

Consolidated Comments

	Page	Line	Comment Type /Topic	Comment	Follow-up
–	Submitted		General comments	This document will be applied to verification of both regulated facility’s emissions reports and offset project reports; however, in many instances throughout the document, references to verification are specifically directed at only regulated facility’s emission reports. It would be helpful if the document was reviewed with this in mind.	Thank you. This was taken into consideration during the final review.
≈	Submitted		General comments	In the absence of measured or metered data, emissions factors and other process calculations have to be used, and this is an area that can lead to interpretation differences, even between auditors and verifiers. Plant personnel are in the best position to understand their respective operations and applicable industry technical documents and verifiers may or may not have the same level of expertise and are more likely to bring in their experience and bias. More clarity on acceptable reference standards and methods may help to reduce variability between verifiers and create a more uniform data base.	Reference methodologies are beyond the scope of this document. AESRD is working on standard methodologies for certain sectors and may consider expanding this in future.

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3	Submitted		General comments	Fugitive emissions will always be a challenge and the chemical industry has been proactive in increased use of leak detection equipment to minimize fugitive emissions. Recognition of such initiatives in providing emissions estimates or calculations would be welcome.	This is beyond the scope of this document.
4	Submitted		Meter Calibration	The Technical Guidance Documents for both responsible parties and verification bodies are silent on the issue of meter calibration. Typically, in the absence of definitive requirements, verification bodies are forced to rely on manufacturer's specifications; however, frequently manufacturer's specifications do not provide a minimum calibration frequency or state that routine calibration is not required. In addition, there is no guidance with respect to the required accuracy of meters. Guidance with respect to the calibration and accuracy of meters relied upon in forming the greenhouse gas assertion would increase the comparability of reports from different facilities.	Meter calibration is a broader issue than just greenhouse gas quantification. Each industry tends to have its own regulations that govern meter accuracy and calibration frequency (e.g., oil and gas Directive 017; utilities Weights and measures regulation). These regulations should be applied. Instances of non-conformance should be addressed appropriately in the verification statement. If there is no applicable regulation, this becomes an issue of materiality and is interpreted according to the guidance.
5	Webinar			For multi-year contracts, does a verifier have to repeat client and verification evaluation annually?	No, but they may need to do a review to ensure earlier assumptions remain valid.

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6	Webinar			Why did you choose the principles based approach vs. prescriptive?	A principle based approach allows for interpretation of new or unusual situations because it defines the underlying concepts rather than the specific rules, which may or may not be applicable. Strict adherence to rules may not be feasible in all situations; however, adherence to underlying principles allows flexibility in achieving the same outcome.
7	Webinar			Is AENV planning to create protocol specific verification guidelines to reduce the problems associated with interpretation of the protocol	No. AESRD has revised its protocol requirements. All new protocols are required to adhere to new requirements. Existing protocols are being up-dated to meet these new requirements.
8	Webinar			Except for the methodology document, it seems that industry does not need to do anything difference. We provide the same data. The verifier just asks more questions. Is this true?	That is correct.
9	Submitted		Editing	Not sure when this is to be done, but spelling and such issues should probably be looked at (e.g., Page 41, line 27; Page 51, line 24; and Page 56, line 1).	Please note that Canadian spelling has been employed throughout the document.

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10	Submitted		Editing	The final version Related Alberta Environment and Water Publication section should contain live web links to each short-cited publication, and each citation in the document should clearly state the month and year of a publication.	Unfortunately, web links have a habit of being modified and frequently end up out of date. As such, we have tried to provide consistent cross-references to direct readers to appropriate related documents.
11	?		Editing	Add references to standards quoted in document.	This has been done. Please note, standards are also available on line from respective organisations.
12	Submitted		Overall support	We support the use of 3 rd party verifiers and the independent verification process.	Thank you.
13	Submitted		Overall support	This draft document has addressed significant concerns including what standards have to be followed and have been appropriately addressed. We think the document as now drafted will be quite useful to reporters and verifiers. We are assuming that the document will undergo an editing process that will correct typos, spelling, etc. and have left these types of comments out.	Thank you.
14	Submitted		Overall support	Overall the document provides a great deal of information for the auditors and expectations for the responsible party.	Thank you.

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15	Submitted		Overall support	<p>In general, this manual describes a specific approach to GHG assurance that, in some cases , verifiers might want to deviate from:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Alternatives to contribution analysis prior to site visit as data is not yet available. <input type="checkbox"/> Not conducting analytical review as it lacks the necessary precision to provide meaningful results <input type="checkbox"/> Not conducting controls assessment where re-computation of the full assertion is quicker <p>Based on our experience with this approach, it becomes more logical the bigger and more complex the engagement. For a simple engagement based on stationery combustion we already find that >80% of the assurance effort can be created by the process (which is reflected in fees accordingly).</p>	<p>A site visit should be directed by the risk assessment. This requires an understanding of the contribution of each of the sources in the inventory; or project and baseline. The data may be draft or, if applicable, historical, but this information is deemed to be a pre-requisite to the site visit.</p> <p>Agreed, there are situations where the analytical testing is not sensitive enough to provide meaningful results. Alternative tests should be used as appropriate.</p> <p>AESRD requires that the verifier review the ability of the data management system to produce reliable and consistent information. A control assessment is necessary to conduct this review.</p>
16	Submitted		Overall support	<p>The material is well organized and provides a helpful basis for verifying assertions of greenhouse gas emission reductions to reasonable level assurance.</p>	<p>Thank you.</p>

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17	Submitted		Overall support	We feel that it provides a very useful, well written tool to both verifiers and reporters. The guidance document should help standardize and increase the quality of verifications, and as a result provide more relevant, complete, consistent, and accurate SGER submissions.	Thank you.
18	Submitted		Overall support	We are generally pleased with the direction of the draft verification guidance document and appreciates the efforts of AESRD to provide clarity and guidance. The document is comprehensive, provides a variety of useful examples and anecdotal information, and – with slight revisions – will serve its purpose in providing guidance regarding the implementation of reasonable assurance greenhouse gas verifications in Alberta and potentially beyond. The document holds promise to remedy, to a certain extent, problems the province has encountered with facility verifications and offsets projects to date.	Thank you.

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19	Submitted		Overall support	This guidance document is particularly important because of the scope of the different professions potentially involved. It is detailed and provides lots of clarity and yet aspects of “reasonable level of assurance” will likely remain subject to interpretation, especially when considered from either an accounting or engineering perspective.	Thank you.
20	Submitted		Overall support	After five years of verification experience under the regulation, it is appropriate that the level of assurance be increased.	Thank you.
21	Submitted		Overall support	We are fully supportive of government efforts to comply with international standards.	Thank you.
22	Submitted		Overall support	Overall, we support AESRD’s approach to reasonable assurance verification.	Thank you.

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23	Submitted		Timelines for compliance	I think it is short notice to throw the guidelines onto everyone. We all knew about reasonable assurance, but from our own perspective. This does add effort. It's a useful document and we have no issue with following it. I do think most verifiers would say it has more than 'slight' and 'minimal' cost implications. Also, there is a sense of more liability for the verifier, implying greater reward should be built into the verification.	AESRD recognizes that costs are variable between companies. AESRD also acknowledges that there has been a range of effort at limited assurance with some companies undertaking limited review and others performing verifications that more closely aligned with reasonable assurance requirements. Costs increases to shift to reasonable assurance verifications will be affected by the nature and extent of testing done at limited assurance. AESRD's observation on costs is based on piloting reasonable assurance audits. AESRD has not observed significant cost increases.

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24	Submitted		Timelines for compliance	<p>During the webinar it was stated that AESRD is aiming to finalize the guidance by Jan. 30, 2013. For offset project verification, that gives industry and verifiers one month with finalized guidance to complete verification prior to the March 1 soft deadline, and 2 months for compliance report verification. This is insufficient time and introduces risk to the program due to rushed verification procedures in an environment of new requirements. Since the guidance is still in draft status, I suggest the new program be phased in or implemented for the 2013 compliance cycle to give industry and verifiers time to understand the new expectations when they are finalized. A focused training workshop for verifiers would be very helpful to get the verifier community on the same page and ensure the new requirements are well understood and implemented properly. Without this you will continue to see a wide range in interpretation and in verification quality.</p>	<p>AESRD is aiming to have it released in January as stated at the webinar and presentation. Verifiers are required to have training in approved audit standards and should already have familiarity with the principles for limited and reasonable assurance.</p>

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25	Submitted		Timelines for compliance	Please align the SGER deadlines with Federal Reporting and NPRI deadline of June 1. This will reduce inherent risk in the program due to errors introduced in due to the rush by companies to compile the data after year end and complete internal reviews and checks, and the rush by verifiers to complete their reviews before the compliance deadline. Why does the program need to be tied to the March 31 fiscal year-end?	As mentioned before, AESRD does not have the ability to change this deadline.
26	Submitted		Timelines for compliance	In consideration of the fact that the guidance document is just being finalized and that the engagement of verifiers is typically done on a long time prior to commencement, we would respectfully request that either the effective year of the verification guidance be changed to 2013, or the compliance submission date moved forward to June which would also align with CEPA section 46 reporting requirements. This would also allow more time between reporting companies and verifiers to clarify scope and costs.	See response 24 above..

