

California Climate Action Registry General Verification Protocol

Verifying Entity-Wide Greenhouse Gas Emissions

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Abbreviations and Acronyms

CARB	California Air Resources Board
CARROT	Climate Action Registry Reporting Online Tool
CDF	California Department of Forestry and Fire Protection
CEMS	Continuous Emissions Monitoring Systems
CH ₄	methane
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
COI	Conflict of Interest
GHG	greenhouse gas
GWP	global warming potential
HFC	hydrofluorocarbon
IPCC	Intergovernmental Panel on Climate Change
N ₂ O	nitrous oxide
PFC	perfluorocarbon
RFA	Request for Applications
SAR	IPCC Second Assessment Report (1996)
SF ₆	sulfur hexafluoride
TA	Technical Assistance Provider
TAC	Technical Advisory Committee
TAR	IPCC Third Assessment Report (2002)

Part I Introduction

1.1 Overview

The California Climate Action Registry created this General Verification Protocol to provide California Registry-approved verifiers with clear instructions for executing a standardized approach to the independent verification of greenhouse gas (GHG) emissions baselines and annual emissions reported by California Registry participants. This standardized approach defines a verification process that promotes the relevance, completeness, consistency, accuracy and transparency of emissions data reported to the California Registry. While this Protocol is written for verifiers, California Registry participants who are interested in understanding and preparing for the verification process may also find it useful.

This Protocol is intended to be used in combination with the California Registry's General Reporting Protocol and web-based calculation and reporting tool (CARROT—Climate Action Registry Reporting Online Tool). **Approved verifiers will verify participants' GHG emissions reports to the standards of the California Registry's General Reporting Protocol, and sector-specific protocols using the process outlined in this General Verification Protocol.**

At a minimum, each emissions report must contain all of an entity's emissions of CO₂ in the state of California for a calendar year, reported in five categories: indirect emissions from purchased electricity, imports of steam, district heating/cooling, and direct emissions from mobile combustion, stationary combustion, manufacturing processes, and fugitive emissions. Where a participant is reporting their U.S. emissions, the report must contain all of their emissions nationally. Starting with the fourth year of reporting, each emissions report must contain all emissions of all six greenhouse gases (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆).

Emissions reports may also contain other information about an organization and its emissions that does not require verification. For instance, this could include information about a company's environmental goals, programs, policies, etc. Participants may also choose to report other indirect emissions, like business travel or employee commuting. In the emissions reports, optional information will be clearly distinguished from information that is verified.

Activities for each specific verification will differ based on the length and complexity of a participant's emissions report, but the verification process will include at least the following steps:

- Case-by-case evaluation of Conflict of Interest
- Scoping and planning a participant's verification activities
- Conducting verification activities
 1. Identifying emissions sources
 2. Reviewing methodologies and management systems
 3. Verifying emission estimates
- Preparing a participant's Verification Report and Verification Opinion

- Submitting a participant-authorized electronic Verification Form and Verification Activity Log to the California Registry via CARROT

Upon completion of the above steps, the California Registry will review the emissions report before accepting a participant's verified emissions report into its emissions database. This process is repeated every year of an organization's participation in the California Registry.

To help decrease the potential for conflict of interest between a verifier and a participant, a verifier can verify the same participant for a maximum of six consecutive years. After six years, a participant must choose another verifier for at least three years. After that time, the original verifier would again be eligible to verify the participant's emissions for up to six consecutive years.

The California Registry assumes that the verifiers will use their best professional judgment when conducting verification activities.

1.2 Organization of this General Verification Protocol

This General Verification Protocol is divided into four parts which outline the necessary steps a verifier must follow to initiate and complete the verification of a participant's emissions report.

Part I, *Introduction* (this section), provides a brief overview of the purposes and requirements of the verification process, describes the principles of verification, highlights important definitions, and answers some key questions.

Part II, *Preparing for Verification*, focuses on activities that take place prior to beginning verification activities, including bidding for a contract with participants, determining conflict of interest, negotiating a contract with participants, providing required notifications, and designing appropriate verification activities for each participant.

Part III, *Core Verification Activities*, provides guidance on conducting the primary activities that the verifier will complete, including: identifying sources, reviewing management systems and methodologies, and verifying emission estimates.

Part IV, *Completing the Verification Process*, covers procedures for completing the verification process including: preparing a Verification Report and Verification Opinion, completing the Verification Form to submit a participant's verified data to the California Registry, and recording and retaining proper records.

1.3 Principles of Verification

The purpose of verification is to provide an independent review of data and information being submitted to the California Registry to ensure that they meet minimum quality criteria. To fulfill this purpose, the independent verification process maintains the criteria of completeness, consistency, accuracy, comparability and transparency as its underlying principles.

Relevance. Verification should ensure that GHG inventories submitted to the California Registry appropriately reflect the GHG emissions of the entity and include emissions information produced in accordance with the program rules on defining reporting boundaries and sources.

Completeness. Verification should ensure accounting of all material GHG emissions sources and activities within the specified scope of the participant's inventory (a minimum of 95%). Baseline and annual emissions results should include all sources for which the participant is responsible.

Consistency. An emissions report should allow for meaningful comparison of emissions performance over time and across similar organizations. Independent verification should ensure that consistent methodologies and measurements are used between the baseline results and annual emissions results. Additionally, changes to participant emission baselines are verified to ensure appropriate comparisons.

Accuracy. Entity-wide reported data should be within the materiality threshold of 5% of the verifier's estimate of total emissions. Calculations and estimates need to be as accurate as possible to prevent material errors.

Transparency. Verification should be a transparent exercise. The data used for verification and the verification activities should be clearly and thoroughly documented to allow for outside review by the California Registry or potential review by the State of California (the State) in the context of overseeing verification activities.

1.4 Verification Principles and Definitions

1.4.1 Verification Standard

Verifiers must verify participants' GHG emissions reports against the California Registry's General Reporting Protocol using the process outlined in this General Verification Protocol. If a participant is reporting process or fugitive emissions, a separate industry-specific protocol may also be used and cited, where available. Some participants may wish to use their GHG emissions report for additional purposes such as registering in another registry, participating in emissions trading schemes, crediting programs, etc., and thus may add additional standards for verification.

1.4.2 Minimum Quality Standard

A verified emissions report submitted to the California Registry must be free of material misstatements, achieving a level of at least 95% accuracy. It is possible that during the verification process, differences will arise between the emissions totals estimated by participants and those estimated by verifiers. Differences of this nature may be classified as either material (significant) or immaterial (insignificant). A discrepancy is considered to be material if the overall reported emissions differ from the overall emissions estimated by the verifier by 5% or more. A difference is immaterial if it is less than 5%.

1.4.3 Reporting Uncertainty vs. Inherent Uncertainty

When evaluating participants' emissions reports, verifiers are to determine if the reporting uncertainty (vs. the inherent uncertainty) is less than the minimum quality standard.

Reporting uncertainty entails the mistakes made in identifying emissions sources, managing data or information, and calculating GHG emissions. Inherent uncertainty refers to scientific uncertainty associated with measuring GHG emissions. The California Registry is aware that there is inherent uncertainty in emissions factors and measurement of activity data through metering and instrumentation (even after the calibration of meters and other data collection methods are verified as accurate), but determining scientific accuracy is not the focus of the California Registry or its General Reporting Protocol.

1.5 Professional Judgment

Approved verifiers must verify participants' GHG emissions reports against the California Registry's General Reporting Protocol using the process outlined in this General Verification Protocol. The California Registry asks verifiers to use their professional judgment when executing the verification activities described in this General Verification Protocol. The purpose of the verifier approval process is to find verification firms that demonstrate, through their staff's professional qualifications and relevant GHG experience, their ability to render sound professional judgments about GHG emissions reports.

Application of a verifier's professional judgment is expected in the following areas:

- Implementation of verification activities with appropriate rigor for the size and complexity of a participant's organization and with regard to the uncertainty of calculations associated with the participant's emissions sources;
- Review of the appropriateness of a participant's GHG emissions tracking, monitoring, and management systems for providing information to the California Climate Action Registry;
- Evaluation of participant compliance with the California Registry's General Reporting Protocol;
- Assessment of methods used for estimating emissions from sources for which the General Reporting Protocol does not provide specific guidance, such as process and fugitive emissions, and indirect emissions from sources other than electricity, imported steam, district heating/cooling; and
- Appraisal of assumptions, and estimation methods and emission factors that are selected as alternatives to those provided in the General Reporting Protocol.

The General Verification Protocol and training provided by the California Registry are intended to explain to the verifier the California Registry's guidelines and expectations and thus what types of professional judgments are appropriate for this program. In addition to these resources, verifiers may contact the California Registry at any time for clarification of California Registry guidelines, expectations and policies.

1.6 Conflict of Interest

In order to ensure the credibility of the emissions data reported to the California Registry and its potential utility under any future regulatory regime, it is critical that the verification process is completely independent from the influence of the participant submitting the emissions report. While conducting verification activities for California Registry participants, verifiers must work in a credible, independent, nondiscriminatory and transparent manner, complying with applicable state and federal law and the current version of the State of California's *Conflict of Interest Process and Requirements for State and California Registry-Approved Verifiers*. This document is posted on the California Registry's website.

Any pre-existing relationship between the verifier and participant must be acknowledged to the California Registry, which will evaluate the potential for a conflict of interest (COI) between the two organizations.

Verifiers must provide information to the California Registry about its organizational relationships and internal structures for identifying potential conflicts of interest

(organizational COI). Then, on an individual basis, the California Registry will review any pre-existing relationship between a verifier and participant and will assess the potential for conflict of interest (case-by-case COI). When the California Registry determines there is a low risk of COI, the participant and verifier can finalize negotiations of their contract. Following completion of a verification, the verifier must monitor for the next year if any new business relationship may create a COI (emerging COI).

