NSF International Strategic Registrations

Management Systems Registration

2007-11-30

Mr. Doug Thompson
Manager, Climate Change Reporting Section
California Air Resources Board
Sacramento, CA 95814

VIA E-MAIL TO: dthompson@arb.ca.gov

Dear Mr. Thompson,

NSF-ISR (NSF) is a greenhouse gas (GHG) validation and verification body that has been approved as a verifier by the California Climate Action Registry (CCAR) and by the Chicago Climate Exchange. This year we have conducted verification audits in the manufacturing sector (food additives, gas turbines) and the oil and gas exploration and production sector. For CCAR's 2006 reporting year we have still to complete verification audits in the oil refining, metals recycling and forestry sectors.

NSF International, the parent organization of NSF-ISR, is an ANSI-approved U.S. national standards writing body and product certification body headquartered in Ann Arbor, Michigan. NSF-ISR provides management systems and sustainable forestry certification in addition to GHG verification services. NSF-ISR is accredited by the ANSI-ASQ National Accreditation Board for its management systems certification work and is approved by the American Forest and Paper Association for its sustainable forestry certification. NSF-ISR employs 49 persons and has 350 professional auditors under contract.

NSF-ISR has actively supported the development of international standards on GHG management (ISO 14064 -1, -2 and -3 and ISO 14065) by providing expert personnel to ISO Technical Committee 207. Based on our experience in the area of greenhouse gas management, NSF-ISR appreciates the opportunity to comment on ARB's proposed regulations for mandatory reporting of GHG emissions. We have reviewed the draft and are pleased to offer comments for your consideration on Section IV, Greenhouse Gas Verification Requirements.

Our comments have an underlying theme: to make the Air Resources Board regulations conform more closely to international standards for the conduct of GHG verification and the treatment of GHG verifiers and verification bodies. In particular, adoption of our comments will help achieve greater alignment with ISO 14065:2007, which was adopted in August 2007 as an American National Standard, and with other ISO standards that deal with certification of persons.

We offer our comments in the sequence that the text we comment on appears in the draft regulation. However, we would like to draw your particular attention to our comments on section 95132 "Accreditation Requirements for Verification Bodies, Lead Verifiers, and Verifiers" which have a particular importance to us and which we believe deviate in significant ways from the requirements defined in ISO 14065. We urge particular consideration of our comments on lead verifier qualification criteria discussed in the rule at 95132(b)(2)(B) and 95132(e)(2). We believe that maintenance of the language in the rule as currently written will lead inevitably—but unnecessarily—to a crippling shortage of qualified personnel available to lead GHG verifications.

95102. Definitions

(1) Accredited verifier.

This definition would be completely consistent with international practice if the word “Certified” were substituted for “accredited.” In international practice, “bodies” (e.g. verification bodies) are “accredited,” whereas “individuals” (e.g. verifiers as persons) are certified. Examples of this nomenclature in other fields are commonplace, such as “Certified Public Accountants,” “Certified wastewater operator,” and the like.

(2) Adverse verification opinion

This is a good definition, except for the apparent linkage between the first four lines and the last two lines. A verification body can issue an adverse verification opinion while having completed all verification services. Admittedly, this is rare. However, if the definition continues to include the last two lines after the words “the regulation,” it appears to imply that no verification body can complete its verification services and issue an “adverse verification opinion.” I doubt that CARB intends this meaning. From a technical perspective, we believe the definition should end with the words in line 5 “the regulation.”

(188) "Verification opinion”

Having defined “verification body” at definition (186), we suggest that the term “verification firm” be replaced in this definition with “verification body.” This change will ensure consistency with ISO 14065:2007, “Greenhouse gases – Requirements for validation and verification bodies for use in accreditation and other forms of recognition.”