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27	Submitted		Timelines for compliance	<p>The verification and reporting process in the first quarter every year is already a very time-constrained process for operators and verifiers. The activities described in Section 2.2 and Section 3 would add a significant number of additional time consuming steps to the process. Key to this would be the proposed verification plan which, as presented, could be characterized as an abbreviated verification, and would require a number of weeks to complete.</p> <p>We feel that it may not be realistic or possible to comply with all the additional process described in the draft document within the time available. The result may impact to the quality and completeness of data held in the provincial system. Shell then recommends that AESRD either look to opportunities to streamline the process so that operators may have better opportunity to comply with the process within the time available, or that the compliance submission date be moved to end of the second quarter each year.</p>	See response 25 above.

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28	Submitted		Timelines for compliance	<p>Although we appreciate the need for timely compliance submissions in coordination with government budget processes, the current compliance submission deadline was challenging even for submissions at limited level of assurance. We were fortunate to have engaged in supplementary verification for the 2011 compliance report to a reasonable level of assurance at the request of AESRD. The verification timeframe was approximately four weeks and the report was completed approximately three months after the data verification was complete. Even with a shortened timeframe, it will be extremely difficult to produce an accurate emissions inventory, complete verification as specified in the draft document, and complete a compliance report to adhere within the three months of a calendar year. We suggest either extending the timeline for compliance submissions or implementing the verification document using a risk-based approach to reduce administrative burden (i.e. implementing sections of the draft document at facilities with large emissions with a higher probability of misrepresenting emissions).</p>	See response 25 above.

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29	Webinar		Timelines for compliance	Will AESRD consider a new deadline beyond March 31 (and March 1st soft deadline for offsets) given the increased level of effort required for reasonable assurance verifications?	See response 25 above.
30	Webinar		Timelines for compliance	Given that BC has changed their Verification dates and that AB clients will not be familiar with these new guidance documents, and verifications have already begun, I am looking for some grace in the execution of the verifications for the 2012 vintage year :)	See response 24 above.
31	Webinar		Timelines for compliance	If a baseline restatement were verified this year, will it be subject to reasonable assurance?	Yes.
32	Webinar		Timelines for compliance	When will the final requirements be used?	Reasonable assurance verifications are required starting with the 2012 compliance year, 2012 vintage offset credits, and any new or restated facility baselines.
33	Webinar		Timelines for compliance	So guidance is mandatory for 2012 vintage year?	Yes.

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34	Submitted		Timing	The document is unclear as to whether reasonable assurance will be applied to retroactive audits. We would appreciate if AESRD could clarify that this document will be applied only to verifications (and audits) moving forward, and not retroactively.	See response 32 above.
35	Webinar		Timing	Can you commit to a date in January when the final guidance will be available?	Every effort will be made to finalize the document as soon as possible in January.
36	Submitted		Timing	Timely feedback from AESRD on the verification process of a project would be of great benefit to commercial operations.	Timely provision of data to facilitate the audit so that AESRD can close and respond within a timely manner would be greatly appreciated.
37	Submitted		Timing	Clearly measured or metered information from calibrated instruments are preferable as a data source, and this is a reasonable target especially for key data points however it must be recognized that implementation of a metering system take time. Engineering that takes into account safety considerations and instrument procurement has to be done before the instruments can be installed – likely at plant turnarounds.	Noted. This issue is outside the scope of this document.

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38	Webinar		Timing	When do material errors need to be corrected? Before after or during the verification. What follow up is required to demonstrate that the material errors have been corrected.	Material errors need to be addressed before the verifier can sign off on the verification. See Section 3.2 and 5.1.7 of the document for more information.
39	Webinar		Timing	AESRD has several years experience with reasonable level assurance audits. What is the typical timeline these take? Does AESRD foresee complications with the higher level of assurance requirement in such a short timeline?	AESRD is not able to speculate on timelines because AESRD audits take place in the summer and have had to make allowances for vacations, facility turn-arounds and other delays.
40	Submitted		Verifier Justification on Professional Opinion	There is concern that broad guidance, found throughout the document, still gives an auditor the leeway to form an opinion based on their best professional judgment with limited justification requirements or direction. We believe that in cases where auditors cannot make clear conclusions based on the evidence set before them, verifiers should be required to justify how it is that they came to their professional opinion.	This document requires that verifier's document and support how they have come to a conclusion. See Section 5.1.3
41	Submitted		Verifier qualifications	Recognizing the importance of the technical and accounting professional components and their differences, it is also apparent that a level playing field among verification teams may be difficult to achieve. Balance will be important.	AESRD agrees. This guidance document is intended to address observed differences to date, and clarify minimum expectations for all verification companies.

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42	Submitted		Verifier qualifications	We would like to encourage the development of a verifier certification process and would be willing to participate in this process.	Accreditation will be considered in 2013.
43	Webinar		Verifier qualifications	Do you have any news on verifier accreditation/certification requirements?	See response 42 above.
44	Webinar		Verifier qualifications	Can you comment on the individual qualifications of verifiers – have you made progress on this issue?	This document clearly defines the expertise required for different roles on the verification team. AESRD supports the concept that the team must be qualified to conduct the verification. Expertise of team members will likely vary depending on the sector being verified.
45	Submitted		Verifier qualifications	Having qualified verifiers is important to ensure data accuracy and consistency.	AESRD supports the concept that a good data management system and controls is necessary to ensure data accuracy and consistency. Qualified verification teams are one control in the government reporting system to ensure appropriate reporting is occurring.
46			Document Title	You may wish to expand the document title to its precise purpose: <i>Technical Guidance for Reasonable Assurance Verification of Greenhouse Gas Emissions, from Facilities and Offset Projects subject to SGER requirements.</i>	Thank you for the suggestion.

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47	iv			Acronym list	A glossary of terms is provided at the front of the document.
48	iii		Lists of Figures and Tables	Numbers assigned to Figure and Table titles throughout the text do not correspond to the subsequent table, nor to this list	References were corrected for the final version.
49	1			The document is intended to provide “an overview of best practices and minimum requirements” for reasonable assurance. However, the word “must” seems to be used liberally throughout the document in relation to best practices some of which would neither be efficient or appropriate in specific circumstances. To improve clarity, an appendix with “minimum requirements” should be provided and the word “must” should be avoided in relation to guidance.	To enhance clarity, the mandatory components of this document have used the word “must” and the sentences have been bolded.

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50	1	Introduction		It would be helpful to include the high level comments noted at the beginning of Appendix A to describe differences between Reasonable and Limited Assurance, with reference to Appendix A for more detail. To indicate that experience with verification to Reasonable Assurance has been gained, include a comment made during the webinar that many verifications prior to Jan 1 2012 were assessed at a higher level than Limited, although conclusions were reported at Limited. Also include brief discussion of verification approach as principles based, rather than prescriptive.	<p>Appendices will be moved forward for final publication.</p> <p>Further, the introduction was expanded to include additional context on the purpose and intent of the document.</p>
51	1	1		Please include an "Overview of Change" section similar to the Compliance Report guidance document	As this is the first version of this document, this section is not applicable. It will be included in any subsequent versions.

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52	Submitted			In general, what I find doesn't work is the lack of clarity on what the differences are for a reasonable assurance verification vs limited. My verification clients are trying to prepare for the new requirements and have been asking me what the new requirements are. Having read the document and participated in the webinar, I still don't have a clear answer for them. What would help is an "Overview of Changes" section at the start of the document similar to what has been included in recent Technical Guidance for Compliance Reports and Baseline Emission Intensity Application documents. Without a more clear description of the new expectations there will invariably be a range of interpretation amongst verifiers.	See response 51 above.
53	1	13		Is reasonable assurance required for baseline restatements	Yes, reasonable assurance will be required for all baseline restatements.

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54	1	13		Exceptions to the Jan 1 st 2012 date should be referenced – for example in tillage projects, March 31 st for remaining historical (02-10) credits, September 30 th for 2011 credits.	With the exception of aggregated tillage projects on First Nations lands, all other offset project verifications must now conform to reasonable assurance verifications. First Nations tillage projects may use limited assurance for the 2002 to 2011 applications, which must be submitted to the Alberta Emissions Offset Registry on or before March 31, 2013. This is documented in other program guidance.
55	1	13	“Will the baseline need to be re-verified to reasonable assurance”?	Maybe a comment on facilities just performing their baseline and companies who have already completed it.	See comment 32 and 53 above.
56	Webinar			We have to re-review the baseline emission data to a reasonable level of assurance as well?	See comment 53 above.
57	Webinar			So the verifier can rely on the accepted baseline and will look only for methodology differences between the baseline and the current compliance report?	The verifier has always been required to look for any methodology differences/changes between the approved baseline and annual compliance report.
58	1	14		change ‘annual compliance submissions’ to ‘annual compliance reports’	Terms were assessed for consistency throughout the document.