As an added protection, a verifier may provide verification services to a California Registry participant for, at most, six consecutive years. After a six-year period, the California Registry participant must engage a different verifier. The original verifier may not provide verification services to that participant for three years. This three year hiatus begins with any lapse in providing annual verification services to a California Registry participant.

In the event that a verifier violates these conditions, the California Registry, in consultation with the State and at its discretion, may disqualify an approved verifier for a period of up to five years.

This conflict of interest clause does not preclude a verifier from engaging in consulting services for other clients that participate in the California Registry for whom the verifier does not provide any verification activities.

Part II Preparing for Verification

2.1 Verification Process Overview

Before any verification activities begin, a number of procedural steps must be taken to ensure that the obligations and responsibilities of both the verifier and participant are clear.

The following summary of the major steps of verification is provided as a reference.

1. **Verifier receives California Registry approval:** Verifier meets all accreditation requirements and completes a California Registry-sponsored verification training workshop.
2. **Participant selects verifier:** Participant contacts one or more State/California Registry-approved verifiers to discuss verification activities. Participant selects an organization to verify its GHG emissions results and begins to negotiate contract terms.
3. **Verifier submits case-specific Evaluation of Conflict of Interest (COI) and State Notification Form:** After a participant chooses a verifier, the verifier must submit a Conflict of Interest Evaluation and State Notification Form to the California Registry to establish that the likelihood of a COI between parties is low or that risk of any conflict can be sufficiently mitigated by the verifier. The form must be submitted at least 10 working days prior to the first scheduled verification meeting.
4. **California Registry sends COI determination to verifier:** The California Registry reviews the Evaluation of COI Form and supporting information to determine the level of risk associated with the proposed participant/verifier relationship, and notifies the verifier of its determination.
5. **Verifier & participant finalize contract:** When the California Registry provides a favorable COI determination between a participant and verifier, verifiers may finalize their contract with a participant.
6. **Verifier conducts verification activities:** Verifier follows the guidance in the General Verification Protocol to evaluate a participant's annual GHG emissions report.
7. **Verifier prepares Verification Report and Verification Opinion for participant:** Verifier prepares a detailed summary (Verification Report) of the verification activities for the participant. Verifier also prepares a Verification Opinion for participant's review, prior to sending opinion electronically to the California Registry via CARROT.
8. **Verifier & participant discuss Verification Report and Opinion:** Verifier meets with participant to discuss Verification Report and Opinion.
9. **Verifier completes Verification Form via CARROT:** Once authorized by a participant, a verifier completes the Verification Form via CARROT. Participant then submits the original Verification Opinion to the California Registry.
10. **California Registry Conducts Final Review:** California Registry reviews the Verification Opinion and Verification Activity Log and evaluates the participant's

emissions reports. Once accepted by the California Registry, a participant's aggregated entity-level emissions become available to the public via CARROT.

Even in multi-year verification contracts, verifiers must repeat steps 3-11 for each annual verification before submission to the California Registry.

2.2 Becoming an Approved Verifier

Only those firms approved by the California Registry, the State or those involved in the American National Standards Institute (ANSI) accreditation program may provide verification services to California Registry participants. In order to become approved, a verifier must complete a two-step process: 1) Obtain accreditation as a GHG verifier from either the California Air Resources Board or from the American National Standards Institute (or other approved accreditation body as specified on the California Registry website) and 2) achieve California Registry approval by attending a verification training workshop facilitated by the California Registry.

Information on ANSI GHG Verifier Accreditation is available at www.ansi.ghg.org.

Information on CARB GHG accreditation is available at arb.ca.gov.

The second step of the approval process requires that lead verifiers one of the California Registry's verification training workshops. A lead verifier is any verifier from the firm who will sign their firm's Verification Opinion. After completing the training workshop, the verification firm becomes an "approved verifier." Following the training session, the California Registry will provide verifiers with a notification of their full approval. Upon receiving this notice, a firm may approach current or prospective California Registry participants to market their services and capabilities, and advertise that they are "approved verifiers for the California Climate Action Registry". All approved verifiers are listed on the California Registry's website.

Approvals are valid for three years from the date of the California Registry approval. At the end of this period, the California Registry will send a notification to each firm's primary contact. If for any reason the State, ANSI or the California Registry finds that a verifier has failed to meet the standards of either the General Reporting Protocol or the General Verification Protocol, it may disqualify a verifier for a period of up to five years.

2.3 Updates to the General Verification Protocol

Periodically, the California Registry may update the General Verification Protocol. The California Registry will advise all verifiers of any changes, and any new requirements that may affect them. Where any changes are significant, the California Registry may require that lead verifiers attend the next verification training workshop.

2.4 Adding or Deleting Designated Staff

During the application process, verification firms will identify all staff members who will be designated verifiers for the California Registry. An applicant who is State-approved may add or delete staff to their roster. To add or delete designated staff after being approved, the verifier should submit the Designated Staff Form (available on the California Registry's Verifiers Only webpage), with the names and contact information for any personnel changing from the roster, and note if staff are to be deleted or added to the roster. When adding staff, the firm should describe each individual's job classifications, relevant experience, education, academic degrees, professional licenses for technical staff members and their respective roles.

2.5 Bidding on a Verification Contract

The California Registry recommends that those participants with complex GHG emissions reports solicit competitive bids for verification services from at least three approved verifiers. Those participants with simpler GHG emissions reports who do not seek, or are not eligible for, batch verification may wish to secure competitive bids or may wish to sole source the verification contract in order to reduce costs and expedite the verification process.

When preparing to send out a request for bids from verifiers, participants should first review the list of approved verifiers and select some (or all) as prospective bidders. Due to the possibility of access to proprietary information, participants may want to send each prospective bidder a non-disclosure agreement. The California Registry suggests that participants distribute requests for bids to prospective verifiers only after they have received a signed non-disclosure agreement from verifiers.

The California Registry recommends that participants include the following information in their requests for bids from verifiers:

1. The expected contract duration;
2. A general description of the participant's organization;
3. The geographic boundaries of the participant's emissions report;
4. The number and locations of facilities and operations;
5. The GHGs reported in the participant's emissions report;
6. The emission source categories (and possibly emission sources) in the participant's emissions report;
7. The password to a read-only (Reviewer) version of the participant's emissions report in CARROT; and
8. A list and description, by category, of how emissions data is organized and calculated (either using CARROT or another methodology).

The California Registry suggests that participants request that commercial proposals from potential verifiers include the following components:

1. History and description of verification company;
2. Explanation of core competencies;
3. Proposed price for verification services;
4. Proposed staff;
5. Statement of verifier liability;
6. Confidentiality policy; and
7. Duration of contract.

The California Registry expects only limited variation in the technical proposals since all of the approved verifiers are trained to implement the California Registry's standardized verification process.

2.6 Conflict of Interest (COI)

2.6.1 Objective of the Conflict of Interest Process

This COI process was developed by the State of California and adopted, with modifications, by the California Registry to assess the risk of potential COI between verifiers and California Registry participants. This process gives verifiers the ability to demonstrate that their organization is capable of identifying and mitigating situations that would impair their ability to render an impartial verification opinion.

Through this process, applicants and any partners must demonstrate:

1. Clearly-defined organizational boundaries, internal structures, and relationships with other companies that have management or financial control over the applicant.
2. The presence of internal mechanisms to identify and mitigate organizational and personal COIs with any potential clients.
3. The ability to be objective in providing verification activities.

To protect the credibility and rigor of the California Registry verification process, the relationship between verifiers and California Registry participants must not create or appear to create a COI. While conducting verification activities for California Registry participants, the verifier must work in a credible, independent, nondiscriminatory and transparent manner, complying with applicable state and federal law and the current version of the California Registry's conflict of interest process

2.6.2 Process and Requirements

In the verification process, all verifiers must demonstrate they do not have significant conflicts of interest with participants:

1. **Organizational COI** – in the application process, each verifying organization shows that they have internal mechanisms in place that help maintain their objectivity in verification activities.
2. **Case-by-Case COI** – in each case where verification services are requested, before a contract is signed with a participant, each verifier demonstrates that any pre-existing relationship between the verifier and participant will not impair impartiality in verifying a GHG emissions report.
3. **Emerging COI** – for a period of one year following a verification, verifiers will monitor their relationship with the participant to ensure impartiality has been protected in the verification process.

These are each discussed in greater detail below.

2.6.2.1 Organizational COI

As part of the application process, a verifier has already documented the ability of its organization to identify and react to COI due to organizational relationships. Verifiers have also submitted the form *Conflict of Interest Declaration of Ability and Intent to Comply*, declaring the applicant and each partner's ability to subsequently perform and submit a case-

by-case evaluation of COI to the California Registry. This form also conveys the applicant's intent to comply with the California Registry's COI process and requirements.

2.6.2.2 Case-by-Case COI

As an early step in the contract negotiation process between verifiers and participants, a verifier must demonstrate on a case-by-case basis that it, its partners, and the individuals performing verification activities do not have any actual or potential conflict of interest with the California Registry participants for which it has been selected to carry out verification functions.

A verifier will have a high risk of COI if the verifier and participant share any management, or if any of the California Registry participant's managers of GHG-related activities were previously employed with or by the verifier within the last three years, or vice versa. A verifier will have a high risk of COI if the verifier or its related companies (e.g., parent company, subsidiaries of a parent company, affiliates) has provided any GHG management or advocacy services (as identified on the list below) to the California Registry participant within the last three years. If a verifier has performed these services, they have a high potential COI, as they would be: 1) verifying their own work, 2) performing management functions for the client, or 3) acting as an advocate for the client. Where a high risk of COI is determined, the verifier is not approved to conduct the verification.