(191) “Verified emissions data report”

To ensure consistency with ISO 14065 and your definition (186), please consider changing “third-party verifier” in the second line to “third-party verification body”. The distinction between “verifier” and “verification body” is important, because 95131 (c)(1) and ISO 14065 require that a “greenhouse gas statement” (i.e. “verification opinion” – see definition (188)) drafted by the verification team (definition (190)) be independently reviewed by a competent person within the verification body.

(192) “Verifier”

This definition would be improved by changing the word “accredited” to “certified”. Please see our comment to (1) “Accredited verifier”.

95131. Requirements for verification services

(a)(2), line 4

We recommend changing the word “accredited” to “certified,” for reasons explained above. This comment also applies to the following:

- (a)(2)(A), line 2
- (a)(2)(B), line 3
- (a)(2)(C), line 2.

(b)(4)(A)

In the first line we recommend changing the word “ensure” to “check.” The word “ensure” implies absolute identification of all sources, great or small. A verification body that would meet the requirement to “ensure” with reasonable assurance would have to increase its on-site verification time to levels that the ARB likely does not intend.

We recommend in the second line changing the term “accounted for” to “identified”. The former term implies quantification, the latter term implies inclusion of the source in the inventory. It is the responsibility of the verifier to reach a conclusion concerning the completeness of the emissions sources reported by the operator. It is the responsibility of the operator to quantify emissions, or “account for,” those sources. A site visit is an important part of verification because it provides a verification body the opportunity to assess, on a sampling basis, the operator’s complete identification of sources.

(b)(8) Sampling Plan.

We recommend changing the word “all” in line 4 to “the”. For the verification team to review “all inputs for the development of the submitted emissions data report” implies 100% sampling, which would be prohibitively expensive, contrary to the spirit of ISO 14064-3, and likely not the intention of the ARB.

(b)(8)(B)

We are puzzled by this requirement. It has no obvious parallel to the GHG verification approach described in ISO 14064-3, and appears to be of limited utility. The operator’s submitted emissions data report should already provide the verification team with quantified emissions data in listed form. Normal practice is for the verification team to review the operator’s submitted report during a document review phase of the verification, and develop a verification plan taking into account risk to material misstatement. This usually means selecting for verification those sources that have the highest reported emissions. We believe it is unnecessary and duplicative to require the verification team to establish a rank order list in the sampling plan. Instead, the sampling plan should focus verification resources on the emissions sources that the verification team have determined have the highest potential for material misstatement. We note that the information about electricity transactions is repeated in (b)(9)(B) and does not need to be retained here.

We recommend that this paragraph be deleted.

(b)(8)(C)

We propose the language of the first three lines of this paragraph to the following:

"The verification team shall base its sampling plan upon a qualitative assessment of the risk to fair reporting of emissions based upon an examination of evidence pertaining to the following areas as applicable under the sections 95110 to 95115."

This change is proposed for the following reasons:

- A "qualitative narrative" is not necessary for verification team members to proceed with verification of identified data sample sets. The reasons for undertaking verification of specified data sets are part of the professional training of GHG verifiers and are well understood without the need for a written narrative.
- "uncertainty risk assessment" is not likely what the ARB intended to say here. The annex to ISO 14064-3 at A.2.4.6.1 Figure A.2 refers to "key reporting risks," "understanding the control system in place to manage risks," "identifying residual risks," and "include residual risk areas in the sampling plan for verification".

(b)(9)(B), line 3

We recommend changing the word "uncertainty" to "material misstatement".

(c)(2)(A), lines 3-4:

We recommend deleting the "sampling plan" and the "detailed comparison of the data checks with the emissions data report" from the information submitted with the verification report. It is normal international practice for sampling plans to remain part of the confidential working papers of the verification body. Sampling plans normally are not provided to the audited organization, because they communicate the verification team's strategy for gaining the confidence necessary to achieve reasonable assurance. Verification plans, on the other hand, divulge in general terms what the verification team plans to examine without signaling in detail the extent of examination necessary to achieve reasonable assurance.