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59	2	Section 2	Overview of Verification	footnote #2 says "... such as CSAE 3000, CICA 5025 and ISAE 3410" It should refer to ISAE 3000 and CSAE 3410	Standards references were corrected.
60	2	2		It may be useful to mention that for facility GHG emissions, the validation function of confirming the completeness of emission sources, appropriateness of calculation methods, etc. is done as part of facility baseline emissions application verification.	Validation remains optional in the Specified Gas Emitters program. It is a tool available to facilities and offset projects as part of their corporate due diligence.
61	2	6		Insert ghg assertion definition	Done.
62	2	23		Reference for validation information	Validation remains optional for Alberta's Specified Gas and Offset programs. No additional guidance on validation has been provided by AESRD.
63	2	34		change 'greenhouse gas information' to 'greenhouse gas assertions'	Terms were checked for consistency throughout the document.
65	3	1		Concern that mandating ISO 14064-3 will disqualify some verifiers.	Engineers were already required to use ISO 14064-3. Most accounting firms use ISO 14064-3 and accounting standards. No concerns were raised by the accountants with respect to ISO being the minimum audit standard.

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66	3	1		The statement is unclear and open to interpretation. It appears to say that ALL verifications must conform to ISO 14064-3, but then ISAE 3000 and CSAE 3410 are referenced in other places throughout the document.	Minimum standard is ISO 14064-3. Additional requirements from other standards such as CSAE 3410 may be used if required by the professional organization. These additional standards would be over and above ISO requirements.
67	3	4		Should reflect AB requirements, not best practices and standards.	This document is grounded in best management principles from both professions and has been written specifically for greenhouse gas engagements in Alberta.
68	3	5		Best practices - Cost implications	See response 23 above.

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69	3	8		<p>We have interpreted this requirement as the verifier including their verification procedures the receipt of a confirmation from our client as to the accuracy and completeness of the information reported. Our concern is that the client may respond in the affirmative without challenging the information. It would also be a point-in-time test and would not capture subsequent changes. We recommend that you consider removing the requirement for the verifier to confirm this information with the responsible party, and instead include a confirmation from the responsible party back to AESRD directly in their submission report. Verifiers add no value to the accuracy of this information. This is information that is the responsibility of the party, and not to do with the GHG quantification.</p>	<p>Confirmation in this sentence is the generally used term, not the accounting procedure of “confirmations”, which is to obtain evidence from third parties. Please see additional footnote for clarification</p>
70	3	15, 16	Mandatory Requirements	<p>Complete all mandatory requirements and documents in working papers - Helpful to Bold, large font Shall, must etc,</p>	<p>See response 49 above.</p>

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71	3	16	Mandatory requirements	It is unclear what information in the guidance document is guidance versus mandatory requirements. Does AESRD mean “4.1.4 Mandatory Procedures” when you refer to mandatory requirements? Otherwise it is difficult to determine what is classified as mandatory (the word appears only 6 times in the guidance).	See response 49 above.
72	Submitted		Mandatory Requirements	<p>Leaving words like “Must” (of which there are 135 in the document) at least indicates the degree of emphasis expected by AESRD. If the introduction simply stated that where the requirements are mandatory they are indicated as such under the heading “Mandatory Procedures” and the remaining “best practices” are expectations where limited variation is expected and only where justified by alternative procedures of equal rigor.</p> <p>In addition it would be good to make sure these “Mandatory Procedures” sections stand out more than they do now.</p>	See response 49 above.

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73	Submitted		Mandatory Requirements	<p>It is imperative that regulatory documents be very clear in what is a requirement for proponents and other stakeholders, and what is recommended or even optional practice. Because of the wording and phraseology used in the draft document, it is not consistently clear what is mandatory for SGER compliance purposes. As illustration, please see-</p> <ul style="list-style-type: none"> • “Verification plans should be modified when: (page 49, line 5)— is it required or simply recommended that they be modified? • “If changes are made to the greenhouse gas assertion, a modified statement of verification with an emphasis of matter will be issued (page 68, line 26) — is the proponent required to issue a modified statement? <p>Consistent use of clear and unambiguous language to reflect the intent would be helpful. Words such as ‘shall’ ‘must’ or ‘need’ provide certainty.</p>	See response 49 above.
74	3	18		Concern about including verifier acceptance decisions in the verifier’s working files.	Verifier files need to document the verification process and how the verifier arrived at their opinion. This guidance provides requirements on minimum records that need to be retained.

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75	3	31		Move figure to Section 2.2	Formatting issues were fixed prior to finalization.
76	3	8, 9, 17		Emphasis on Acceptance phase in addition to planning, execution and completion, document acceptance review - Cost implications	AESRD recognizes there may be cost implications associated with additional requirements; however, these reflect best practices and help to manage risk for the reporting entity and the verifier.
77	3	15 & 20		add 'relevance and transparency' to 'completeness, accuracy, reliability and consistency' [relevance and transparency are identified in 14064 Part 1....and are considered attributes]	The terms were clarified in the document, including references to relevant sections of ISO 14064. Please see Section 2, Page 3.
78	4	1-6		The definition of 'Responsible Party' is too arduous and repetitive	Noted.
79	4	10-12		Expand the description of 'Intended User' to include other interested parties like: offset buyers (LFEs), shareholders, bondholders and directors of the 'Responsible Party'. All of these parties are exposed to risk if the assertion is misstated.	Disagree. The final intended user is AESRD, which uses verification reports to support compliance with the Specified Gas Emitters Regulation. Other parties may choose to use these documents to support corporate due diligence, credits transactions, etc., however, the final audience remains AESRD.

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80	4	14		change 'professional services company' to more generic 'verification services company'	Not changed. Professional services company is more generic than verification services company and we do not wish to imply in any sense that this service constitutes verification.
81	4	15		Table is difficult to read	Formatting was fixed throughout the document.
82	4	21		Figure 2 needs to be referenced.	There is no appropriate reference since it has been modified from its original source, similar diagrams are available in both CICA 5025 and ISO 14064-3.
83	4	26		No requirement for verification to be paid by project proponent not buyer	Corporate due diligence is part of the contractual obligations between the parties, but is not a verification activity. Payment responsibility must be negotiated between the parties involved.
84	5	Section 2.2		Really well organized	Thank you.
85	5	Section 2.2.1	Verifier Independence Evaluation	More detail on how the government will proactively follow up on and ensure verifier independence would be useful.	This is monitored during internal reviews and facilities are notified if AESRD has concerns (e.g., multiple restatements). Facilities and verifiers must monitor independence.

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86	5	Section 2.2.2	Client Acceptance	<p>I wholeheartedly agree with the Section 2 Acceptance Guidance <u>with the exception of Section 2.2.2 Client Acceptance</u>. Client acceptance is a matter of professional and business judgement that is best left for the decision of the responsible officers in those organizations that wish to engage in greenhouse gas verification services. Section 2.2.2 Table 1 provides some risk examples, which are not all encompassing regarding business and professional liabilities associated with verification services. I suggest that you shorten this section by simply stating that “<i>entering into a greenhouse gas verification service contact with a Client, for the purposes of SGER Compliance, requires that the service organization conduct their own prior due diligence review regarding its qualifications and ability to complete the work scope</i>”.</p>	<p>AESRD agrees that the final contracting decision is at the discretion of the companies involved. This section lists considerations that must be addressed and documented in the verifier’s working files prior to entering into a verification engagement.</p>
87	5	5		Engagement replaced with verification	Terminology was assessed for consistency in the final document.

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88	5	4, 5		Verification process prior to engagement contract - Cost and risk to verifier	Requirements were clarified in the document and are not mandatory.
89	5	20		We have our own internal requirements that stand up to financial audit requirements. Going through our own separate checklist (as a “must”) is very time consuming. Can we rely on our own client acceptance/ independent procedures or is the separate checklist a mandatory requirement?	Internal corporate processes may be used as long as they are equivalent or better than the mandatory requirements in this guide.
90	6	24-31	(Advocacy Threat)	There is a difference between a verifier advocating for a client and defending their work. A verifier’s opinion on a dataset or process may coincide with the clients. When questioned on this, the verifier would be expected to have a response similar to the client’s. The third bullet point regarding litigation is also not advocacy. Verifiers would be expected to defend and justify their verification opinion during litigation or to queries from ‘intended users’.	Agreed, there is a difference between advocating and stating a conclusion given appropriate evidence. Verifiers must monitor their independence to ensure they do not inadvertently provide advocacy services on behalf of their client.