2.6.2.3 Incompatible Services

- 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 energy, or other projects which explicitly identify GHG reductions as a benefit
- Preparing or producing GHG-related manuals, handbooks, or procedures specifically for the California Registry participant
- Appraisal services of carbon or GHG liabilities or assets
- Brokering in, advising on, or assisting in carbon or GHG-related markets
- Management over health, environment and safety functions
- Legal and expert services unrelated to California Registry verification

If the verifier identifies a potential or actual COI, the verifier must also submit a plan to avoid, neutralize, or mitigate the COI situation. The California Registry will review the information submitted to determine if the verifier provided enough information to make a COI determination. If not, the California Registry may request additional information. Once the information is found to be complete, the California Registry will review and evaluate the case, and will issue a written determination within ten working days.

Once the case-by-case evaluation is complete, a verifier may provide verification services to a California Registry participant for, at most, six consecutive years. After a six-year period, the California Registry participant must engage a different verifier. The original verifier may not again provide verification services for at least three years. This three-year period is triggered following any lapse in providing annual verification services to a California Registry participant.

This cycling of verifiers will help to avoid potential COI situations due to lengthy and ongoing relationships. Also, this guarantees that another firm will review material previously reviewed by another verifier, thus providing another "check" on the consistency and appropriateness of professional judgments made.

2.6.2.4 Emerging COI

Verifiers agree to monitor their activities for one year after the verification, and seek the approval of the California Registry and the State before entering into arrangements or relationships during that time that may present COI. The verifier may not enter into any contract with a California Registry participant or related entity that the California Registry and/or the State determines would create an unacceptable level of risk of COI.

In order to obtain this determination, the verifier must submit *Form COI-AB: Notification of Verification Activities And Request for Evaluation of Potential for Conflict of Interest Between Verifier and California Registry Member* (available on the California Registry's Verifiers Only webpage) to the California Registry detailing the specifics of their situation and request a determination. The California Registry will use a similar procedure to determine the risk for COI during that period.

2.6.2.5 Confidentiality

The California Registry will enter into confidentiality agreements with verifiers and California Registry participants as necessary to evaluate potential COI. Any organization that must provide confidential information to support the evaluation should clearly indicate what information is confidential, and the California Registry will follow its standardized procedures to do its utmost to protect confidential business information.

2.7 Negotiating a Contract with the Participant

After a verifier has been selected by a California Registry participant, the two parties should negotiate and complete contract terms. This contract is exclusively between the participant and the verifier, and the particulars of any given contract are at the discretion of the two parties. However, contracts for verification services typically include the following components:

- **Scope of the Verification Process.** This component of the contract should outline the exact geographic and organizational boundaries of the participant's emissions inventory to be examined. This should, but may not necessarily, match the boundaries used in the GHG emissions report to the California Registry. This scope should indicate whether a participant's California-only emissions are included or if both California and U.S. emissions are included. It should also identify whether the participant has used the management control, equity share, or other methods based on contractual relationships to determine organizational boundaries.
- **Confirmation of Approved Verifier Status.** This is a simple statement that the verifier has been approved by the California Registry to verify emissions reports covering the scope listed above.
- **Verification Standard.** Verifiers must verify participants' GHG emissions reports against the California Registry's General Reporting Protocol using the process outlined in this General Verification Protocol. If a participant is reporting process or fugitive emissions, a separate industry-specific protocol may also be used and cited, where available. Some participants may wish to use their GHG emissions report for additional purposes such as, registering in another registry, participating in emissions trading schemes, crediting programs, etc., and thus may add additional requirements into their contract for verification.

- **Non-Disclosure Terms.** The verifier and the participant should agree in advance on methods for identifying and protecting proprietary and confidential business data that may be revealed during verification.
- **Site Access.** The verifier and the participant should agree in advance to the time, place, and conditions of a verifier's site visits, if any are required.
- **Documentation and Data Requirements.** The verifier and participant should agree on how and when the participant will provide activity and emissions data to the verifier. The range of required documentation will largely be determined by the size and complexity of participant operations, and whether the participant has used the online calculation tools available through CARROT.
- **Period of Performance.** The period of performance for verification services may be up to six years. Where a participant's operations do not significantly change from year to year, they may wish to work with a verifier on a three-year cycle. However, the participant has discretion as to whether to sign a one or multi-year contract.
- **Performance Schedule.** Participants and verifiers may wish to agree on a schedule to complete the verification process and for the verifier to deliver a Verification Report and Verification Opinion. Verification should be completed by October 31 of the same calendar year when the emissions report was submitted.
- **Payment Terms.** Typical payment terms include total value, schedule of payments, and method of payment (e.g., electronic funds transfer).
- **Re-Verification Terms.** If the verifier identifies material misstatements, the participant may choose to revise its GHG emissions report. At that time, the participant may ask the verifier to re-verify the portions of the report with material misstatements or seek verification from another provider. *A verifier may not provide guidance, technical assistance, or implementation work on the remediation of material misstatements, as this constitutes consulting services and results in a conflict of interest.* Contracts should also specify the length of time a participant will have to correct material misstatements.
- **Liability.** All verifiers are subject to minimum liability associated with completing the verification per the terms of the verification contract. The participant may require and the verifier may agree to additional liability under this contract.
- **Contacts.** Parties should identify technical leads for both the participant and verifier, as well as responsible corporate officials of each party.
- **Dispute Resolution.** Both parties must state their consent to submit irreconcilable differences for review to the California Registry-convened Dispute Resolution Committee.
- **Acknowledgement of State Site Visits.** Both parties must sign an acknowledgement that, on a random basis, the State may accompany a verifier for purposes of monitoring the verification process.

2.8 Batch Verification

In an effort to minimize the transaction costs of verification for small organizations with relatively simple emissions, the California Registry will contract with an approved verifier to

undertake the verification work for interested participants with limited GHG emissions. The California Registry calls this batch verification. Emissions reports verified under batch verification must meet the same standards as non-batch reports. Eligible participants include those with:

- Less than 500 metric tons of CO₂e emissions per year;
- No significant process or fugitive emissions (significance threshold is 5% of total CO₂e emissions) ;
- Indirect emissions from purchased electricity at four or fewer sites; and/or
- Direct emissions from five or fewer passenger vehicles only; and/or
- Direct emissions from stationary combustion at one site.

Upon the recommendation of the batch verifier, the California Registry reserves the right to deem a participant's GHG emissions inventory too complex for batch verification. The California Registry also reserves the right to grant batch verification eligibility on a case-by-case basis.

2.8.1 Procedures

Each year, the California Registry will solicit competitive bids for batch verification services from all eligible approved verifiers.

Participants interested in batch verification will contact the California Registry to express their interest. After confirming the participant's eligibility, the California Registry will keep track of interested participants.

Each participant will sign a standardized contract with the verifier that has been developed by the California Registry. If participants require non-standard contract language, they cannot participate in batch verification.

Once the contracts are signed, the California Registry will work with the verifier to identify all necessary documentation, as requested by the verifier and as required in the General Reporting and General Verification Protocols. The California Registry will collect the necessary supporting documentation from the participants and forward it to the verifier. It is expected that batch verification will not require a site visit, but will consist of document review and telephone interviews.

The verifier will contact each participant to understand their operations. Then, the batch verifier will review and assess the emissions reports and documentation and prepare the Verification Report and Opinion. The verifier will then discuss the findings with each participant and upon authorization, will submit the electronic Verification Form to the California Registry via CARROT.

To minimize any potential conflict of interest, the California Registry will contract with a batch verifier on an annual basis and the designated batch verifier will perform all eligible verifications for that calendar year of emissions. The batch verifier will be ineligible to bid on batch verification for the following three years. Because of this term limit, the limited nature of emissions and operations of the participant and the elevated level of oversight by the California Registry, the potential for COI is deemed low, and the requirement to request determination of COI is waived.

2.9 Notification of Planned Verification Activities

After verifiers and participants have completed contract terms, the verifier must notify both the California Registry and the State of California 10 business days prior to the beginning of verification activities, using Form D, *Notification of Verification Activities*. This form is available on the California Registry's Verifiers Only webpage. Notification should include:

- Verifying company information;
- Participant information;
- Year and types of greenhouse gas emissions data being verified;
- Schedule of verification activities; and
- Names of approved staff members conducting the verification activities

This notification period is necessary to allow the State the opportunity to accompany verifiers on visits to participants' sites. The State will observe, evaluate, and report on the quality and consistency of verification activities. A verifier that does not provide proper notification to the California Registry and the State may be disqualified as an approved verifier.

2.10 Kick-off Meeting with the Participant

After contract terms have been completed and the California Registry and State have been notified of planned verification activities, verifiers should conduct a kick-off meeting with participants. For some verifications, this may consist of a telephone call. The agenda for that meeting should include:

1. Introduction of the verification team;
2. Review of verification activities and scope;
3. Transfer of background information and underlying activity data (See Table 2); and
4. Review and confirmation of the verification process schedule.

Based on the information provided in agenda items 2 and 3, the verifier should determine the most effective, efficient, and credible detailed verification approach tailored to the particular characteristics of the participant.

2.11 Online Reporting

All participants must report their emissions using the California Registry's online calculation tool, CARROT. Participants may also opt to use CARROT to calculate their indirect emissions and direct emissions from stationary and mobile combustion. Where participants have used CARROT to calculate their emissions, the verifier needs to verify that data have been collected properly and entered accurately. The verifier should assume CARROT's calculations are correct and do not need to re-calculate the emissions. Due to the time savings, this should result in a less expensive and expedited verification process.