The "detailed comparison of the data checks with the emissions data report" normally form part of a verification team's confidential working papers. They are reviewed internally within the verification body but are not shared with the audited organization. There are at least two reasons for this. First, the format of verification working papers may be proprietary to the verification body, and disclosure to the audited organization breaks the confidentiality of methods and could become available during document review to any successor verification body after the expiration of the six-year limit on verifying a single operator. Second, the information in the working papers may include evidence meaningful to the verification team and independent reviewer, but not constitute "detailed comparison of the data checks with the emissions data report." Verifiers tend to rely on recorded information ("detailed data") provided by the audited organization and may make notes on copies of such records concerning a verification method employed and its general outcome. Requiring verifiers to append to verification reports "detailed comparison of the data checks with the emissions data report" is therefore a burdensome paperwork requirement that adds no apparent value to the verification service and takes time away from more meaningful verification activities.

(c)(2)(A), line 4

We recommend substituting the word "a" for "the" before the term "issues log".

ARB has not defined “issues log,” so it remains a general term rather than a term of art. We believe we understand what ARB means with this term and routinely provide in our reports to audited organization a list of “issues” identified at various stages during the verification. However, the term “issues log” is not used in ISO 14064-3 or in the “Attest Engagements on Greenhouse Gas Emissions Information” practice guideline published in 2003 as Position Statement 03-2 by the American Institute of Certified Public Accountants, so its meaning has not been established by any national or international standard or of which we are aware.

95132. Accreditation Requirements for Verification Bodies, Lead Verifiers and Verifiers

Title: We recommend changing the title to read “Accreditation Requirements for Verification Bodies and Certification Requirements for Lead Verifiers and Verifiers”. This change will promote consistency with national and international uses of the terms “accreditation” and “certification.”

(a), line 1

We recommend changing the first part of this paragraph to read as follows:

“The accreditation and certification requirements specified in this subarticle . . .”

(b), lines 1-2

We recommend changing the first part of this paragraph to read as follows:

“The Executive Officer may accredit verification bodies and certify lead verifiers and verifiers . . .”

(b)(1)(A), line 2

We recommend changing the “ARB accredited verifiers” to read “ARB certified verifiers”.

(b)(1)(B)(1), line 2

We recommend changing the word “accredited” to read “certified”.

(b)(1)(C), line 2

We recommend changing “one million” to “ten million”. Verification of GHG emissions reports should be conducted by verification bodies with substantial enough resources and professional liability to cover the consequences of significant errors and omissions. Professional liability coverage, as opposed to general business liability insurance, is typically underwritten for a minimum of $5 million. We believe the importance of this activity warrants setting required levels of professional liability above customary minimums.

(b)(1)(D)(1), line 2

We recommend deleting “and customers”. NSF-ISR has served thousands of customers, and we do not see the value to the ARB of our providing a long list of current and past organization names that have received services from us. Also, we may consider some of this information proprietary. We believe that the apparent purpose of identifying customers is adequately served by disclosing the industry sectors in which we operate and by providing to ARB information concerning the policies we employ to ensure the avoidance and/or mitigation of conflicts-of-interest. The guidance in ISO 14065 for “publicly accessible information” is limited to the following: “The validation or verification body shall maintain and, upon request, provide clear, traceable and accurate information about its activities and the sectors in which it operates” (ISO 14065:2007, 7.4).

(b)(1)(D)(2), lines 2-4

We recommend ending this sentence in the second line after the word “entities”. The remainder of this sentence is duplicative of the requirement in (b)(1)(D)(1).

(b)(2), line 1

We recommend replacing the word “accreditation” with “certification” in the title and first sentence of this paragraph for reasons explained above.