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91	6	2		The self-interest examples focus on direct business-related interests. However, personal interests and indirect financial interests can also be involved and could be cited here as examples, too. E.g. where there is a personal relationship with the client, where a family member works for the client, etc. where unfavourable audit findings could potentially have social (or indirect financial) interests.	It impossible to foresee every possible conflict of interest scenario. As such, the examples provide context for what would constitute a conflict of interest. The verifier must still use professional judgement to assess whether an actual or perceived conflict of interest exists and take appropriate steps to manage any conflicts that may exist.
92	6	31 32	Acting as an advocate on behalf of the client in litigation or in resolving disputes with third parties.	The text with respect to advocacy-related threats to impartiality seems to be overly broad. All of the other threats to impartiality relate to threats associated with activities directly related to the client’s greenhouse gas emissions inventory process or assertion. It is not clear why advocacy is not similarly restricted to advocacy related to issues that directly affect the greenhouse gas assertion.	Wording has been clarified.
93	7	7-13		How will the regulator estimate if the “fees from the client represent a large percentage of the overall revenues of the third party verifier”? More clarity would be appreciated.	This is outside of the scope of government mandate and is a matter of judgement on the part of the verifier as to when a particular client would provide sufficient overall revenues to pose an economic threat.

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94	7	36-38	Section 2.2.1.2	It is unlikely that aggregation companies will submit multiple projects of the same project type in one year in the absence of historical credits. What is more likely is companies having several different project types in a single year. Additional guidance on how the independence limitations affect multiple project types would be helpful.	Will clarify that this applies to aggregated projects with more than one project submitted annually. If only one project is submitted annually, the company must adhere to the 5 year maximum requirement for using a single verifier. Please note, this is on a project by project basis. It is possible for a company to have the same verification company conduct several verifications per year on different facilities/offset projects.
95	7	36	Section 2.2.1.2	Independence threats are likely the lowest risk affecting the quality of a verification statement. Yet the guidance documents are very prescriptive on how often a verifier can be used. On the other hand, the draft guidance provides vague guidance on verifier qualifications (Sec. 2.2.4.4.1), which is likely a greater source of verification risk. The Independence Limitation could force facilities and project developers to use less technically qualified verification teams resulting in increased risk for all parties.	AESRD acknowledges that verifier qualifications is important and will be reviewing accreditation requirements in 2013. The independence requirements have been in place for several years now, and AESRD has not observed any evidence that this rotation is moving facilities to less competent verification teams.

	Page	Line	Comment Type /Topic	Comment	Follow-up
96	7	13	Section 1	Do past submitted BEI's need to pass reasonable level of assurance or just new ones going forward? That is, do we need to resubmit old BEI's to have them vetted against reasonable level verification or can we continue using them as verified at limited level?	See response 32 and 53 above.
97	7	17		Concern on preserving perceived independence.	This statement has been corrected.
98	7	18		Conflict of Interest cannot be mitigated. Requires use of different third party verifier.	Firms often perform other services for the company that may be perceived as a conflicts of interest. In some cases, conflicts can be managed. In cases where the conflict cannot be managed, a different verifier must be used. No changes were made.
99	7	25	Section 2.2.1.2	How about if an audit company was hired by ESRD to perform and audit on a LFE, and then the same LFE hires that same company to perform their annual GHG audit. Would both audits count toward the five total?	Likely, this would be the case.

	Page	Line	Comment Type /Topic	Comment	Follow-up
100	7	37		<p>When would the 8-verification limit with 2-year hiatus come into effect? For example, if an aggregator has already used the same verifier for 5 verifications consecutively when the guidance is published, does the count start from 0, or do the 5 previous verifications need to be considered? Equally, if an aggregator had least used a particular verifier 1 year prior to the publication of the guidance, what is the requirement to wait before using that verifier? (0 years, since the 8-verification limit has not been reached under the new guidance, 1 year, since the new guidance recognizes what has come before, or 2 years, since the guidance is newly in effect?)</p>	<p>Specific questions around potential conflicts of interest should be directed to AESRD for further discussion.</p>
101	7	37		<p>Why eight years for aggregation companies? suggest adopting 5 years consistently</p>	<p>Aggregation companies that compile multiple projects per year have been limited to 8-verifications (not 8 years). A 5 year rule could result in more than 20-verifications by the same company, which, in AESRD's opinion creates a potential conflict of interest of familiarity.</p>

	Page	Line	Comment Type /Topic	Comment	Follow-up
102	8	Table		Want client's business to be based on revenue generated from offset credits. Wants a different example.	This example simply states that client's whose whole business model is based on offset revenue are potentially a higher risk than if offsets are an add-on to other business practices. This example was changed.
103	8	table 1		Explain Items the third and last examples	Tone at the top is a standard term in risk literature and speaks to management attitudes and corporate culture. It has been added to the glossary of terms.
104	8	Table 1:	Client Evaluation Factors	Need to clarify how this will apply to verification of aggregated projects and relationship between verifier and aggregator (whose sole role is selling offsets.)	See response 102 above.
105	8	2		"reduce the threat of litigation against the verifier" Please provide examples of situations the verifier may be in threat of litigation. I have not been aware of this potential risk.	Verifiers must address risks of potential litigation in their contracts.
106	8	Section 2.2.2	Client Evaluation	Is client evaluation mandatory or recommended? How can it be confirmed that the verifier checked all these factors? How will this be disclosed/reported?	Client evaluation is a mandatory requirement. It must be fully documented in the verifier's working papers.

	Page	Line	Comment Type /Topic	Comment	Follow-up
107	8	5		Client acceptance is not likely appropriate if “The client’s business is based on the revenue generated from selling greenhouse gas offsets” – that would exclude a lot of project developers then. Does this mean that a verifier should only take on a client if that client has a ‘core business’ outside of offset project development?	See response 102 above.
108	8	5		Table – row 3 (The nature of the client’s operations including its business practices). Seems a bit odd to flag this as a situation where acceptance is likely not appropriate as this could apply to any offset project type that faces financial barriers and whose primary purpose is to reduce/remove emissions	See comment 91 above.
109	Submitted		Editing	There are several instances throughout the document where the reference to a table is obviously incorrect. Please review all table references to improve clarity. For example, row 29, pg. 7 references “Table 2 below”; however, it should clearly be referencing Table 1.	Formatting issues were corrected in the final document.
110	8	5		How would the verifier know the reason for not hiring a previous verifier?: "Non-selection of previous verifier was based on a modified or adverse opinion."	In many cases, when there is a transition between verifiers, the new verifier contacts the old verifier to discuss any significant items that may have an effect on the current verification.

	Page	Line	Comment Type /Topic	Comment	Follow-up
111	8	7		Should client analysis be mandated.	This was discussed and the decision was made to mandate this step.
112	8	14		I don't understand the need for the verifier to assess Program Criteria since these are established by AESRD and are fixed	The verifier is not assessing program criteria. The verifier is assessing application program criteria to the subject matter.
113	8	15, 16	Verification Process	These items are determined throughout the course of the verification and cannot be adequately assessed at the initial stage of verification	See introductory paragraph that states that verification is not a linear process and there is iteration and feedback thought out.
114	Submitted		Verification Process	The verification process seems to be described out of order. Many of the initial verification tasks cannot be completed until much later in the verification process, during and after the site visit.	See response 113 above.
115	Webinar		Verification Process	How do you develop a complete risk assessment early in the verification process before you fully understand the entity? Fully understanding the entity almost always requires a site visit which occurs later.	See response 113 above.
116	9	Table		Does not align with ISO principles.	These are principles of criteria, not the ISO principles of verification. Terms that appear in both lists have been identified in the document.

	Page	Line	Comment Type /Topic	Comment	Follow-up
117	9	1		Should offset and facility criteria be separated.	Listing them would make this document rigid; every time an offset protocol or guidance document gets changed, this would need to be changed. As such, AESRD has used a principles-based approach that applies equally to offsets and facilities.
118	9	Figure 1		Term “Verification Acceptance” is a bit confusing, is there a better term to use to describe this activity? It sounds more like the end (whereby the verifier accepts the submitted compliance), which is confusing since we think it is supposed to represent the initiation of the verification activities of the verifier.	Please refer to the definition provided in the Glossary.
119	9	6		Two periods at the end	Removed.
120	9	6		Delete extra period	Removed.
121	9	20		"Over stating or understating emissions introduces bias in Alberta's greenhouse gas reporting system and must be avoided" - This conflicts with offset guidance requirement for "conservativeness" and Page 14, Line 1, last row of table	This statement referers to the criteria or quantification methodologies, which must not be over or understated. It is the actual reporting of the GHG emissions or emission reductions that must be conservative when accuracy and completeness cannot be reached.