It is the participant's responsibility to provide the verifier with access to CARROT. A verifier will have read-only access to the participant's Total Emissions Summary, which provides a detailed summary of all the information that the participant has reported. Because the verifier needs to be able to evaluate any operational changes, access is also provided to the previous year's total emissions summary, as well as emissions reported in the baseline year if this has been specified and if it is different than the current emissions year. For example, for a participant who has set a baseline year of 2002, has reported data from 2002 – 2006, and is contracting with a verifier for evaluation of their 2007 emissions; the verifier will be able to access their 2007 report, their 2006 report, and their 2002 report. They would have public access to emissions reported in the intervening years.

Additional assistance with navigating and using CARROT is provided in the California Registry's Verification Training Workshops and by contacting the California Registry at 213-891-1444 or help@climateregistry.org. Verifiers may also request temporary access to CARROT for training purposes.

reviewed during verification will also vary depending on the nature of the emission sources contained in the participant's emissions report.

3.2.1 Determining Appropriate Verification Activities

To guide verifiers in their determination of appropriate verification activities, the California Registry divides participants into three general groups, based on the level of effort necessary to verify their emissions. The characteristics of the verification approach for each of these groups are listed below. Of course, verifiers are expected to use their professional judgment to augment or narrow these approaches based on uncertainty in emissions estimates and other items affecting material accuracy.

Group 1: Small participants with simple operations. This group includes participants who have only the following material emissions sources:

- Indirect emissions from electricity consumption, steam imports, and district heating/cooling at four or fewer buildings; and/or
- Direct emissions from stationary combustion at one site; and/or
- Direct emissions from five or fewer passenger vehicles.

In an effort to minimize verification costs, small participants who also have total emissions that are less than 500 metric tons of CO₂e per year may elect to be batch verified with similar organizations. The California Registry will assist this batch of participants in bidding and negotiating contracts with the verifier. Standard terms and conditions will apply for all contract elements. Verification for these participants will usually not require a site visit, but rather, activities will be conducted via a telephone interview.

Alternatively, small participants may choose to contract out verification services through a sole source procurement or competitive bidding process.

Group 2: Larger participants with more complex operations. These include participants with only the following material emissions sources:

- Indirect emissions from electricity consumption, steam imports, and district heating/cooling at more than four sites;
- Direct emissions from stationary combustion at more than one site;
- Direct emissions from more than five vehicles; and/or
- No material process or fugitive emissions.

For these participants, most verifications will require at least one site visit. Additional visits may be required when characteristics of the participant changes between reporting periods (e.g., new sites, changed location, began new operations). Site visits are used to ensure that all material GHG emission sources have been included and appropriately accounted for in the greenhouse gas emissions report.

Group 3: Participants with process or fugitive emissions. For participants with material process or fugitive emissions or other emissions not covered above, verification activities must be more detailed. Because these emission calculations are not currently included in the General Reporting Protocol, the verifier is required to use their

professional judgment as to the appropriateness of the calculations used by the participant.

3.3 Verification Cycle

For participants whose operations do not change significantly, verification can be a three-year cycle. In Year 1, a verifier will need to form a detailed understanding of a participant's operations and resulting GHG emissions. If there have been no significant changes in a participant's boundaries, GHG emissions sources and/or management systems, a verifier may streamline and expedite the verification activities in Years 2 and 3 by focusing on verifying emissions estimates. To ensure data integrity, all of the core verification activities should be completed again in Year 4, followed by streamlined activities in Years 5 and 6.

The minimum core verification activities for each year are:

Year 1: Identify emission sources, review management systems, verify emissions estimates

Year 2: Verify emissions estimates

Year 3: Verify emissions estimates

Year 4: Same as Year 1

3.4 California Registry's Expectations for Verification Activities

Through these verification activities, verifiers are to verify that the annual emissions reports submitted to the California Registry via CARROT meet the standards of the General Reporting Protocol:

1. The participant has reported all material emissions, broken out into the following five categories:
 - Indirect emissions from purchased electricity, imported steam, district heating/cooling;
 - Direct emissions from mobile combustion;
 - Direct emissions from stationary combustion;
 - Direct emissions from process activities; and
 - Direct fugitive emissions.
2. Total emissions reported as de minimis are less than 5% of the total emissions.
3. From the fourth year of reporting to the California Registry, all material emissions from all six greenhouse gases (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆) are reported.
4. All California emissions are identified separately from the rest of a participant's U.S. emissions, where the participant has chosen to report their U.S. emissions.
5. All emissions were emitted during the calendar year specified.

6. Reported emissions meet the minimum quality standard of 95% accuracy.

Emissions reports may also contain other information about an organization and its emissions that does not require verification. This could include, for instance, information about a company's environmental policies and goals, and emission reduction projects. Participants may also choose to report other optional indirect emissions (e.g., business travel, employee commuting). In the report generated by CARROT, optional information will be clearly distinguished from verified information.

To verify information is accurately reported, the verifier will want to review, at a minimum, the documents listed in Table 1. To facilitate this review, once the participant reports their emissions using CARROT, the participant and the verifier can generate a Verification Checklist. Based on the types and categories of emissions they have reported, CARROT will provide participants and verifiers with a list of documents they will need for verification.

Table 1. Documents to be Reviewed during Verification

Activity or Emissions Source	Documents
Identifying Emission Sources	
Emission Source Inventory	Facility Inventory
	Emission Source Inventory Stationary Source Inventory Mobile Source Inventory Fuel Inventory
Understanding Management Systems and Methodologies	
Responsibilities for Implementing GHG Management Plan	Organization Chart, Greenhouse Gas Management Plan, Documentation and Retention Plan
Training	Training Manual, Procedures Manual, Consultant Quals Statement
Methodologies	Protocols Used (if in addition to the California Registry's General Reporting Protocol)
Verifying Emission Estimates	
Indirect Emissions from Electricity Use	Monthly Electric Utility Bills, Emission Factors (if not default)
Direct Emissions from Mobile Combustion	Fuel Purchase Records, Fuel in Stock, Vehicle Miles Traveled, Inventory of Vehicles, Emission Factors (if not default)
Direct Emissions from Stationary Combustion	Monthly Utility Bills, Fuel Purchase Records, CEMs Data, Inventory of Stationary Combustion Facilities, Emission Factors (if not default)
Indirect Emissions from Cogeneration	Monthly Utility Bills, Fuel and Efficiency Data from Supplier, Emission Factors (if not default)
Indirect Emissions from Imported Steam	Monthly Utility Bills, Fuel and Efficiency Data from Supplier, Emission Factors (if not default)
Indirect Emissions from District Heating	Monthly Utility Bills, Fuel and Efficiency Data from Supplier, Emission Factors (if not default)
Indirect Emissions from District Cooling	Monthly Utility Bills, Fuel and Efficiency Data from Supplier, Emission Factors (if not default)
Direct Emissions from Process Activities	Raw Material Inputs, Production Output, Calculation Methodology, Emission Factors
Direct Fugitive Emissions	
Refrigeration Systems	Refrigerant Purchase Records, Refrigerant Sales Records, Calculation Methodology, Emission Factors
Landfills	Waste-in-Place Data, Waste Landfilled, Calculation Methodology, Emission Factors
Coal Mines	Coal Production Data Submitted to EIA, Quarterly MSHA Reports, Calculation Methodology, Emission Factors
Natural Gas Pipelines	Gas Throughput Data, Calculation Methodology, Emission Factors
Electric Transmission and Distribution	Sulfur Hexafluoride Purchase Records, Calculation Methodology, Emission Factors

Step 1: Identifying Emission Sources

Verifiers should review a participant's reported emission source inventories (facility, source, and fuel) to ensure that all sources are identified. Verifiers should then determine the GHGs that will result from the identified sources and estimate their magnitude. GHGs that are not required to be reported can be disregarded. Finally, verifiers should rank the remaining reported emissions by CO₂e (using the Global Warming Potentials [GWPs] contained in the Intergovernmental Panel on Climate Change's (IPCC) Second Assessment Report (SAR) - see Table 2, below) to assess the environmental risk associated with the emissions.

Table 2. GWPs from IPCC's Second Assessment Report

Greenhouse Gas	GWP (SAR, 1996)
CO ₂	1
CH ₄	21
N ₂ O	310
HFC-23	11,700
HFC-32	650
HFC-125	2,800
HFC-134a	1,300
HFC-143a	3,800
HFC-152a	140
HFC-227ea	2,900
HFC-236fa	6,300
HFC-4310mee	1,300
CF ₄	6,500
C ₂ F ₆	9,200
C ₄ F ₁₀	7,000
C ₆ F ₁₄	7,400
SF ₆	23,900

Source: U.S. Environmental Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2003 (April 2005).

When the emission source inventory is complete, verifiers should review participant's GHG emissions report and document answers to the following questions to assess if the GHG emissions report reflects the geographic, organizational, and operational scope of the participant:

1. Does the GHG emissions report include all processes and facilities under the management control of the participant? If not, why?
2. Does the report include all sources of GHG emissions within the geographic and organizational boundaries of the participant?
3. Does the report include all applicable types of GHGs from each emission source within the geographic and organizational boundaries of the participant?
4. Have any mergers, acquisitions, or divestitures occurred during the current reporting year? Have any activities been outsourced in the current year? If yes, has the participant specified a baseline? If so, has it been adjusted?

After these questions have been answered, verifiers will be able to determine if the GHG emissions report accurately reflects the geographic, organizational, and operational scope of the participant. Once all emission sources have been identified, verifiers may proceed to Step 2 to review the calculation methods used and the management systems employed.

Step 2: Reviewing Methodologies and Management Systems

After the scope and comprehensiveness of the participant's emission sources has been confirmed, verifiers should review the methodologies and management systems that the participant used to calculate their emissions. This is principally a risk assessment exercise, in which the verifier must weigh the relative complexity of the scope of the participant's emissions, the participant's methodologies and management systems used to prepare the GHG emissions report, and the risk of calculation error as a result of reporting uncertainty or misstatement. Through these steps, the verifier should determine the appropriateness of the management systems to provide required data to the California Registry. For example, the absence of a comprehensive GHG management system for a participant with a single retail

outlet and solely indirect emissions from electricity purchases may not add significant risk of material misstatement. In contrast, a large vertically-integrated manufacturing company with facilities in 31 states would require a much more robust management system for tracking and reporting its GHG emissions.

