrator about the findings.
- A solution would try to be resolved to include:
 - Removing the particular team member who compromised impartiality, or
 - Declining the project altogether if a reasonable solution cannot be reached.

Mechanism for Oversight of Impartiality

The COI Auditor, provides oversight to ensure that impartiality is being achieved throughout each verification project. The COI Auditor provides impartial monitoring and review to ensure independence. The following step-by-step procedures include:

- AWT is contacted by a client to provide verification services.
- The COI Auditor is then provided with contact information for all involved parties and research regarding impartiality and conflict of interest takes place.
- The COI Auditor researches each company to determine the client's parent company and any subsidiaries.
- All staff members are then made aware of these findings at the initial team meeting to determine if impartiality will be compromised by any of the members.
- If it is determined that impartiality is not compromised and no potential conflicts of interest exist, the team leader, team members, internal peer reviewer and appeals, complaints and disputes representative then sign the *Internal Conflict of Interest/Impartiality* form.
- If a conflict of interest is discovered or it is determined that impartiality is compromised at this point, AWT would determine the necessary steps to eliminate conflict of interest and compromises to impartiality entirely to include:
 - Removing the particular team member that poses a conflict of interest, or
 - Declining the project altogether.
- ARB COI evaluation forms are completed and submitted to the applicable registry for review and approval.

Verification Team Members/Internal Peer Reviewer/Appeals, Complaints and Disputes Representative:

The following verification team leader, team members and internal peer reviewer confirm to act impartially and acknowledge to the best of their knowledge that there are no known conflicts of interest. The undersigned have the proper education and training to successfully assist in the specific areas assigned.

Name/Title: _____ Signature: _____ Date: _____

Name/Title: _____ Signature: _____ Date: _____

Name/Title: _____ Signature: _____ Date: _____

Name/Title: _____ Signature: _____ Date: _____

Name/Title: _____ Signature: _____ Date: _____

Name/Title: _____ Signature: _____ Date: _____

Name/Title: _____ Signature: _____ Date: _____

Name/Title: _____ Signature: _____ Date: _____

Attachment C.

Contracting of V/V Services



Agri-Waste Technology, Inc.
501 N. Salem St., Suite 203
Apex, NC 27502
919-859-0669 (office)
919-233-1970 (fax)
www.agriwaste.com

Version 1.5

**Contracting of Verification Services on Behalf of
Agri-Waste Technology, Inc.**

I, _____, agree to provide independent, third-party verification services on behalf of Agri-Waste Technology, Inc. (AWT). I conform to the California Air Resources Board requirements and am qualified to complete such services based on my educational background, professional experience, training and qualifications. I agree to comply with AWT policies and procedures set forth in the AWT Management System Policy. I will keep all client information confidential and independent from commercial and other interests and will notify AWT of any conflicts of interest with potential clients or responsible parties. I agree to complete the portion of the projects assigned to me and will provide continual open communication between AWT, the client and myself.

Consultant

Date

V/V Director

Date

Attachment D.

Confidentiality/Non-Disclosure

Confidentiality/Non-Disclosure Agreement

Version 1.1

I, the undersigned, am aware that during the course of my employment at Agri-Waste Technology (AWT) or during the course of my subcontractor agreement, confidential information (such as product designs, marketing strategies, client information and files, pricing policies, etc.) will be available to me.

All information disclosed to me and identified by AWT as confidential shall be treated as Confidential Information during the performance of the services included herein. Confidential Information shall not include (i) information which can be proven to have been publicly available at the time of receipt or which subsequently becomes publicly available through no fault of me, (ii) information which can be proven to have been known by me prior to the date hereof, (iii) information which can be proven to have been lawfully received from an unaffiliated third party without restriction on disclosure, provided such third party is not under an obligation of non-disclosure to me, or (iv) disclosure which can be demonstrated to have been compelled by law.

I further understand this disclosed information is proprietary and critical to the success of AWT and therefore must not be given out or used other than for AWT business purposes. Furthermore, I am not permitted to remove or make copies of any disclosed client records, reports or documents without prior management approval. Finally, all employees and subcontractors are required to inform the client and/or responsible party before placing any disclosed information into the public domain.

In the event of termination of employment (or completion) of subcontracting services), whether voluntary or involuntary, I hereby agree not to utilize or exploit such disclosed information with another individual or company.

Signature

Date

Attachment E.