	Page	Line	Comment Type /Topic	Comment	Follow-up
122	10	11-16		<p>Should not proceed – assume we can ask for appropriate information and then proceed?</p> <ul style="list-style-type: none"> - Out-dated methodologies? Does AESRD have a list of approved methodologies? - How do we know site-specific data is available? Should this be if we know, e.g., gas analyses? 	The verifier must undertake their own due diligence based on available data to decide whether to undertake the work.
123	10	11-16		<p>The comment on the appropriateness of attestations should read “reliance on attestations without supporting records and/or effective controls”. The reason for this addition is to be consistent with how attestations or declarations are used as records in finance. For example, payroll records and even expense claims are attestations (e.g. time sheets, claim forms) only supported by a managerial sign-off. In this example, the managerial sign-off is a control point – it is not supporting evidence. It is also not a second attestation. The reliability/effectiveness of the control is testable. Verifiers can use this testing to make informed objective decisions on the appropriateness of the evidence as opposed to a subjective decision based on nothing more than an unsupported opinion.</p>	Wording was clarified.

	Page	Line	Comment Type /Topic	Comment	Follow-up
124	10	27-30		Hard to know such details when bidding. Alternatively, to know this detail costs more and puts the verifier at risk if we lose. Adds cost to all.	It is incumbent on the verifiers' to ask the right questions when developing bids.
125	10	Section 2.2.3.3	Sufficient and Appropriate Evidence	According to the draft guidance, it is up to the verifiers to determine whether sufficient and appropriate evidence has been collected. It would be helpful, however, to have more guidance in this area. For example, how is this determination made? Are the evidence requirements identified in the Protocol? If so, the guidance should state that the verifier should check for conformance between the Protocol requirements and evidence provided.	We can't prescribe every action. Verification must rely on the professional judgement and expertise of the verifier to assess greenhouse gas assertions against program criteria to render an opinion on the verification.
126	Webinar		Evidence	Can you discuss evidence and dealing with scientific certainty and probability (50%+1) or the "but for" test to examine evidence?	Scientific certainty and probability are disclosure issue. Higher uncertainty may undermine a verifier's ability to provide assurance.
127	Webinar		Evidence	What if a verifier asks for evidence they haven't asked for before...and the project doesn't have it? If they are looking for the same evidence.	The verifier must assess whether there is sufficient and appropriate evidence in order to come to a conclusion. If a verifier asks for a piece of evidence that is unavailable, often there is other evidence that can be used to support the assertion.
128	10	13		Confusion over sentence example for subject matter.	Wording has been revised.

	Page	Line	Comment Type /Topic	Comment	Follow-up
129	10	13		<p>The meaning of the bolded text in Section 2.2.3.2 raises some potential issues. This requirement is problematic in instances where a Facility uses accepted reporting or calculation procedures that are based on generic quantification methodologies even though facility-specific data may be available. For example, oil and gas facilities frequently choose to report their fugitive emissions using guidance provided by CAPP which is an approved methodology under the SGER. These same facilities have partial or complete Leak Detection and Reporting (LDAR) survey results that provide facility-specific data on fugitive emissions.</p> <p>Further, this statement would appear at odds with Section 3.6.7, which implies that generic data may often be better as stated below:</p> <ul style="list-style-type: none"> • 16 <i>In most cases, greenhouse gas quantification uses estimates to determine the volume of gas emitted</i> • 17 <i>to the atmosphere/sequestered. Metering and direct measurement techniques are evolving, but are</i> • 18 <i>often cost prohibitive to use and in some cases, do not result in more accurate emissions information</i> • 19 <i>(e.g., generic fitting counts yield more defensible fugitive emissions estimates than a once per year</i> • 20 <i>LDAR test for fugitive emissions).</i> 	<p>AESRD generally prefers the use of site specific information to generic data, unless there are circumstances where the generic data yields more accurate results.</p> <p>AESRD has become aware of a number of instances where site specific data was available, but was not used for greenhouse gas emissions quantification. This has resulted in a number of facilities needing to restate their baseline and annual compliance reports.</p> <p>Likewise, facilities must use relevant and current quantification methodologies. Use of out-dated methodologies have resulted in facilities needing to restate their baselines, and could result in compliance report restatements.</p> <p>Where more accurate facility data is available, it must be used.</p>

	Page	Line	Comment Type /Topic	Comment	Follow-up
130	11	Section 2.2.4.1	The Designated Signing Authority	The Designated Signing Authority text in 2.2.4.1 sets out competence requirements for the designated signing authority. This text allows CAs and engineers to have the verification conducted by non-professionals and then sign off on the verification as a professional with only “general knowledge of the subject matter” as per these Guidelines. The regulation explicitly requires that the “third party auditor” has technical knowledge of specified gas emission quantification methodologies, audit practices, and any other matters considered relevant by the director. It is not clear how general knowledge of the subject matter” can meet this requirement.	Regulation cites that the third party auditor, not the designated signing authority (DNA) must have technical knowledge of the of specified gas emission quantification methodologies, audit practices, and any other matters considered relevant by the director. This guidance further specifies that a member of the team must have the technical knowledge; this does not preclude the DNA from having this knowledge; however, it is not necessary for it to reside in the DNA. Further, both accountants and engineers have professional obligation to only undertake work for which they are qualified and trained and are required to practice with due care.
131	11			Please include a brief description of the qualifications of third party verifiers as described in the SGER, and include exact wording in a new Appendix.	Reference to the Specified Gas Emitters Regulation has been added.

	Page	Line	Comment Type /Topic	Comment	Follow-up
132	Submitted		The Designated Signing Authority	As indicated during the October 15 presentation and as indicated in Section 2.2.4.1 of the Draft Technical Guidance, a Designated Signing Authority is identified as either a professional engineer or a chartered accountant that meets the requirement of Section 18 of the Specified Gas Emitters Regulation. Section 18(1) of the SGER states that: <i>“a person is eligible to be a third party auditor under this regulation if the person (a) is (i) registered as (A) a professional engineer under the Association of Professional Engineers and Geoscientist Act (B) a chartered accountant under the Regulated Accounting Professions Act (ii) a member of a profession that has substantially similar practice and competence requirements as a profession identified in subclause (i) (A) in a province or territory of Canada, or...”</i> . Would a professional geoscientist with a ‘P. Geo’ designation in Alberta or in other Canadian provinces or territories be considered to have ‘ <i>substantially similar practice and competence requirements</i> ’ and thus meet the requirements in Section 18(1)(a)(ii), and serve on the verification team as a Designated Signing Authority?	No. This clause currently applies only to CAs and P.Engs from other jurisdiction outside Alberta; and may include similar, related designations from the US and other countries.

	Page	Line	Comment Type /Topic	Comment	Follow-up
133	11	17-27		Delete: and quantity in ln 17 and 20	There is generally a need for automation when there is an increase in the quantity of records. There is generally an increased quantity of records associated with increased frequency of measurement.
134	11	3-5		Databases - Might not be as transparent, so also a potential drawback.	Verifiers are required to understand databases including database assumptions and data handling to understand whether outputs from the database meet program requirements.
135	11	21-23		Explain lines 21-23	Information that is scrutinized for other reasons, such as performance reward systems, tend to have more controls governing their function when compared to information that does not have similar uses.
136	11	1		Automated data management systems are more about repeatability than quality	Automation generally has few errors than manual transcription processes. Repeatability has been included.

	Page	Line	Comment Type /Topic	Comment	Follow-up
137	11	Section 2.2.4.4.1	Subject Matter Experts	We support the involvement of subject matter experts in the verification process. We are encouraged to see the guidance document suggest that “the verifier must engage subject matter experts”. However, the associated hint-box states that “Agriculture offset projects may benefit from the addition of a Professional Agrologist...” It would therefore be helpful to see the document provide clearer and tighter guidance regarding situations where this subject matter expert “may” be engaged versus when he/she “must” be engaged. Also, further clarification regarding the skill set required to be a subject matter expert would be a helpful addition to the document.	The role and need for subject matter experts will be highly variable between verification engagements and verification teams. The verifier must assess the specific needs of the engagement and the competencies and skills of verification team members and experts within the verification company to determine whether gaps exist that need to be addressed through additional external resources.
138	11	6		Quality is depending on the assurance system used.	Typically quality is dependent on the controls and not the assurance system. Note that these are considerations not truisms.
139	11	13		Need to clarify how transparency calculations support understanding/relying on data management system information.	Transparency of calculations should be considered in the data management review to determine what procedures can be applied and the type of evidence that can be collected.

	Page	Line	Comment Type /Topic	Comment	Follow-up
140	11	29		Should add one person can cover more than one role.	Roles and responsibilities were clarified, including identification of roles that must be conducted by separate persons.
141	12	14		Change Legal authority to sign on behalf of the verification company To Legal authority to sign the verification statement on behalf of the verification company There are many types of signing authority (e.g. dollar value). This change will clarify the intended type.	Suggested changes were incorporated.
142	12	23		Change Selecting the verification team and ensuring the team has the appropriate competencies for the verification To Ensuring the team has the appropriate competencies for the verification It is too prescriptive to require that the lead verifier be the one to select the verification team. There are other competent people within a verifier organization that can do this function.	Suggested changes were incorporated.