A verifier's general review of a participant's GHG management systems should document answers to the following questions:

1. Are calculation methodologies/procedures used to manage GHG emissions at the source level? Are they appropriate given the uncertainty/risk associated with the emissions? Are these methodologies/procedures standard within this industry?
2. Are appropriate methods used to manage and implement entity-wide GHG emissions reporting programs? If the participant has more than one facility, are the emissions data correctly aggregated and monitored?
3. Is someone responsible for managing and reporting GHG emissions? Is this individual qualified to perform this function?
4. Is appropriate training provided to personnel assigned to GHG emissions reporting duties? If the participant relies on external staff to perform required activities, are the contractors qualified to undertake such work? Is there internal oversight to assure quality of the contractor's work?
5. Are appropriate documents created to support and/or substantiate activities related to GHG emissions reporting activities, and is such documentation retained appropriately? For example, is such documentation maintained through reporting plans or procedures, utility bills, etc.?
6. Are the mechanisms used to measure and review the effectiveness of GHG emissions reporting programs appropriate for this purpose? For example, are policies, procedures, and practices evaluated and updated at appropriate intervals?

Verifiers should also consider how the participant's management systems are designed to support reporting five categories of emission sources (indirect, mobile, stationary, process and fugitive). Consequently, in reviewing a participant's Total Emissions Report, verifiers should document answers to the following questions:

1. Does the management system capture the diversity of the sources that comprise each emission category? For example, are there multiple types of vehicles and other transportation devices that require different emission estimation methodologies?
2. Does the system capture all the diversity of GHGs emitted from each emission source category?
3. Has the participant used the default emission factors and standardized estimation methods in the California Registry's General Reporting Protocol to calculate emissions in each source category? Has the participant or its technical assistance provider developed estimation methods independently? If the participant uses alternative emission factors, are they documented and explained appropriately?

4. Does the participant's GHG management systems appropriately track emissions in all of the emission source categories?

Once the verifier has assessed the overall risk associated with the management systems, the risks should be assessed in conjunction with the weighted CO₂e estimates determined in Step 1 (Identifying Emission Sources). Verifiers should then identify the areas with the greatest potential for material misstatements (either based on volume of emissions, lack of management systems, or both) to determine the best risk-based strategy to identify a representative sample of emissions to recalculate.

Step 3: Verifying Emission Estimates

Based on a participant's identified emission sources, management systems, and corresponding risk profile of GHG emissions, verifiers should select a representative sample of calculations to verify and sites to visit. Sampling procedures may entail conducting site visits, but should include reviewing documents such as utility bills or emissions monitor results, and recalculating emission estimates based on underlying activity data. In Table 3, below, the California Registry specifies the minimum number of sites that should be visited based on the size of the entity. The verifier should use professional judgment to assess if additional visits are needed.

Table 3. Minimum Site Visit Sample Size

Total Sites	Minimum Sample Size
2-10	30%
11-25	20%
26-50	15%
51-100	10%
101-250	5%
251-500	3%
501-1,000	2%
Over 1,000	1-2%

3.5 Potential Site Visits by the State of California

As part of the State of California's oversight of the verification process, the State will randomly accompany verifiers on site visits. The California Registry's enabling legislation directed the State to observe the verifier during verification visits, evaluate whether the participant has a GHG accounting program consistent with California Registry-approved procedures and protocols, and evaluate the reasonableness of the emissions information being reported. The State may send an employee or a contractor to accomplish this responsibility. The purpose of any site visit is to oversee the verifier's activities, and to evaluate the reasonableness of the participant's reported data. The State will report on its findings to the California Registry.

To accomplish this, during a site visit, the State will need to access the same information and sources as that of the verifier. The State will work with the verifier and participant to obtain this access. This may involve requesting access to on-site locations that may have GHG emission sources or related activities and participant information, data, records, or copies of records; observing verifiers during any exchange of participant data or data analyses; and/or asking the verifier to provide specific information related to their on-site and off-site data analyses. The State will also make every effort to not impede the normal activities of either the participant or the verifier. All costs for the State site visit are borne by the State.

Before the end of a site visit, the State will discuss its preliminary observations and evaluations with the verifier and participant. The State will also contact and discuss with the verifier and participant any findings that identify either party before reporting this to the California Registry.

As the Participant requests, a representative from the State, and/or the Verifier that will view confidential information should sign the Standard Nondisclosure Agreement (NDA). Rules covering State confidentiality can be found in the *California Code of Regulations, Title 20, Sect. 2501 et seq.*

3.6 Targeted Review & Recalculation of GHG Emissions

The California Registry does not expect nor require verifiers to review all of the participant's documents and recheck all their calculations. To ensure that data meet a minimum quality standard on an entity-wide basis, verifiers should concentrate their activities in the areas that have the greatest uncertainty and amount of emissions. Verifiers should calculate emissions for these sources and compare those calculations to emission levels reported by the participant. If they are free of material misstatement (have a difference of <5%), the verifier should declare that the participant's report conforms to the California Registry's Protocols.

If the reported data is not free of material misstatement, the verifier should include this information in its Verification Report and should complete its sampling effort of other sources. Once verifiers have confirmed that a sample of data is free of material misstatements, they should estimate total emissions and confirm that all material GHG emissions are reported.

3.7 De Minimis Emissions

De minimis emissions are a quantity of GHG emissions from one or more sources, for one or more gases, that when summed equal less than 5% of an organization's total CO₂e emissions. The percentage applies to California emissions for the purposes of California-only emissions reporting, and applies to U.S. emissions for national reporting. Participants have some discretion in choosing which sources and/or GHGs are de minimis, but are expected to disclose all de minimis emission sources in their emissions report. Verifiers should review participant's documentation and explanation of how de minimis emissions were calculated to confirm that not more than 5% of total CO₂e emissions are considered de minimis.

3.8 Identifying Material or Immaterial Misstatements

In order for verifiers to verify a GHG emissions report, a sample of data must be free of material misstatement. It is possible that during the verification process differences will arise between the emissions estimated by the participant and those estimated by the verifier. Differences of this nature may be classified as either material or immaterial. A discrepancy is considered to be material if the overall reported emissions differ from the overall emissions estimated by the verifier by 5% or more. A difference is immaterial if this difference is less than 5%.

A verifier's verification of emissions estimates should document the answers to the following questions:

1. Are the reported electricity, steam, and district heating and cooling use consistent with utility bills?

2. Is the reported total stationary fuel use by fuel type consistent with the fuel use records?
3. Is the reported total consumption of fuels in motor vehicles consistent with available documentation and by vehicle type? If the entity calculates transportation emissions based on vehicle mileage, is the reported vehicle mileage consistent with vehicle mileage records?
4. Are the reported process and fugitive emissions consistent with activity data or maintenance records?
5. Are the emission factors used by the participant appropriate? If California Registry default factors are not used, do the alternative emission factors provide increased accuracy? Is their derivation and explanation of increased accuracy properly documented and reasonable?
6. Does a sample of the participant's calculations agree with your re-calculated direct (mobile, stationary, process and fugitive) and indirect emissions estimates? Have you documented your process for determining the appropriate sampling plan?
7. Are all material GHG emissions included? Are all emissions that are considered de minimis emissions documented and reported as such?
8. Are the current year's reported emissions significantly different from the prior year's emission levels? If so, what has changed from prior years?
9. Has the accumulated change in reported emissions, since the last baseline update, changed by more than ten (10) percent? If so, has the baseline, if any, been recalculated?
10. Are there any discrepancies between your emissions estimates and the participant's material?

Once verifiers have reviewed these activities and answered these questions, they are ready to complete the verification process.

Part IV Completing the Verification Process

4.1 Overview

Once a verifier has completed reviewing a participant's annual GHG emissions report, they must do the following to complete the verification process:

1. Complete a detailed Verification Report, and deliver it to the participant;
2. Prepare a concise Verification Opinion, and deliver it to the participant;
3. Conduct an exit meeting with the participant to discuss the Verification Report and Verification Opinion and determine if material misstatements (if any) can be corrected. If so, the verifier and participant should schedule a second set of verification activities after the participant has revised the GHG emissions report.
4. Submit an electronic Verification Form and Verification Activity Log to the California Registry via CARROT;
5. Return important records and documents to the participant for retention.

4.2 Completing a Verification Report

4.2.1 Verification Report Content

The Verification Report is a confidential document that is shared between a verifier and a participant, and is only available to the California Registry or the public at the participant's request.

The Verification Report should include the following elements:

- The scope of the verification process undertaken;
- The standard used to verify emissions (this is the California Registry's General Reporting Protocol, but may also include other protocols or methodologies for those sources for which the California Registry has yet to provide detailed guidance);
- A description of the verification activities, based on the size and complexity of the participant's operations;
- A list of emission sources identified, including de minimis sources;
- A description of the sampling techniques and risk assessment methodologies employed for each source;
- An evaluation of whether the participant's annual GHG emissions report is in compliance with the California Registry's General Reporting Protocol;
- A comparison of the participant's overall emissions estimates with the verifier's overall emissions estimates;

- A list of material misstatements, if any;
- A list of immaterial misstatements, if any; and
- A general conclusion to be reflected in the Verification Opinion.

4.2.2 Quality Assurance Check

When the Verification Report is completed, it should be forwarded to an independent senior reviewer within the verifier's firm for a quality assurance check. No Verification Report should be forwarded to a participant until it has had an independent internal review.