Control of Documents and Records Policy

All verification related records are stored securely on AWT’s internal server and appropriately identified, collected, indexed, filed, stored, maintained and disposed of properly as managed by the V/V Director. All electronically transmitted records are transmitted via email or a password protected File Transfer Protocol (FTP) site that is only accessible by the V/V Director, Team Leader, Team Members and the client. All reports to clients are transported via email, ftp or FedEx. Records are only transmitted to the program registry and/or clients via email, FedEx and/or using the FTP site. All clients records will remain confidential and onsite at AWT’s home office, located in Raleigh, North Carolina.

Upon request, records pertaining to the verification will be retained or destroyed in agreement between the participating parties and in accordance with the verification plan and California Air Resources Board requirements and contractual arrangements.

AWT records include the following information:

- Management System Policy and related documents
- All project related data submitted by the client or responsible party.
- Contractual agreements signed by client or responsible party and AWT
- Confirmation of the completion of verification activities, including findings and information on material or non-material discrepancies
- Verification statements
- Records of complaints and appeals and any subsequent correction or corrective action, if applicable
- Personnel records, including evidence of the competence of verifiers and technical experts
- All other records referenced in the Management System Policy

I have read this document and understand the Document and Records Control Policy and agree to abide by the criteria listed above.

Signature

Date

Attachment F.
Sampling Plan

Client: _____
Project Name: _____
Date: _____
Revised: _____
Written By: _____

The sampling plan is based on risks or material concerns that could potentially lead to errors, omissions and/or misrepresentations that are identified throughout the verification process and is amended accordingly. This plan is used in developing the validation/verification plan and is approved by the team leader. The following elements are included in the sampling plan:

Level of Assurance

Typical Language: This is a reasonable assurance engagement meaning that AWT will provide a reasonable, but not absolute, level of assurance that the GHG offset assertion is materially correct.

The level of assurance is used to determine the depth of detail that AWT designs into the validation/verification plan and sampling plan. AWT participates in reasonable assurance engagements meaning that AWT will provide a reasonable, but not absolute, level of assurance that the GHG offset assertion is materially correct or in the case of validations, that the GHG offset project is eligible and likely to result in the asserted GHG offsets.

Verification Scope

The verification scope is an up-front specification that indicates the type of validation/verification to be undertaken including types of GHGs and crediting years, GHG project and baseline scenarios, physical infrastructure, activities, technologies and processes of the GHG project, and GHG sources, sinks and reservoirs. The verification scope also includes the frequency of subsequent verifications.

Verification Criteria

The verification criteria is consistent with the ISO 14064-3 standard, IAF MD6 and the *Insert Relevant Program Specific Protocol Here*.

Amount and type of evidence (qualitative and quantitative) necessary to achieve the agreed level of assurance

AWT will examine the GHG data and information to develop an accurate account of the project's GHG assertion. AWT will determine whether or not the project conforms to the validation/verification criteria and any discrepancies will be addressed by the client or responsible party. AWT will then examine whether or not the validation/verification evidence collected supports the GHG assertion, by evaluating the collected evidence in the assessments of controls, GHG data and information and applicable GHG program criteria to support the GHG assertion. It will then be determined whether or not the GHG assertion is without material discrepancies and that AWT provided the level of assurance

agreed upon in the original contract. Any modifications to the GHG assertion will then be evaluated, so that all evidence supports its findings. Specific data/information requirements to be provided by the client or responsible party include but are not limited to:

- Description of the procedures and systems used to collect, document and process GHG emissions data at the facility level
- Description of quality control procedures applied (internal audits, comparison with last year's data, recalculation by a second person, etc.)
- Listing of responsible individuals for collecting GHG emissions data at each site and at the corporate level, if applicable
- Information on uncertainties, qualitative and if available, quantitative

Include list of all information/data that will be reviewed here including the quantity of data to review based on the risk assessment, AWT MSP document or program specific requirements.

Methodologies for Determining Representative Samples

AWT determines representative samples based on the requirements of the program and specific protocol. Absent specific requirements, AWT evaluates the specific project including data uncertainties, QA/QC procedures and methods for data collection to determine representative sampling intensity. Unless more rigorous sampling is deemed appropriate by the team leader, data that is automated and not subsequently manually transcribed is sampled such that automated calculations/aggregations are checked for a minimum of one data point per data set to ensure software is set up correctly. If material anomalies are observed, a corrective action request would be issued. Where data is manually transcribed, raw data utilized for GHG emission reduction calculations is sampled at a rate of the equivalent of 1 month out of 6 months or 2 months/year for all relevant data sets. Where spreadsheets are utilized, all formulas are reviewed to ensure accuracy. Should the field audit reveal inconsistencies in the project documentation and the implementation of the project in terms of data collection and management, the minimum sampling rate shall be doubled. Should the desk review of data and calculation procedures uncover material errors, the minimum sampling rate of desk reviewable data shall also be doubled. If program requirements set forth detailed sampling requirements that are more rigorous than the internal requirements listed above, the program requirements take precedence.