	Page	Line	Comment Type /Topic	Comment	Follow-up
143	12-15		competencies	Please describe who assesses whether the competencies and attributes are met by the designated signing authority, verification team, lead verifier? What are the principles / criteria?	The verification team must make an assessment when evaluating the work and the client must make an assessment when engaging the verification company.
144	13			Peer Reviewer's qualification must be higher and level of effort must be greater - Guidance on % of budget Typo Ln 28 at should be a	This is will vary between verifiers.
145	13		"The peer reviewer cannot be extensively involved in the verification"	Not clear why the word "extensively" has been added here. The peer reviewer should not be involved in verification activities as their role is reviewing the completed verification file. Adding "extensively" implies another standard.	The role and competencies of the peer reviewer were clarified.
146	13		"and cannot sign the statement of verification as this could compromise the peer reviewer's objectivity".	This is somewhat puzzling. The peer reviewer already signs a statement indicating their acceptance of the verification statement. I do not see why the location of the signature changes the peer reviewer's objectivity. The value of the peer review process comes from the peer reviewer having to sign off on the verification, giving a second opinion.	See response 145 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
147	13	28-30		Is there any guidance on the extent of involvement as %	This varies between verifiers and their risk management practices.
148	13	3		Change The peer reviewer provides guidance and an objective assessment of the verification prior to the issuance of the statement of verification and verification report To The peer reviewer provides guidance and an objective assessment of the verification prior to the issuance of the final statement of verification and final verification report This will allow the issuance of draft documents by the lead verifier prior to peer review	See response 145 above.
149	13	7		Does the peer reviewer do the independence assessment or make sure it was done.	See response 145 above.
150	13	28		Flag the change in program rules that mean the peer reviewer cannot sign the verification statement.	See response 145 above.
151	13	28		Should read “must maintain a degree of”	Done.

	Page	Line	Comment Type /Topic	Comment	Follow-up
152	13	29		The statement “The peer reviewer cannot be extensively involved in the verification ” is not consistent with pg 63 line 4. The latter is clearer.	See response 145 above.
153	13	29		The word “extensively” can be subjectively interpreted which could lead to inconsistency. Also best practices would call for the peer reviewer to not be involved at all in the audit that they will be reviewing, to provide objectivity.	See response 145 above.
154	13	Section 2.2.4.3: line 28		Grammatical “at”	Done.
155	14	Table 3		helpful	Thank you.
156	14	Table 13		Emissions reductions can be compared without functional equivalence.	This is a program principal addressed in other program guidance.
157	15	Table		Want a separate line item for facility requirements.	There are additional competencies for offset projects, but not for facilities.
158	15			Definition of procedures helpful	Thank you.

	Page	Line	Comment Type /Topic	Comment	Follow-up
159	15	Box		<p>Suggest rewording:</p> <p>Note: If there is no appropriate agricultural expertise on the verification team, agriculture offset projects would benefit from the addition of subject matter experts, such as Professional Agrologists, with relevant expertise in cropping or livestock management.</p>	<p>This now reads as an Agrologists with relevant expertise. Agrologists must adhere to their codes of practice and professional ethics.</p>
160	15	hint box		<p>hint box at the bottom does not add information of value</p>	<p>It provides an example of a specific area where subject matter expertise, if not available internally in a verification company, should be contracted to support the verification.</p>
161	15	7-11		<p>Add reference to requiring / confirming subject matter expert's independence</p>	<p>It is recognized that in some cases, there may not be enough experts to fully manage for independence. The lead verifier must use professional judgement to assess the results of subject matter expert including any potential for bias.</p>
162	15	3		<p>Wants section 2.2.4.4.1 to be located with Table 3.</p>	<p>Subject matter experts are not necessarily part of the verification team and may be subject to different independence requirements and controls. See response 161 above.</p>

	Page	Line	Comment Type /Topic	Comment	Follow-up
163	15	13		"subject matter expert's report" - subject matter experts do not typically issue a report but rather provide input on guidance to the verification team as required	Subject matter expert advice may be written or oral in nature, although from a documentation perspective, written is preferred. The term report has been changed to advice.
164	15	15		Does the subject matter expert need access to data and the person responsible.	This is negotiated with the verifier and varies depending on the situation.
165	15	30		Want planning split between facility and offsets	Principles are the same, regardless of whether it is a facility or a project. Nuances as needed are discussed in the subsections.
166	15	31		"existing and easily obtained information" - please clarify	This refers to information that is readily available at this stage of the verification.
167	16			Definition of analytical testing helpful	Planning analytics is good practice, but is not mandatory.
168	16	Figure 3		showing the 5 step process is helpful	Thank you.

	Page	Line	Comment Type /Topic	Comment	Follow-up
169	16	Section 3.1		<p>The bolded words appear to be a typographical error.</p> <ul style="list-style-type: none"> • 23 For initial verifications, this process requires a significant portion of time as the verifier collects and • 24 evaluates aspects of the operations, data, and responsible party's data management systems upon • 25 used to develop the greenhouse gas assertion. Subsequent verifications typically focus more on new • 26 developments that may affect the greenhouse gas assertion. 	Grammatical errors have been corrected.
170	16	15		It is not clear if the chart should reflect the sequential nature of the process as described in the text	See response 50 above.
171	16	23		<p>Initial verification might need to have higher budget. - This would force mostly 5 year series selections</p> <p>Ln 24 typo – delete: upon</p> <p>Not fully agree with ln 25-26, not just on the new developments</p>	Done.
172	16	24		Delete upon	Done.

	Page	Line	Comment Type /Topic	Comment	Follow-up
175	16	27		Do we need to discuss feedback loop to execution phase?	See response 50 above.
176	17			Historical graph of key variables – extra work, extra data, cost implications	This is the normal methodology, but not mandatory.
177	17			Information search	This is the normal methodology, but not mandatory.
178	17			Prior verifications can be relied upon - helpful	Note, that this does not imply that prior verifications can be relied upon, but that their information may be useful in planning the verification.
179	17	20-23		If there now is a need to review historical data please specify how many years.	This changes depending on the facility or project and its operating characteristics, but the intent is that the historical data provides information on the current year reporting.
180	17	6		please clarify what is meant by "reward systems"	See response 135 above.
181	17	14		Why is there a need to identify variables that may be related?	This supports analytical testing procedures.
182	17	18		Want production accounting added.	Done.
183	17	33		Should read “affect” instead of “effect”	Done.

	Page	Line	Comment Type /Topic	Comment	Follow-up
184	17	33		please remove - verification looks at the past so there is no need to review impending regulations. This is required for validation, not verification.	Verifications are assessed against rules that existed during the reporting period. Validation is a projection of future scenarios that may occur over the life of the project. However, verifiers should be aware of impending regulations as facilities may need several years to fully implement new regulatory requirements, and may in fact, make process changes in advance of the actual regulatory change.
185	17	33		Replace “effect” with “affect”	Done.
186	18	18		Please clarify or reword "the tone at the top"	See response 103 above.
187	18	19		Not clear. Needs to be broader.	Unclear on the concern with this line. No changes were made.
188	18	38		Guidance states: “For facilities, the greenhouse gas assertion is the high level statement made by the facility that it is in compliance with its approved baseline emission intensity limit.” However, our understanding is that the assertion is the reported greenhouse gas emissions level, which is what the verifier confirms.	Wording has been clarified.

	Page	Line	Comment Type /Topic	Comment	Follow-up
189	19	hint box		hint box at the bottom is confusing does not add information of value	Unsure on the specific concern. Hint box was kept.
190	19	13-18		This is the first definition of reasonable assurance in the document; however, in our opinion, it is not a very precise definition. We recommend including technical definitions of the three levels of assurance (limited, reasonable and absolute) early in the document and then either re-wording or removing these lines from section 3.2.	This section addressed a characteristic of reasonable assurance. Please review the glossary of terms for a definition of reasonable assurance.
191	19	Section 3.2		The bolded words appear to be a typographical error. <ul style="list-style-type: none"> • 19 Verification risk is assessed based on inherent, control, and detection risk in the greenhouse gas • 20 assertion and line items comprising the broader assertion⁸. These risks are discussed in more detail in • 21 Sections⁰ to 3.2.4. 	Errors were corrected in the final document.
192	19	Section 3.2.1.1	Greenhouse Gas Statement Level	may need some clarification in the box Statement Level vs Assertion - , is the assertion the GHG emissions or the GHG emission intensity for GHG inventory reporting	The box has been re-written to align with theoretical principles.
193	19	Figure 4		of attributes of the assertion	Unclear on the concern. No changes were made.

	Page	Line	Comment Type /Topic	Comment	Follow-up
194	19	5		Chart would be more relevant on p. 21 after line 15	Moved.
195	19	21		Typo/Missing information	Unclear on the concern.
196	20	First box	attributes vs line items	Second box illustrates that some risk cannot be known until the verification is being executed meaning the level of effort cannot be completely predicted - More detailed than our SARA process, cost implications	That is correct.
197	20	5-6		This is somewhat prescriptive - management support or engagement is a more likely form of management involvement in the process.	Please note that these are examples and may not apply in every situation.
198	20	14		Project proponent to disclose uncertainties and key assumptions	Yes, this is a requirement.
199	20	14		no reporting facilities disclose scientific uncertainties	Yes, this is a requirement.