4.2.3 Participant Review of Verification Report

Once a participant receives a Verification Report from their verifier, they should have at least 30 days to review and comment on the Verification Report. At the end of that review, the verifier and the appropriate official at the participant's organization should hold an exit meeting to discuss the nature of any material or immaterial misstatements.

4.3 Preparing a Verification Opinion

Verifiers should prepare a Verification Opinion using the template shown in Figure 2. The Verification Opinion is a simple confirmation of the verification activities and outcomes for all stakeholders (participants, verifiers, the California Registry, and the public). The Verification Opinion must also follow the same internal review process as the Verification Report and consequently must be reviewed by an independent senior reviewer within the verifier's firm, and signed by a designated lead verifier. An electronic version of this template is available on the California Registry's Verifiers Only webpage or may be obtained from the California Registry by emailing help@climateregistry.org.

4.4 Verification Activity Log

In order to assess the consistency of professional judgments that verifiers have been asked to make, verifiers should also complete a Verification Activity Log (Table 4 below) and submit a completed copy to the California Registry, along with the electronic Verification Form, in CARROT.

Table 4 includes a step-by-step outline of the standardized verification activities that all verifiers must consider. Not all activities are required of all participants or during each year, depending on a participant's specific circumstances, but verifiers should review this list and note "not applicable" (or "N/A") where appropriate. The table also includes a series of yes/no questions. Any "no" response should be explained, without revealing a participant's confidential information.

The California Registry will consider both the Verification Opinion and the answers in Table 4 in its final review of emissions data, before accepting a participant's report into the California Registry. An electronic version is available for download in CARROT, on the California Registry's Verifiers Only webpage, and from the California Registry by emailing help@climateregistry.org.

Table 4. Verification Activity Log

Verifier Company:		
California Registry Participant:		
Preparing for Verification	Date Achieved	
Bid on a Verification Contract		
Request determination of COI from California Registry		
Negotiate Contract with California Registry Participant		
Notify State of California and California Registry of Planned Verification Activities		
Conduct Kick-off Meeting With Participant		
Plan Verification Activities Based on Participant Characteristics		
Core Verification Activities		
Identify Emission Sources	Date Achieved	
Identify and list all facilities in the entity		
Identify and list all emission sources (indirect, mobile, stationary, process and fugitive)		
Identify and list all fuel types		
Rank all sources by magnitude on a carbon dioxide equivalent basis		
Assess any changes in geographic and organizational boundaries		
	Yes	No
1. Does the GHG emissions report include all processes and facilities under the management control of the participant?		
2. Does the report include all sources of GHG emissions within the geographic and organizational boundaries of the participant?		
3. Does the report include all applicable types of GHGs from each emission source within the geographic and organizational boundaries of the participant?		
4. Have any mergers, acquisitions, or divestitures occurred during the current reporting year?		
5. Have any activities been outsourced in the current year?		
6. If a baseline has been specified, has it been adjusted accordingly?		
7. Does the GHG emissions report include all processes and facilities under the management control of the participant?		
Review Methodologies and Management Systems	Date Achieved	
Evaluate procedures and systems for preparing emissions report		
Evaluate personnel and training for preparing emissions report		
Consider the uncertainty associated with methodologies and management systems		
	Yes	No
8. Are appropriate calculation methodologies/procedures used to manage GHG emissions at the source level? Are they appropriate given the uncertainty/risk associated with the emissions?		
9. Are appropriate methods used to manage and implement entity-wide GHG emissions reporting programs?		
10. If the participant has more than one facility, is the emissions data correctly aggregated and monitored?		
11. Is someone responsible for managing and reporting GHG emissions?		
12. Is that person qualified to do so?		
13. Is appropriate training provided to personnel assigned to GHG emissions reporting duties? If the participant relies on external staff to perform required activities, are the contractors' qualified to undertake such work?		
14. Are appropriate documents created to support and/or substantiate activities related to GHG emissions reporting activities, and is such documentation retained appropriately?		
15. Are appropriate mechanisms used to measure and review the effectiveness of GHG emissions reporting programs? For example, are policies, procedures, and practices evaluated and updated at appropriate intervals?		

16. Does the system account for the diversity of the sources that comprise each emission category? For example, are there multiple types of vehicles and other transportation devices that require different emission estimation methodologies?																				
17. Do you know the diversity of GHGs emitted from each emission source category?																				
18. Has the participant used the default emission factors and standardized estimation methods in the California Registry's General Reporting Protocol to calculate emissions in each source category?																				
19. Has the participant or its technical assistance provider developed estimation methods independently?																				
20. If participant uses alternative emission factors, are they documented and explained appropriately?																				
21. Does the participant's GHG management system appropriately track emissions in all of the emission source categories?																				
Assess Risk of Material Misstatement Associated with Management Systems/Procedures	Date Achieved																			
Develop sampling procedures for sources based on risk of material misstatement																				
Verify Emission Estimates																				
Confirm total fuel consumption																				
Confirm vehicle miles traveled																				
Confirm that appropriate emission factors are used. If not default factors, ensure the derivation and explanation of increased accuracy is properly documented																				
Calculate direct (mobile, stationary, process & fugitive) & indirect emissions based on sampling procedures																				
Compare estimates from sample calculations to reported emissions																				
Determine if there are any discrepancies between sample calculation and reported emissions																				
Confirm that all material GHG emissions are included (that all emissions not included are either de minimis or not required)																				
Determine if Discrepancies are Material or Immaterial	Yes	No																		
22. Based on the following table, have you visited an appropriate number of sites?																				
<table border="1"> <thead> <tr> <th>Total Sites</th> <th>Minimum Sample Size</th> </tr> </thead> <tbody> <tr> <td>2-10</td> <td>30%</td> </tr> <tr> <td>11-25</td> <td>20%</td> </tr> <tr> <td>26-50</td> <td>15%</td> </tr> <tr> <td>51-100</td> <td>10%</td> </tr> <tr> <td>101-250</td> <td>5%</td> </tr> <tr> <td>251-500</td> <td>3%</td> </tr> <tr> <td>501-1,000</td> <td>2%</td> </tr> <tr> <td>Over 1,000</td> <td>1-2%</td> </tr> </tbody> </table>	Total Sites	Minimum Sample Size	2-10	30%	11-25	20%	26-50	15%	51-100	10%	101-250	5%	251-500	3%	501-1,000	2%	Over 1,000	1-2%	Total number of sites: _____ Total number visited: _____	
Total Sites	Minimum Sample Size																			
2-10	30%																			
11-25	20%																			
26-50	15%																			
51-100	10%																			
101-250	5%																			
251-500	3%																			
501-1,000	2%																			
Over 1,000	1-2%																			

23.	Are the reported electricity, steam, and district heating and cooling use consistent with utility bills?		
24.	Is the reported total stationary fuel use by fuel type consistent with the fuel use records?		
25.	Is the reported total consumption of fuels in motor vehicles consistent with available documentation and by vehicle type? If the entity calculates transportation emissions based on vehicle mileage, is the reported vehicle mileage consistent with vehicle mileage records?		
26.	Is the reported process and fugitive emissions consistent with activity data or maintenance records?		
27.	Are the emission factors used by the participant appropriate? If California Registry default factors are not used, ensure that alternative emission factors provide increased accuracy and that the derivation and explanation of increased accuracy is properly documented and reasonable.		
28.	Does a sample of the participant's calculations agree with your re-calculated direct (mobile, stationary, process & fugitive) & indirect emissions estimates? Have you documented your process for determining the appropriate sampling plan?		
29.	Are all material GHG emissions included? Are all emissions that are considered de minimis emissions documented as such?		
30.	Are the current year's reported emissions significantly different from the prior year?		
31.	Has the accumulated change in reported emissions, since the last baseline update, changed by more than 10%? If so, has the baseline, if any, been recalculated?		
32.	Are discrepancies between your emissions estimates and the participant's immaterial?		
Completing the Verification Process		Date Achieved	
Prepare a detailed Verification Report and submit to participant			
Prepare a Verification Opinion and submit to participant			
Conduct exit meeting with participant to discuss Verification Report & Opinion			
Provide records to participant for retention			

4.5 Completing the Verification Contract

4.5.1 Exit Meeting

Verifiers should prepare a brief summary presentation of their verification findings for the participant's key personnel. At the exit meeting, verifiers and participants might exchange lessons learned about the verification process and share thoughts for improving the verification process in the future. Verifiers and participants may wish to consider joint feedback to the California Registry.

The goals of this meeting should be:

- Acceptance of the Verification Report and Opinion (unless material misstatements exist and can be remediated, in which case the verification contract may need to be revised and a second verification process scheduled). If the participant does not wish to retain the verifier for the re-verification process, the verifier shall turn over the participant's relevant documentation to the participant within 30 days.
- Authorization for the verifier to complete the Verification Form in CARROT.

If the verifier is under contract for verification activities in future years, the verifier and participant may wish to establish a schedule for the next year's verification activities.

Figure 2. Sample Verification Opinion

[Insert Verification Firm Logo]

California Climate Action Registry Verification Opinion

Name of Verification Firm: _____

This is to verify that _____ [Name of Member Organization] has had its greenhouse gas emissions report covering the period January 1, _____ [Insert Reporting Year] to December 31, _____ [Insert Reporting Year] verified according to the California Climate Action Registry's General Verification Protocol against a standard of the California Registry's General Reporting Protocol.

Organizational Boundary of Verification

☐ Financial Management Control ☐ Operational Management Control ☐ Equity Share

GHGs Verified

☐ CO₂ ☐ CH₄ ☐ N₂O ☐ HFCs ☐ PFCs ☐ SF₆

Total Direct Emissions: _____

Total Indirect Emissions: _____

Geographic Scope of Verification

☐ California Emissions ☐ U.S. Emissions

Baseline Year (if specified)

_____ (Direct) _____ (Indirect) Year, if specified

Verification Opinion

☐ Verified without Qualification
☐ Unable to Verify

Attestation

[Insert Name], Lead Verifier _____
Date

[Insert Name], Senior Internal Reviewer _____
Date

Authorization

I _____ [Name of Member Representative] authorize the above named verifier to submit this Verification Opinion to the California Climate Action Registry for _____ [Name of Member Organization].