(b)(2)(A)

We recommend changing the lead-in paragraph to (b)(2)(A)1-3 because the references cited in (b)(2)(A)(2) and (b)(2)(A)(3) are not, properly speaking, “greenhouse gas reporting programs.” We propose that this sentence read: Evidence that the applicant has demonstrated experience as a lead greenhouse gas verifier by one of the following methods:”

Also, we propose adding, on a separate line following (b)(2)(A)(3), the word “Or;”. If the word “Or” is not added at the end of the entirety of (b)(2)(A), no GHG verifier who did not meet one of the three types of “grandfathering” experience cited in (b)(2)(A) could ever submit sufficiently complete evidence to the Executive Director to become certified. We do not believe this is ARB’s intention.

(b)(2)(A)(1)

We recommend adding to the beginning of this sentence the word “Serving” and changing the word “registered” to “approved”. To our knowledge, CCAR has only conducted a review and approval process for proposed verification body staff. The use of the word “registered” implies something beyond approval, as in this word is used with a meaning similar to “certification,” such as in the case of “registered professional engineers.”

(b)(2)(A)(2)

ARB appears to have misunderstood the services that the United Kingdom Accreditation Service provides. The following clarification was provided by Mr. Phil Shaw, who manages this program for UKAS:

> "We do not certify individuals as lead verifiers. What we introduced was that a lead verifier must be witnessed by UKAS prior to being deployed as a lead without supervision. In effect it is an approval, but we acknowledge the status in our reports etc, we do not formally issue a document approving the individual. We may need to consider this if verification bodies accredited by UKAS wish to make representations to the California Board."[1]

"Certification" of individuals implies a process conducted by an organization in accordance with ISO 17024:2003, "Conformity Assessment – General requirements for bodies operating certification of persons."

To improve accuracy, we recommend adding to the beginning of this sentence the word "Serving" and then continuing with "As a lead verifier who has performed at least three verifications by December 31, 2007 and who has been witnessed in that capacity by the United Kingdom Accreditation Service with favorable assessment of services performed."

(b)(2)(A)(3)

We recommend this sentence be modified to read as follows: "Is certified by a body operating personnel certification in accordance with the requirements of ISO 17024:2003 or equivalent as having met competency requirements for greenhouse gas verifiers defined in ISO 14065, or as having met competency requirements for environmental management systems auditor as defined in ISO 19011, and who has performed at least three verifications by December 31, 2007."

We suggest omitting reference to ISO 14064 because none of the three parts of this standard define competency requirements for GHG verifiers.[2]

(b)(2)(B)

We recommend substituting the word "certified" for "accredited" three times in this sentence.

We also recommend substituting "at least four completed verifications" for "two continuous years" in line 2 and substituting "and has been witnessed as an acting lead verifier under the supervision of an ARB [certified] lead verifier in at least one completed verification" for "has worked as a verifier in at least three completed verifications under the supervision of an ARB [certified] lead verifier".

We make this recommendation because the length of time that an individual holds a particular certification does not guarantee that the verifier will either use that qualification or be successful at performing the service. In our opinion, it is more appropriate for an experienced-based qualification to make reference to verifications completed than time in grade. We have selected four verifications as a suitable number because it is the same number used in Table 1 of ISO 19011:2002. Table 1 illustrates

[1] Personal e-mail to John Shideler, NSF-ISR GHG program manager, from Phil Shaw of UKAS, received 17 November 2007.

[2] ISO 14064 Part 1, clause 8.3.3 includes non-normative text on the subject of verifier competence. However, this advice is directed to organizations that are preparing for verification of their GHG inventories and does not establish an adequate basis for evaluating the competency of GHG verifiers. ISO 14064 Part 3 provides guidance language on verifier competency in the annex, but this is non-normative.

experience requirements for qualifying management systems auditors at either the initial grade of auditor or for advancement in grade to lead auditor. From a practical point of view, verification bodies are likely going to need to train GHG verifiers as rapidly as possible to meet surging demands for this service in 2008 and 2009, and not just in California. We believe that ARB's experience requirements in this paragraph will unnecessarily limit the qualification and advancement of GHG verifiers who can demonstrate competence performing the service if the criteria are not modified.

(b)(2)(E)

We recommend replacing the word "accreditation" with "certification" in the first line of this paragraph for reasons explained above.