	Page	Line	Comment Type /Topic	Comment	Follow-up
200	20	17		The “attributes” of the assertion outlined in the guidance are similar to the principles described in ISO 14064 Parts 1 and 2 (relevance, completeness, consistency, accuracy, transparency, conservativeness), but not aligned with ISO 14064 documents. If verifications must conform to ISO 14064-3, should the principles (attributes) not be consistent with the languages in the ISO 14064 standards?	ISO does not have the equivalent concept of attributes. Principles and attributes are different concepts.
201	20	25		Universal risk	Unclear on the concern. This table is provided as an illustrative example only.
202	20	27		More clear name for this attribute would possibly be ownership	Ownership is not always applicable. In offset projects and facilities, the project/facility may be operated by an entity different than the legal owner.
203	20	27		To improve clarity consider replacing the attribute “Occurrence” with “Ownership”	See response 202 above.
204	21	hint box		Within the hint box in reference to section 3.2.2, who is included as “key staff”? Examples would be helpful	Key staff will be variable based on facility operations and tasks as they relate to greenhouse gas quantification.

	Page	Line	Comment Type /Topic	Comment	Follow-up
205	21	28-29		The statement regarding aggregated projects is incorrect. Aggregation is a risk mitigation method that is well supported by actuarial science. It spreads out risk through diversification, which is the principle behind the insurance industry.	Verifiers must assess risks. In aggregated projects, unless there is a uniform control infrastructure in place, will have a higher risk than a non-aggregated project.
206	21	26		Inherent Risk - Disagree that offset projects have higher risks, because many reports include generation of credits and use of credits. Baselines as well.	The document refers to the risk of misstatement. For projects, the emission reduction value is generally smaller than the emissions of an inventory (facility), what is considered material is also generally smaller. As a result, the risk of material misstatement is higher on smaller amounts.
207	21	30 (Hint box, Section 3.2.3)		The “hint” here seems to miss the important point that a verifier can maintain independence while pointing out ineffective or missing controls, but cannot maintain independence if they provide advice related to how the responsible party should address missing or ineffective controls.	The principles of independence, particularly, the threat of self-review, does not allow verifiers to implement controls, but they are allowed to comment on and provide advice on how these controls might be implemented or improved as long as the responsible part has the discretion and responsibility of design and implementation any and all changes.
208	21	33		use ‘placed’	Unable to find this word. No change made.
209	21	35		May not be correct if we are working on go forward corrections approach.	Verification is about looking at historical data and the historical operation of the controls.

	Page	Line	Comment Type /Topic	Comment	Follow-up
210	22			issue with a placement of a table	Unclear on the concern. No changes made.
211	22	23-24		Not good example, too simplistic	This is a real example.
212	22	Section 3.2.4	Detection Risk	Rename section to risk assessment matrix or risk assessment.	The larger outline step is called Verification Risk Assessment; detection risk is a subcomponent.
213	22	5		Verification risk needs to connect to limited or reasonable.	This document was written for reasonable assurance only.
214	22	Figure 5:	Verification Risk Model and 3.2.5.1 Line items	table overlaid on the text	Corrected.
215	22	10		Disagrees that it is a concern if it is addressed in the protocol.	Did not understand this concern. Protocols specify quantification methodologies, records and other minimum standards, but do not speak to verification risks.
216	22	11		Detection confidence not inverse of detection risk but of inherent times control risk	Relabelled.
217	22	14		It would be more appropriate to label this table as “Detection Risk”. In our opinion, “detection confidence” has an opposing meaning.	Relabelled as Design of Detection Risk.

	Page	Line	Comment Type /Topic	Comment	Follow-up
218	22	21		Should data management system be an inherent risk.	A data management system is a set of controls and falls under control risk.
219	23			Line items - A level of detail we did not do with our SARA, cost implications	Please refer to CSAE 3410 for more information on line items.
220	23	2		Excellent chart	Thank you.
221	24	Table 5		This table uses terms “lower, higher, lower, lowest”. Are these terms relative to each other? Would it be appropriate to use a numerical ranking?	Different verifiers will have their own way of conducting this ranking. The intent is to communicate a relative ranking.
222	24	Table 5		Will this table be an expectation from the power generation facility?	This table is for illustrative purposes only. It does not reflect one specific industry.
223	24-27	Table 5		Useful table of examples and what to look for. Mobile sources, consideration that no distances are provided? Relevance?	This is a data gap and should be revealed in the data mapping exercise or at the GHG statement level, not in the controls or inherent risk at the assertion level.
224	24	18	Section 3.1.2	“Controls can be endemic (e.g., the tone at the top) – what is meant by this statement? Terminology is not clear.	See response 103 above.
225	25	1		Add Line Item for Emission Factors for completeness	Completeness of emission factors is a risk at the GHG statement level, not at the attribute level.

	Page	Line	Comment Type /Topic	Comment	Follow-up
226	25	Table 5		The discussion of the Inherent Risk for the Classification Attribute under the SF ₆ Line Item appears to contain a typographical error.	Done.
227	25	21	Section 3.2	Problem with the referencing and bullet formatting.	Formatting was fixed in the final document.
228	26	Table 6		The discussion of the Inherent Risk for the Occurrence/Completeness and Accuracy Attributes under the Baseline-Direct Fuel Related Emissions Line Item appears to contain typographical errors.	Done.
229	27	1		Use existing protocol.	Caution must be used on items that are dynamic and subject to change over time.
230	27	Table 6		The discussion of the Control Risk for the Accuracy Attribute under the Project-Direct Fuel Related Emissions Line Item appears to be incomplete or cut off.	Done.
231	28	Box		that consistency and reliability have a higher priority than completeness and accuracy - While this may be valid, we still need complete and accurate reports / projects right?	The box has been removed as this concept is addressed elsewhere in the document above Figure 1.

	Page	Line	Comment Type /Topic	Comment	Follow-up
232	28	Box		How does this line up with the very conservative material error allowed of 5%. Do we allow for a trade-off of consistency and reliability with completeness accuracy? If we ratchet up the verification do we allow for 7.5% or 10% material error?	See response 231 above.
233	28			The planning section provides a reasonable conceptual model that should be considered a best practice. There are elements of this process that are not practical to conduct at this stage of the verification in many cases. In particular: a detailed contribution analysis is not possible until after the year-end. Currently, many site visits are conducted prior to the year-end so it is clear that the site visit activities are not able to be driven by this document.	See response 50 above.
234	28	Hint box		It is incorrect to state that completeness/accuracy is lower priority than consistency/reliability. Please explain or provide a reference if you think it is worthwhile to include this.	See response 77 and 231 above.
235	28	19-29		helpful for analytics	Thank you.

	Page	Line	Comment Type /Topic	Comment	Follow-up
236	28	37-38		Production must be verified - This is usually covered in financial audits or government reports, so can we not rely upon other verifiers?	The verifier must assess whether the audit work being used is appropriate for the verification. Externally reported data may not, in all cases, be applicable to greenhouse gas assessments.
237	28	Sections 3.3 and 3.4		Excellent!	Thank you.
238	29	3-5		For offset projects, should materiality not be assessed against the emission reductions being asserted rather than project or baseline emissions? Since net emission reductions are always smaller than either project or baseline emissions, something that is immaterial when compared, say, against project emissions (e.g. 3%) might cause a much larger change in the net emission reduction (e.g. 20%). Clarification is requested under this section, which possibly requires further consultation by government and members of the task force with market participants.	The example was corrected. Please note, the contribution analysis is used to focus the direction of the verification, not to determine materiality.
239	29	7		Does this include calculations? All data and calculations used to create the assertion?	Unclear on the concern. Please note, all examples provided are examples only. Verifiers must develop their own forms appropriate to the facility/project being verified.

	Page	Line	Comment Type /Topic	Comment	Follow-up
240	29	Table 7		Please define units, is "/a" per annum?	The term was added to the glossary.
241	29	Table 7		AESRD indicates that production values must be verified and provides as an example the direct summation of several alkanes to calculate the total annual production, which is used in determining the emission intensity. However, there are facilities in Alberta in which direct summation of products is not entirely appropriate and could result in misleading emission intensity assertions. Although there are examples where direct summation of products is not appropriate, there is not always clear guidance for reporters as to how to quantify dissimilar products (e.g. barrels of oil equivalent, etc.) nor is there always clear guidance as to how to verify the associated assertions. Examples of this issue would be facilities that produce both bitumen and synthetic crude oil or natural gas liquids, natural gas, and elemental sulphur. Additional guidance with respect to AESRD-acceptable methods for quantifying products would be very helpful to both reporting facilities and to verifiers.	AESRD approves facility baselines, including the production metrics used to report products. If you have concerns about the production denominator being used, please contact AESRD to discuss.