Risks of Potential Errors, Omissions or Misrepresentations

AWT assesses risks of potential errors, omissions or misrepresentations and reports relative magnitudes in this section. The risks are utilized to inform the sampling.

Insert Table showing relative magnitude of perceived risks of potential errors, omissions or misrepresentations. Indicate the category of risk (inherent, controlled or detectable) for each source of risk.

Attachment G.

Verification Plan

Client: _____
Project Name: _____
Date: _____
Revised: _____
Written By: _____

Level of Assurance

This is a reasonable assurance engagement meaning that AWT will provide a reasonable, but not absolute, level of assurance that the GHG offset assertion is materially correct.

The level of assurance is used to determine the depth of detail that AWT designs into the verification plan and sampling plan. AWT participates in reasonable assurance engagements meaning that AWT will provide a reasonable, but not absolute, level of assurance that the GHG offset assertion is materially correct.

Verification Objectives

The objective of this engagement is the verification of the *Insert Project Name Here* against the *Insert Program Specific Protocol Here* for the purpose of registration with the *Insert GHG Program Here*.

The objective would include an assessment of the integrity of the asserted offsets to the agreed upon level of assurance.

Verification Criteria

The verification criteria is consistent with the *Insert Relevant Program Specific Manuals/Protocol*.

Verification Scope

The verification scope is an up-front specification that indicates the type of verification to be undertaken including types of GHGs and reporting period, baseline scenario, GHG project description (physical infrastructure, activities, technologies and processes), and GHG sources, sinks and reservoirs. The scope also includes the frequency of subsequent verifications.

- a. Baseline Scenario
- b. Project Description: Physical Infrastructure, Activities, Technologies and Processes

Insert Client Name, Project Name, Year

- c. GHG sources, sinks and/or reservoirs
- d. Types of GHGs
- e. Reporting Period
- f. Frequency of Subsequent Verifications

Materiality

Based on the full context within which the information is presented, AWT will assess any errors, omissions and/or misrepresentations and make requests to *Insert Client Name* for additional information, clarifications or corrective actions. Any discrepancy resulting in a material errors, will result in a corrective action request. The required materiality shall be established based on the requirements of the GHG program or in the absence of GHG program requirements, best professional judgement considering objectives, level of assurance, criteria and scope.

Based on the Climate Action Reserve's methodology to determine the materiality threshold, the following will apply:

- For projects asserting less than 25,000 tCO₂e per year the materiality threshold is 5%.
- For projects asserting between 25,000 tCO₂e and 100,000 tCO₂e per year, the materiality threshold is 3%.
- For project asserting greater than 100,000 tCO₂e per year, the materiality threshold is 1%.

Verification Activities

The AWT verification process consists of the following general phases: pre-engagement, approach, verification and review and issuance of the verification statement Additional process details for ARB are available on the ARB website:

<http://www.arb.ca.gov/cc/capandtrade/offsets/offsets.htm>

AWT sufficiently documents all verification activities to ensure consistency with all required ARB program criteria.

These procedures start after a participant has selected AWT as the verifier and a contract has been executed.

Note: The verification process for conversion of early action offset credits to ARB offset credits roughly follows this procedure. However, there are differences as set forth in Section 19550 of the cap and trade regulation. Where the following procedure and the regulation conflict, the regulation is followed.

Insert Client Name, Project Name, Year

1. Lead Verifier and COI Auditor prepare Internal Conflict of Interest/Impartiality document and obtain signatures from all team members. Team Leader prepares notice of verification services and request for evaluation of conflict of interest forms and submits to the COI Auditor for completion. COI Auditor determines if there are issues with COI and completes NOVS and COI forms. Team leader reviews these documents, signs and submits them to the offset project registry and/or ARB at a minimum of 30 calendar days prior to beginning any verification services.
2. Lead Verifier holds a planning meeting with participants, which includes:
 - Introduction of the verification team
 - Review and confirmation of verification process and scope, objectives, level of assurance, criteria and materiality
 - Transfer of background information, underlying activity data and results of previous assessments (if applicable)
 - Review and confirmation of the verification process and schedule
3. Lead Verifier prepares sampling plan. The sampling plan must include a ranking of GHG emission sources within the project boundary by amount of contribution to total CO₂e emissions and GHG reductions. The sampling plan must also include a ranking of GHG emission sources in order of calculation uncertainty. Internal peer reviewer reviews sampling plan. In addition, the sampling plan must include a narrative of uncertainty risk assessment for data acquisition equipment, data sampling and frequency, data processing and tracking, project baseline and annual GHG emissions and GHG reductions calculations, data reporting and management policies in developing offset project data reports. The sampling plan must include GHG emission sources that will be targeted for document reviews and data checks and an explanation of why they were chosen, methods used to conduct data checks for each GHG emission source and a summary of information analyzed in the data checks and document reviews for each GHG emission source.
4. Lead Verifier prepares the verification plan. The verification plan must include the date of planning meeting, date of site visit, types of proposed document and data reviews and expected date of completing verification services.
5. Conduct verification activities in accordance with the Article 5, Sub-article 13 and 14 of the Cap and Trade regulation.