(b)(3)

We recommend replacing the word "accreditation" with "certification" in the title and first line of this paragraph for reasons explained above.

(b)(6)

We recommend replacing the word "accreditation" with "certification" in the third line of this paragraph for reasons explained above.

(c)

We recommend changing the title to read "ARB Accreditation of Verification Bodies and Certification of Verifiers" for reasons explained above.

(c)(1)

We recommend changing the text in line 2 to begin "body or certification as a lead verifier or verifier".

(c)(2)

We recommend replacing the word "accreditation" with "certification" in the first line of this paragraph for reasons explained above.

(c)(3)

We recommend changing the text in lines 3-4 to read "shall act to grant or withhold accreditation of the verification body or certification of the lead verifier or verifier."

(c)(4)

We recommend replacing the word "accreditation" with "certification" in line 1.

(c)(5)

We recommend adding the words “or certification” after the word “accreditation” in line 1. In lines 2-3, we propose the sentence to read “may re-apply for accreditation as a verification body or certification as a lead verifier or verifier.”

(d)

We recommend changing the text in lines 3-4 to read “. . . providing accreditation to a verification body or certification to a lead verifier or verifier.”

(e)(1)

We recommend replacing the word “accreditation” with “certification” in line 1.

(e)(2)

We recommend this paragraph be renamed “Subcontracting and Outsourcing.”

We recommend the first line of this subparagraph be amended to read “A verification body shall not include verifiers employed or subcontracted by verification bodies to which it has outsourced verification services among the number used to meet the minimum staff total . . . ”

Publication in the final rule of this subparagraph as currently written would effectively preclude NSF-ISR’s GHG program from obtaining approval as an ARB-accredited verification body. As mentioned in the introduction portion of this letter, NSF-ISR employs 49 persons directly and maintains a professional auditor workforce of 350 subcontracted auditors. The 49 persons who are directly employed include the Environment, Health and Safety Business Unit manager and personnel who provide audit support services. Our auditors and verifiers are nearly all subcontracted professionals. NSF-ISR is not unique in approaching staffing in this manner. It is a common business approach in our industry. Many environmental management system certification bodies and greenhouse gas validation and verification bodies rely on the use of contracted auditors. There are several reasons for this.

First, it is in the best interest of audited organizations to have available to them auditors with a broad experience in the industry they audit. The qualifications of auditors are enhanced when they do other professional work besides auditing. Such work may include engineering, consulting, training, and related activities. In some cases, very experienced individuals turn to auditing near the end of their professional careers in order to stay active with part-time work.

Second, it is in the interest of certification and verification bodies to attract a larger number of part-time auditors to perform the work of an equivalent number of full-time persons because the certification and verification bodies can thereby offer greater geographic distribution of their auditors and a higher representation of industry sectors.

Third, professional auditors are often independent-minded individuals who prefer to manage their own work schedules and business affairs rather than seek full-time employment where a structure of work is provided to them by an employer.

For these reasons, and others, it is a standard industry practice of certification and verification bodies to utilize contracted auditor/verifier personnel rather than auditors/verifiers who are full-time employees.

The working group that developed ISO 14065 considered this issue and distinguished between "contracting" of personnel and "outsourcing" of verification activities. Here is what ISO 14065 says in its clause 6.4 "Use of contracted validators or verifiers":

> "The validation or verification body shall have procedures or policies that demonstrate that it takes full responsibility for validation or verification activities performed by contracted validators or verifiers.
>
> "The validation or verification body shall require contracted validators or verifiers to sign a written agreement by which they commit themselves to comply with applicable policies and procedures of the validation or verification body. The agreement shall address confidentiality and independence from commercial and other interests, and shall require the contracted validator or verifier to notify the validation or verification body of any existing or prior relationship to the client, responsible party, or both.
>
> "NOTE: Contracted external validators or verifiers operate as part of the validation or verification team and under the supervision of the validation and verification body on specific validation or verification activities. The use of contracted validators or verifiers under such agreements does not constitute outsourcing as described under 6.6."