[Member Representative Signature] _____
Date

4.5.2 Limits to Verifier Feedback

If a participant's emissions report is not verifiable due to material misstatements, a *verifier must not provide guidance on how to remediate the identified misstatements*. Such guidance would be considered a consulting activity and therefore, a conflict of interest. However, verifiers may provide any existing documentation that may be useful to participants in preparing remediation plans. A verifier should also enumerate any shortcomings in a participant's GHG tracking and management systems.

The California Registry will retain the participant's unverified emissions report in the California Registry database for up to two years pending verification. After two years, if the emissions report is still not verifiable, the California Registry will render the emissions report inactive.

4.6 Submitting the Verification Opinion to the California Registry

Once the Verification Opinion is complete and has been authorized by the participant, the verifier must complete the Verification Form and Verification Activity Log electronically in CARROT and the participant must email a Portable Document File (PDF) copy of the fully executed verification opinion to help@climateregistry.org. The participant may also elect to send a hard copy of the verification opinion with wet signatures to the address listed below:

Verification Opinion
California Climate Action Registry
523 W. Sixth Street, Suite 428
Los Angeles, CA 90014

Once the California Registry receives an electronic or hard copy of the Verification Opinion, the California Registry will perform a final review of the emissions report in CARROT. When successful, the participant's report will be formally accepted into the California Registry database and the annual verification process will be completed.

*Note: Participants are *not* required to submit their Verification Opinions to the California Registry for the first two years of their participation. However, it is important to note that a participant's emissions data will not be considered accepted by the California Registry unless the California Registry receives a Verification Opinion indicating a "verified without qualification" assessment.

4.7 Record Keeping and Retention

While the California Registry views the verification process essentially as a private exchange between the verifier and the participant, the verifier should remind the participant to retain sufficient records to enable an ex-post verification of the participant's emissions. The California Registry recommends that the following records be retained for a minimum of seven years as specified by contract with the participant.

Verifiers should retain hard and electronic copies, as applicable, of:

- The participant's GHG emissions report (printable from CARROT);
- The Verification Report; and
- The Verification Opinion.

The participant should maintain the following documentation for a minimum of seven years:

- Contact information for the lead verifier and a responsible corporate officer at the participant's organization;
- A general description of the participant's organization;
- The geographic boundaries;
- The number of facilities and operations assessed in the verification activities;
- The GHGs evaluated;
- The sources of emissions identified;
- Assessment of emission factors, demonstrating greater accuracy if not default emission factors;
- Copies of fuel use, mileage, or other activity data records used in sample recalculations;
- Verification methodology used based on the size and complexity of the participant;
- Sampling procedures for selecting site visits;
- Dates of site visits;
- The verifier's evaluation of the participant's management systems; and
- The verifier's estimates of the participant's emissions.

Copies of the original activity data records are necessary to perform an ex-post verification.

4.8 Timeline of Verification Process

Incorporating all of the steps and procedures involved in reporting, reviewing and verifying credible emissions data may be a lengthy process. The following table gives you an overview of the consecutive steps and necessary lapses of time between steps in the verification process.

Table 5. Verification Process Timeline

Activity	Elapsed Time
Preparing for Verification	
Contacted by participant to submit proposal for services	Where no consulting activities for 3 years prior to contract
Selected by participant	Varies
Submit request for case-by-case determination of COI to California Registry	Prior to contract negotiation
California Registry evaluates case and issues notification of low risk for COI	One month
Negotiate contract with participant	Varies
Notify State of California and California Registry of verification activities	One month
Core Verification Activities	
Begin verification activities	Maximum one year
Completing the Verification Process	
Submit Verification Report and Opinion to participant	Varies
Participant reviews Verification Report and Opinion and returns comments to verifier	One month
Verifier discusses findings with participant	Varies
Participant authorizes submission of electronic Verification Form to the California Registry	By October 31 of data year +1
Monitor emerging COI	One year
Verifier cannot provide consulting services to participant	One year
Participant chooses a new verifier	After a maximum of six years

Glossary

Applicant	A firm, or lead firm (if part of a team), responding to a State-issued RFA for Verifiers.
Baseline	Datum against which to measure greenhouse gas emissions performance over time, usually annual emissions in a selected base year.
Batch Verification	Verification process arranged by the California Registry for multiple participants with relatively simple GHG emissions (less than 500 tons of CO ₂ e emissions and typically only indirect emissions from electricity consumption and/or direct emissions from stationary or mobile combustion).
Verification	The process used to ensure that a given participant's greenhouse gas emissions inventory (either the baseline or annual result) has met a minimum quality standard and complied with the California Registry's procedures and protocols for calculating and reporting GHG emissions.
Verified Member	A California Registry participant that has submitted at least one verified annual emissions report to the California Registry.
Verifier	A firm or team of firms that has been State- and California Registry-approved to conduct verification activities under the California Registry program. A verifier may also refer to a single employee within a State- and California Registry-approved firm who conducts verification activities.
CO ₂ equivalent*	(CO ₂ e) The quantity of a given GHG multiplied by its total global warming potential. This is the standard unit for comparing the degree of harm which can be caused by different GHGs.
Conflict of Interest	A situation in which, because of other activities or relationships with other persons or organizations, a person or firm is unable or potentially unable to render an impartial Verification Opinion of a potential client's greenhouse gas (GHG) emissions, or the person or firm's objectivity in performing verification activities is or might be otherwise compromised.
Datum	A reference or starting point.
De Minimis	A quantity of greenhouse gas emissions from one or more sources, for one or more gases, which, when summed equal less than 5% of an organization's total CO ₂ e emissions.
Direct Emissions	Emissions from sources that are owned or controlled by the reporting organization.
Emerging COI	A potential or actual COI situation that arises, or becomes known, during verification or for a period of one year after the completion of verification activities.

Emission Factor*	A factor relating activity data and absolute GHG emissions.
Equity Share	Fractional percentage or share of an interest in an entity based either on ownership interest, or on some other contractual basis negotiated among the entity's stakeholders.
Fugitive Emissions*	Unintended or incidental emissions of GHGs from the transmission, processing or transportation of fossil fuels or other materials, such as HFCs from refrigeration leaks, SF ₆ from electric power distribution equipment, methane from mined coal, CO ₂ emitted incidentally with geyser steam and/or fluid used in geothermal generating facilities.
Global Warming Potential*	(GWP) The ratio of radiative forcing (degree of harm to the atmosphere) that would result from the emission of one unit of a given GHG to one unit of CO ₂ .
Greenhouse Gases	(GHGs) For the purposes of the California Registry, GHGs are the six gases identified in the Kyoto Protocol: carbon dioxide (CO ₂), nitrous oxide (N ₂ O), methane (CH ₄), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF ₆).
Indirect Emissions	Emissions that are a consequence of the actions of a reporting entity, but are produced by sources owned or controlled by another entity.
Inherent Uncertainty	The scientific uncertainty associated with measuring GHG emissions due to limitations on monitoring equipment, or measurement methodologies.
Lead Verifier	An individual who has completed a California Registry-sponsored verification training workshop and who has the authority to sign a verification firm's Verification Opinion.
Management Control	The ability of an entity to govern the operating policies of another entity or facility so as to obtain benefits from its activities.
Material misstatement	An error (for example from an oversight, omission or miscalculation) that results in the reported quantity being significantly different from the true value to an extent that will influence performance or decisions.
Member	A California Registry participant that is preparing its annual GHG emissions report, but has not yet submitted its verified report to the California Registry.
Minimum Quality Standard	Data that is free of material misstatements, and meets the California Registry's minimum level of accuracy of at least 95%.
Mobile Combustion*	Burning of fuels by transportation devices such as cars, trucks, airplanes, vessels, etc.
Organizational COI	Instances where the ability to render objective GHG verification services may be affected by the services provided by, shared management and/or financial resources with, or other situations created by a parent company or other related entities.

Outsourcing*	The contracting out of activities to other businesses.
Partner	An organization working through a lead firm (applicant) to respond to a State-issued RFA for Verifiers. A partner may or may not be a related entity. If the applicant submits an application wherein staff or financial capability is shared with either a parent firm or subsidiary of a parent firm, then that parent or subsidiary is considered a partner. If the applicant is part of a larger organization, but the application does not include any staff or financial capability from the larger organization, then the larger organization is not considered a partner.
Personal COI	A relationship of an employee or a partner employee that may impair the objectivity of the employee in performing a verification.
Process Emissions	Emissions from physical or chemical processing rather than from combustion, such as CO ₂ emissions from cement manufacturing and PFC emissions from aluminum smelting.
Related Entity	An organization that is linked to the verifier by: common ownership or directors, contractual arrangement, a common name, informal understanding, or other means such that the related organization has a vested interest in the outcome of an assessment or has a potential ability to influence the outcome of an accredited management system assessment, greenhouse gas validation, or verification.
Reporting Uncertainty	The errors made in identifying emission sources and managing and calculating GHG emissions. This differs from inherent uncertainty due to incomplete understanding of climate science or a lack of ability to measure greenhouse gas emissions.
Stationary Combustion*	Burning of fuels to generate electricity, steam, or heat.

**Definitions of key terms obtained from “The Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard,” World Business Council for Sustainable Development and World Resources Institute, Switzerland, March 2004.*

Key Questions

Verifier Approval: Who may qualify as a verifier?