Initial Site Visit Following the First Reporting Period

- a) Assess offset project eligibility and additionality according to Section 95973 and the applicable Compliance Offset Protocol;
- b) Review the information submitted for listing pursuant to section 95975 and determine if it is complete and accurate.
- c) Confirm that the offset project boundary is appropriately defined;
- d) Review project baseline calculations and modeling;

- e) Assess the operations, functionality, data control systems, and review GHG measurement and monitoring techniques;
- f) Confirm that all applicable eligibility criteria to design, measure, and monitor the offset project conform to the requirements of the applicable Compliance Offset Protocol.

Initial Site Visit Following the First Reporting Period & Each Subsequent Site Visit

- g) Check that all offset project boundaries, GHG emissions sources, GHG sinks, and GHG reservoirs in the applicable Compliance Offset Protocol are identified appropriately;
 - h) Review and understand the data management systems used by the Offset Project Operator or Authorized Project Designee to track, quantify, and report GHG reductions, GHG removal enhancements, or other data required as applicable in the Compliance Offset Protocol. This includes reviewing data collection processes and procedures, sampling techniques and metering accuracy, quality assurance/quality control processes and procedures, and missing data procedures. The offset verification team member(s) must evaluate the uncertainty and effectiveness of these systems;
 - i) Interview key personnel involved in collecting offset project data and preparing the Offset Project Data Report;
 - j) Make direct observations of equipment for data sources and equipment supplying data for GHG emission sources in the sampling plan determined to be high risk;
 - k) Collect and review other information that, in the professional judgment of the team, is needed in the offset verification process;
 - l) Confirm the offset project conforms with all local, state, or federal environmental regulatory requirements pursuant to section 95973(b), including health and safety regulations; and
 - m) Review all chain of custody documents as required in the Compliance Offset Protocol, if applicable.
6. Lead Verifier prepares issues log based on the results of the site and desk audits, Independent Reviewer reviews list and Lead Verifier submits to client. The issues log must identify the section of the regulation or the offset protocol related to the nonconformance, must indicate whether the issues could have any bearing on material misstatement or conformance and must indicate that issues were corrected by the offset project operator or authorized project designee prior to completing verification services.
7. Lead Verifier prepares and signs the Verification Statement and Verification Report. The Verification Statement is a brief, one-page summary that confirms the verification activities and outcomes. The Verification Report includes the following elements at a minimum:
- a. Verification Plan

- b. Detailed comparison of data checks
 - c. Issues log and resolutions
 - d. Qualifying comments
 - e. Calculations performed
8. Independent Reviewer reviews the Verification Report, Verification Statement and accompanying documents to confirm that all verification activities have been completed, whether or not the GHG assertion is free of material discrepancy and whether or not the verification activities provide the agreed upon level of assurance. The Independent Reviewer signs the Verification Report and the Verification Statement.
9. Exit meeting is scheduled, so that the Lead Verifier and participant can discuss the Verification Report and Statement.
10. Upon approval, Lead Verifier uploads the issues log, Verification Report and Verification Statement to the Offset Project Registry.
11. Recordkeeping--AWT will keep participants electronic copies of information utilized during the verification process for a minimum of 15 years. The Sampling Plan will also be kept for 15 years.

Verification Timeline

Please note that the schedule listed is tentative and dependent on obtaining the appropriate information from the project developer. If the schedule changes during the project activities, the changes will be communicated to the project developer. This verification plan will be updated at the end of the project to reflect all schedule changes.

1. Kickoff Meeting
2. Field Audit
3. Draft Verification Report/Statement to Client
4. Upload Verification Report/Statement to Registry

Complaints, Appeals and Disputes Process

AWT has a defined process for handling complaints, appeals and disputes which is located on our website (<http://agriwaste.com/carbon-offsets/verification/>) under “Documents”.