ISO 14065 therefore recognizes that the use of contracted external validators or verifiers is normal industry practice. It is clear from the distinction in ISO 14065 between contracting and outsourcing that contracting personnel is not considered a threat to control by the validation or verification body or a significant additional threat to objectivity and impartiality of individual verifiers. This is because validation and verification bodies invest resources in training contracted verifiers in their procedures and exercise the same type of control over their assignment to any particular audit that they would if the verifier were a full-time employee.

Outsourcing, on the other hand, refers to contract arrangements with another organization, such as another validation or verification body, to provide validation or verification services to the outsourcing validation or verification body. This might occur, for example, if "Verification Body A" had to organize a worldwide program of verification audits and chose to outsource verification activities in one or more particular countries to "Verification Body B." Here is what ISO 14065 says about outsourcing:

> "In the absence of GHG programme prohibitions on outsourcing, the validation or verification body may outsource but
>
> "a) shall retain full responsibility for the validation or verification,
> "b) shall require the outsourced body to provide independent evidence that demonstrates conformity with this International Standard and with ISO 14064-3,
> "c) shall obtain consent from the client and responsible party to use the outsourced body, and
> "d) shall have a properly documented agreement."

Legitimate reasons for outsourcing would include lacking auditors with specific language skills or knowledge of local GHG programs in a particular country.

In the case of GHG verifications conducted for the California Air Resources Board, it is unlikely that a verification body capable of meeting ARB accreditation standards would have a legitimate need to outsource any of its work. Retaining a prohibition in the regulation against counting verifiers employed or subcontracted by an outsourced verification body as meeting the staffing requirements under Section 95132(b)(1)(A)(1) and 95132(b)(1)(A)(2) would therefore protect the State of California's interest in exercising needed control over approved verification bodies.

95133. Conflict of Interest Requirements for Verifiers

(a)

In the second line we recommend adding the words "and certified" after the word "accredited".

(c)

We recommend modifying this requirement by ending it after "95133(b)" in line 2 and deleting the remainder of the text in the sentence.

We believe that permitting the verification body to have engaged in any amount of work described in 95133(b) during the previous three years should create a conflict-of-interest that would preclude it from providing the verification service. Due to his prominence in advising ISO Technical Committee 207 Working Group 6 on this topic during the writing of ISO 14065, NSF-ISR sought the opinion of Phil Shaw of UKAS about this specific language. In an e-mail to NSF-ISR's GHG program manager, he wrote:

> "[Page] A-97 is comprehensive regarding what should be considered for the purpose of analyzing potential conflicts of interest. to then quote the 20 percent figure could negate some significant conflict, especially if the fee was for a major consultancy, or tool for measurement/ monitoring data management etc. etc. The time frame is also risky, since the tool etc will be embedded in the system. Time frames for consultancy- the two year rule, was only ever envisaged for management systems where it was felt that any management system/organisation will have developed from what was put in place by consultant. For data verification I have maintained that this may not always be the case and any consultancy at any time should be considered a conflict."[3]

NSF-ISR does not express an opinion on whether ARB should maintain its draft "three-year rule." We do agree with Mr. Shaw, however, that any revenue-producing consultancy directly related to GHG data information and its associated systems does not constitute "low risk" for conflict-of-interest determinations.

[3] Personal e-mail to John Shideler, NSF-ISR GHG program manager, from Phil Shaw of UKAS, received 17 November 2007.

(e)

We recommend changing the word “Verifiers” in the title to “Verification Bodies”

Thank you for providing NSF-ISR an opportunity to comment. We are ready to provide you with any further information you may require concerning our proposals for improving the draft regulation.

Kind regards,

John C. Shideler, PhD
NSF-ISR GHG Program Manager

cc: Ms. S. “Petie” Davis, NSF-ISR EHS Business Unit Manager