Only those firms accredited by the California Registry, the State of California, or The Climate Registry may provide verification services to California Registry participants

To become approved, a verifier must complete a two-step process: 1) Obtain accreditation as a GHG verifier from either the California Air Resources Board or from the American National Standards Institute (or other approved accreditation body as specified on the California Registry website) and 2) achieve California Registry approval by attending a verification training workshop facilitated by the California Registry.

Information on the ANSI GHG Verifier Accreditation is available at www.ansi.ghg.org. Information on CARB GHG accreditation is available at arb.ca.gov.

Applicants who wish to be qualified as approved verifiers need to demonstrate experience in GHG verification and verification of financial data, technical data, quality control, and/or environmental management systems. Verifiers must also demonstrate the means to accept financial liability for verification activities undertaken for a participant. *Firms providing verification services to a participant may not provide any non-verification services that create a high risk of COI to the same participant for three years prior to and one year after verification.*

Liability: What liability will a verifier incur? What liability coverage must a verifier accept?

At a minimum, a verifier is responsible for planning a participant's verification activities, conducting the verification activities, preparing a Verification Report and Opinion, and submitting authorized Verification Opinions to the California Registry via CARROT. If a California Registry-approved verifier fails to complete the contracted activities, they may be financially liable for the cost of hiring a different California Registry-approved verifier to complete a proper verification from start to finish (as defined in the contract between a verifier and a participant). The verifier may incur additional liability based on the negotiated terms of the contract. This liability may include the future value of GHG emissions or emission reductions, damages, or any other element agreed to by the verifier and the participant.

In their initial application, verifiers must demonstrate the means to accept financial liability for verification activities undertaken for a California Registry participant, specify such liability in any contract for verification activities, and make adequate arrangements (e.g., professional liability insurance coverage) to cover liabilities arising from its activities or operations. However, verifier liability may also be limited in the contract with the California Registry participant.

Resolution of Disputes: What recourse is available if the participant does not accept the findings of the verification?

There may be instances where a verifier and a participant cannot agree on identification of material misstatements and/or the findings of the Verification Opinion. In such instances, both parties can request the Dispute Resolution Committee, composed of qualified representatives from California state agencies, the California Registry, and one non-voting verifier, who serves pro bono on an annual, rotating basis. The participant and the verifier will

each pay a filing fee equal to 5% of the participant's annual membership fee to submit the matter to the Dispute Resolution Committee.

The Dispute Resolution Committee will interview the participant and the verifier, review the area of dispute and reach a unanimous, binding decision concerning verifiability. The California Registry will notify the verifier and the participant of the Committee's decision. Thus, as part of contract negotiations, each California Registry participant and verifier will need to sign a form agreeing to this Dispute Resolution policy.

"Batch Verification": How does it work? How will it affect bidding, contracting, and the overall verification process?

In an effort to minimize the transaction costs of verification, the California Registry will help eligible participants with simple GHG emissions contract for "batch verification". Eligible participants have relatively simple GHG emissions (indirect emissions from purchased electricity and/or emissions from limited stationary and mobile sources) and produce less than 500 metric tons of CO₂e per year.

In batch verification, the California Registry will work with one verifier each year to verify the emissions reports of multiple organizations at one time. Emissions must be verified to the standards of the General Reporting Protocol. Because of the nature of the emissions, batch verification activities will consist of document review and phone conversations, but will not require a site visit. The California Registry will assist in negotiating a standardized contract and a flat fee for each organization. Standardizing the contract language will help to minimize the transaction costs of verification for small, office-based organizations.

A new batch verifier will be chosen each year. This finite verifier term is to minimize the risk from COI and to eliminate the cost associated with a case by case COI.

Verification Deadlines: What is the deadline for completing the verification process?

Emissions should be reported to the Registry no later than June 30 following the emissions year. Verification should be completed by October 31 following the emissions year. For instance, 2008 emissions should be reported by June 30, 2009 and verified by October 31, 2009.

Verification Report and Verification Opinion: What are the Verification Report and Verification Opinion and how are they different?

The Verification Report is a detailed report that a verifier prepares for a participant. The Verification Report should describe the scope of the verification activities, standards used, emission sources identified, sampling techniques, evaluation of a participant's compliance with the General Reporting Protocol, assumptions, and a list of material and immaterial misstatements, if any. The Verification Report is a confidential document between the verifier and the participant, and is only shared with the California Registry or the public at the participant's request.

The Verification Opinion is a brief, one-page summary of the verifier's findings that simply states if the participant's emissions report is verifiable or not. The Verification Opinion is submitted in hard copy by the verifier to the participant for approval.

***Verification and Remediation:** What if a participant's emissions report is not verified?*

After completing verification activities, the verifier will prepare a Verification Report and forward it to the responsible official representing the participant. The responsible official includes anyone authorized by the participant to approve the GHG emissions report for submission to the California Registry and will typically be a corporate official or the technical manager of the verification contract.

If the verifier identifies material misstatements that prevent a favorable Verification Opinion, those material misstatements should be listed and described in the Verification Report. If possible, the participant may correct those material misstatements and resubmit the emissions report for verification within a reasonable amount of time. The participant may seek technical assistance to correct material misstatements but the verifier may not provide such technical assistance as it would constitute non-verification services, and create a conflict of interest.

The California Registry will retain the participant's unverified data in the California Registry database for up to two years, pending correction. After that time, the participant will need to re-enter the data.

***Confidentiality:** Are the results of the verification kept confidential? Will emissions data be kept confidential?*

All aggregated entity-level emissions data and metrics reported to the California Registry will be available to the public. However, the California Registry will keep confidential all reported emissions, activity data, methodologies, and emissions factors that are reported at facility, project, or source levels. Confidential information will only be accessible to the participant, the California Registry, and the verifier, unless the participant allows others access to such information or wishes to have it available to the public. In instances where the State of California accompanies verifiers on site visits, the State may have access to confidential information as needed to oversee verification activities and evaluate the reasonableness of the participant's data and systems to track emissions. Representatives from the State, the Verifier, and the Participant who will view confidential information will all be required to sign the Standard Nondisclosure Agreement (NDA). As noted in an earlier question, the Verification Report is a private document between a participant and verifier, while the Verification Opinion is shared with the California Registry. A majority of the contents of the Verification Opinion will also be shared with the public.

***General Verification Protocol Revision Policy:** Will this General Verification Protocol change over time? How can verifiers provide feedback to the California Registry?*

The California Registry expects to regularly review, revise, update, and augment this General Verification Protocol. The California Registry invites all parties, verifiers, California Registry participants, California State agencies, and the public to provide insights and experiences that will help improve the General Verification Protocol. Anyone with suggestions or concerns is encouraged to contact the California Registry at any time at 213-891-1444 or by email at info@climaterestry.org.

Stakeholders will also be able to present suggestions directly to the California Registry's Board of Directors for consideration at their meetings. All suggestions and requests for modifications must be made by utilizing the "Protocol Comment Form" available on the California Registry's website at www.climaterestry.org/protocols.

California Registry-Approved Technical Assistance Providers: What role do they play?

Some participants may desire outside assistance, either in terms of expertise or human resources, to collect, document and report their emissions to the California Registry and/or otherwise manage their GHG emissions. To assist participants in identifying a firm qualified to help them, the State and the California Registry approve firms qualified to serve as technical assistance providers (TAs). Participants are not required to use only approved TAs. However, approved companies have been approved as firms experienced in providing GHG emissions services, and many of them have attended California Registry-sponsored training sessions. Where a participant has retained the services of a TA, the participant may ask the TA to play a role in the verification process. Neither the California Registry nor the State is responsible for any consulting services or recommendations they may provide, nor do they specify any role that TAs should or should not play.

All firms approved as verifiers also are automatically qualified to act as TAs. However, a firm cannot provide both technical assistance and verification services to the same client at the same time.

Role of California State Agencies: What is the relationship between the California Registry and state agencies?

The Registry was established by California statute as a non-profit voluntary registry for greenhouse gas emissions inventories, to help organizations establish GHG emissions baselines against which any future GHG emission reduction requirements may be applied. The State of California was directed to offer its best efforts to ensure that participants receive appropriate consideration for early actions in the event of any future state, federal or international GHG regulatory scheme.

The California Registry and state agencies work together and keep each other informed about current activities. The State of California continues to provide technical guidance to the California Registry and plays a direct oversight role in the verification process. The California Registry gives great weight to state agency guidance and relies in large part on these recommendations when developing California Registry policies, procedures and tools, including reporting and verification protocols and the online reporting tool. However, final policy and technical decisions are made independently by the California Registry's Board of Directors.

Updated Emissions Reports: Once a report has been verified, will it ever change?

Following verification of an annual GHG emissions report, there may be situations in which a verified report may change. A participant may wish to add information beyond the minimum reporting standards (add non-CO₂ gases during the first three years of reporting, report facilities outside of California, change the emission factor used, etc.). Participants can update their report at any time. However, any changes will need to be re-verified, and this information will need to be documented in CARROT. As understanding and sophistication of GHG accounting principles develops, the California Registry may elect to update accounting principles (e.g., alternate emission factors, Global Warming Potentials). Where participants have used CARROT to calculate their emissions, these changes do not need to be re-verified.

CARROT: Am I required to use CARROT to communicate with the California Registry?

Participants are required to report their emissions to the California Registry using CARROT. The participant-entered annual GHG emissions report generated by CARROT is the document on which the verifier provides its Verification Opinion to the California Registry. The Verification Opinion is submitted in separately by the participant. Verifiers are not restricted to only communicating with the California Registry via CARROT, but must use the online tool to submit an electronic Verification Form and Verification Activity Log. Questions about using CARROT may be directed to the California Registry at 213-891-1444 or help@climateregistry.org.

Additional Questions?

If you have any questions regarding GHG emissions reporting or verification under the California Registry Protocols, please contact the California Registry by phone (213-891-1444) or email (help@climateregistry.org).

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