Team Leader Date

Client Date

Insert Client Name, Project Name, Year

Attachment H.

Complaints, Appeals and Disputes

AWT's objective is to ensure that all GHG information represents a true and fair account, by analyzing each GHG verification project with respect to relevance, completeness, consistency, accuracy, transparency and conservativeness. In the event that a client deems that an aspect of their verification project is not compliant, AWT will commit to the following procedures to ensure a timely, independent and effective resolution. AWT is responsible for all decisions at all levels and ensures that decisions based on complaints, appeals and/or disputes will not result in any discriminatory actions against the client.

Facts Discovered After the Verification Statement

AWT will consider appropriate action if facts that could materially affect the verification statement are discovered by our client, responsible party or California Air Resources Board after the issuance to include the following:

- Determine if the facts have been adequately disclosed in the GHG assertion
- Consider if the verification statement requires revision
- Discuss the matter with the client, responsible party or California Air Resources Board

If the verification statement requires a revision, AWT will meet with the initial verification team members to discuss the concerns and to issue a revised report and statement, which specifically addresses the reason for the revision. AWT will obtain sufficient evidence and identify relevant information up to the date of the verification statement. If facts that could materially affect the verification statement are discovered after this date, AWT will consider appropriate action on a case-by-case basis.

Complaints

AWT will commit to the following regarding complaints:

- All clients must notify AWT in writing of their complaint and outline their objections
- The Lead Verifier assigned to the project will field the complaint and provide the client with a copy of AWT's *Complaints, Appeals and Disputes* document. AWT will safeguard the confidentiality and subject of the complaint
- Clients must acknowledge that they have received the *Complaints, Appeals and Disputes* document and return the signed form to AWT within 5 business days
- Upon receipt of complaint, AWT will confirm whether the complaint relates to validation/verification activities and whether the verification body is responsible
- An employee that was not originally assigned to the project in question will be chosen to review the complaint and determine a resolution, within 30 business days. Typically, this individual would be the President of the company.
- Once a resolution has been made, the Lead Verifier will contact the client in writing with AWT's outlined conclusion and any necessary modifications to the verification statement or report
- The client has 5 business days to notify AWT in writing whether or not the complaint has been resolved
- If the matter can not be resolved between AWT and the client, a formal Appeal by the client will be made

Appeals and Disputes

AWT will commit to the following regarding all appeals:

- All clients must notify AWT in writing of their appeal and outline their objections
- The Lead Verifier assigned to the project will field the appeal
- Upon receipt of appeal, AWT will confirm whether or not the following should occur:
 - To require additional documentation from project owner for review
 - Determine whether another site visit is required
- An employee that was not originally assigned to the project in question will be chosen to review the appeal and determine a resolution, within 30 business days. Typically, this individual would be the President of the company.
- Once a resolution has been made, the Lead Verifier will contact the client in writing with AWT’s outlined conclusion and any necessary modifications to the verification statement or report
- The client has 5 business days to notify AWT in writing whether or not the complaint has been resolved
- If the matter can’t be resolved between AWT and the client, AWT will at that point contact the California Air Resources Board and determine appropriate action.

_____ acknowledges receipt of the above *Complaints, Appeals and Disputes* document and understands the procedures and timelines outlined to successfully complete the complaint/appeal. AWT ensures a timely, independent and effective resolution of all complaints and appeals.

Client Name (Signature)

Phone Number

Note: Signature is required only if the complaints, appeals and disputes process is being used by the client.

Please return signed document to:
Agri-Waste Technology, Inc.
501 N. Salem St., Suite 203
Apex, NC 27502
Attn: President of Agri-Waste Technology, Inc.

Appendices

1. COI
2. NOVS
3. Verification Statement
4. Verification Report

Appendix 1

COI

See <http://www.arb.ca.gov/cc/capandtrade/offsets/forms/forms.htm> for latest form.

Appendix 2

NOVS

See <http://www.arb.ca.gov/cc/capandtrade/offsets/forms/forms.htm> for latest form.

Appendix 3

Verification Statement

See <http://www.arb.ca.gov/cc/capandtrade/offsets/forms/forms.htm> for latest form.

Appendix 4
Verification Report

ARB Verification Report Checklist

A verification report prepared for projects registered on the Air Resources Board shall include the following items:

- _____ Verification Plan
- _____ Detailed Comparison of Data Checks
- _____ Calculations Performed
- _____ Issues Log and Resolutions
- _____ Qualifying Comments