	Page	Line	Comment Type /Topic	Comment	Follow-up
242	29	8		At the bottom of the example table, a straight sum of volumes is used to total amounts of different fuels. Would there actually be any value in doing this on a volume basis, since they all have different energy contents and resulting emissions per unit volume? Summing on some sort of equivalent basis (e.g. BOE, MJ, etc.) would seem more appropriate.	In this example, there would be no significant difference if done on an energy or volume basis but working with other types of hydrocarbons there may be and the verifier should use an approach that is appropriate to the production type.
243	29-30	Table 7		useful examples of contribution analysis	Thank you.
244	30	4		It would be helpful if the section on materiality clearly defined materiality for offset projects in addition to materiality for regulated facilities.	Page 31, Line 9 states offset projects use a 5% materiality threshold.
245	31	Box	Uncertainty	Need to clarify here that the uncertainty is in the data collected and controlled by the proponent. For example some emission factors, though based on the best current science, contain a great deal of uncertainty.	The box refers to qualitative uncertainty not quantitative uncertainty.

	Page	Line	Comment Type /Topic	Comment	Follow-up
246	Submitted		Materiality Threshold and Uncertainty	Many of the meters in current service at downstream facilities have an accuracy of $\pm 5\%$. The only way to meet the proposed uncertainty threshold would be to install custody transfer meters. Extensive change-out of functional capital stock at operating facilities would be required. Procurement and engineering typically require many months lead time and installation would need to be managed around facility shutdown periods that occur only every few years. Clarity on acceptable uncertainty is required.	Uncertainty in methodology is not be factored into the materiality calculation. AESRD requires companies to use the most accurate methodology available, however we recognize there is associated uncertainties in calculation methodologies. Disclosure of these uncertainties is required. Calculations with high uncertainty may affect the verifier's ability to come to a conclusion on the assertion.
247	Submitted		Materiality Threshold and Uncertainty	Clarity around "acceptable uncertainty" is required as the expectations under Section 3.6.7 and Section 3.6.8 appear to be contradictory. In the first paragraph of Section 3.6.7, it is stated that estimates are commonly used and that metering technologies are evolving, are costly, and may not provide improved accuracy of information. Section 3.6.8 then indicates that the most accurate available methodology is to be used to limit uncertainty, and Table 14 shows that monitoring and direct measurement provide the most certainty.	Uncertainty is usually an issue of qualitative materiality unless significant enough to affect the assertion. Verifiers must use professional judgement in assessing the impacts of uncertainty to the assertion.

	Page	Line	Comment Type /Topic	Comment	Follow-up
248	31	20-24		Examples provided are split into two places some inline, others in the text box, but there doesn't seem to be any real difference between the two lists. Suggest consolidation.	Text boxes have been used to highlight items that AESRD feels are important, and based on our experience, have resulted in frequent errors identified during government audits. The information in the text box supports information in the text.
249	31	20-24		Spelling error, 'erode' is correct.	Grammatical errors have been corrected.
250	31	5-6		Suggest making clearer that this is for inventories as it is described elsewhere in the document	Done.
251	31	5		Wants an overarching statement that says the program uses a risk based approach and minimum errors need to be brought to gov't attention.	Verification theory requires errors over 5% to be disclosed; however, AESRD requires both immaterial and material errors disclosed. This assists us in understanding facility/project performance and in identifying areas of the program that require further improvements.

	Page	Line	Comment Type /Topic	Comment	Follow-up
252	31	10 (Hint box, Section 3.5.1)		Is AESRD really stating that high personnel turnover at a regulated facility in and of itself may be the cause of material error? If so, it seems that the regulation is effectively now dictating a minimum standard for private sector turnover rates in an environmental regulation. It may be more appropriate to use the turnover rate within the evaluation of inherent risk during the verification risk assessment. This comment is also extended to training for key personnel (line 9, page 49) since AESRD has not defined minimum training requirements for key personnel in any guidance documents.	No, but high staff turnover can be a risk, particularly in cases where facilities or projects lack documented procedures. Facilities/projects should take steps to minimize risks caused by staff turnover including developing written procedures, etc. High turnover may be a qualitative concern for a verifier. AESRD is not stating that this is a standard, rather that this is a potential judgement call by the verifier.
253	31	Section 3.5, Line 9		The “a” in the following sentence appears to be a typographical error: <i>Offset projects use a 5 per cent of the emission reductions or removals for a materiality threshold.</i>	Grammatical errors were corrected.
254	31	Section 3.5.1, Line 11		The word “quantitative” in the sentence below contains a typographical error: <i>Materiality can be thought of in qualitative/quantitative terms.</i>	Done.

	Page	Line	Comment Type /Topic	Comment	Follow-up
255	31	15		<p>Do we have an agreed upon way to deal with the inherent variability of emission factors or other factors used for quantification. In most cases approved emission factors are considered correct thus uncertainty comes only from project data. for controlled project data, is it appropriate to determine the potential error and account for it (e.g., use of lower bound of the 95% confidence interval rather than average). this is the conservative approach that I have been taking as it assures that a material error is unlikely (only 2.5% chance value is more than the true value).</p>	<p>Emission factors are part of the quantification. Uncertainty in the quantification methodologies is dealt with is in Section 3.6.8.</p>

	Page	Line	Comment Type /Topic	Comment	Follow-up
256	Submitted		qualitative assessments	<p>We are very concerned with the difficulty and amount of effort required by verifiers to comply with the draft document. Of particular concern include the requirements regarding estimates and the use of qualitative assessments. Natural gas pipeline transportation occurs over a very large geographic area with thousands of discrete emissions sources. As such, estimates are used extensively for a number of significant emission sources to determine the magnitude of overall emissions. The need to triangulate estimates will be cumbersome and time consuming. An appropriate alternative may be determining estimates to triangulate based on a risk assessment (e.g. proving the number of components only at a certain station type). In addition, due to the complexity of pipeline systems, the use of qualitative assessments based on a misunderstanding and/or lack of published data (e.g. fuel consumption on in-house manufactured equipment) may prevent us from receiving appropriate assurance statements.</p>	<p>The guidance (Section 3.6.7) allows for the alternative approach to test the processes used to make the estimate.</p>

	Page	Line	Comment Type /Topic	Comment	Follow-up
257	32	17-18	Tolerable error	It is not clear how the tolerable error percentage values were chosen. Could more guidance – or the underlying rationale – please be provided, or perhaps highlighted in future iterations of the guidance document?	The actual methodology is not a must, but the consideration of tolerable error must be done. See response 259 below for more information on tolerable error.
258	32	1	Tolerable error	I have read this section and the table several times and I do not understand how tolerable error is determined.	See response 259 below.
259	32	Section 3.5.2	Tolerable error	This approach requires clarification and explication for use with biological quantifications as they are frequently somewhat cumulative. If quantification is cumulative then minor (non-material) errors may accrue upward to materiality with despite there being no further errors made.	Tolerable error has been redone so that is mathematically correct. Please note that because of the way error propagates to the final values, there is an infinite number of ways to set tolerable error at a line item level. As a result, it requires judgement on the part of the verifier to determine tolerable error based on inherent and control risks.
260	32	5		User materiality laid out explicitly in compliance guidance.	There were some concerns with the equations used. Also, we have expanded how materiality should be quantified. The compliance guidance will need to reconcile the align with these new requirements.

	Page	Line	Comment Type /Topic	Comment	Follow-up
261	Webinar		Audits	Is there still a need for an audit even with the reasonable level of assurance?	Yes, AESRD will continue to audit a percentage of compliance submissions/offset projects annually to assess program performance. Audits allow AESRD to assess program performance. Please see relevant sections of program technical guidance for more information on the government audit process.
262	Webinar		Audits	Will GOA auditors also use method 1?	AESRD auditors use the same methodologies as third party verifiers. The difference is that they are contracted by AESRD rather than the facility or project. Please see relevant sections of the program technical guidance documents for more information on the government audit process.
263	Webinar		Audits	Will government audits be conducted using the same guidance? i.e. the verification and audit should be conducted to the same standard in future, unlike in the past where audit was at a higher standard?	See response 261 and 262 above.
264	Submitted		Audits	Clarification on the criteria that AESRD will utilize to do their own audit of GHG verifications would be helpful, especially if they are going to be significantly different from this guidance.	See response 261 and 262 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
265	32	Table 10		Entire table should be on a single page	Formatting issues have been corrected.
266	32	Table 10		Examples of source errors and CO2, CH4, N2O, SF6 etc errors - Are these meant to be what we should use? For example, if no stationary combustion, but mostly others with higher error, then materiality threshold cannot be met.	This is an example only and is not intended to be used as a template. See response 259 above for more information on tolerable error.
267	32	11	Tolerable error	It's unclear how tolerable error is set. Could you provide example calculations?	See response 259 above.
268	32	Section 3.5.2: Line 11	Tolerable error	Does the 500,000 CO2e include emissions from biomass?	See response 259 and 266 above. Note, biomass treatment is discussed in more detail in the Technical Guidance for Baseline Emission Intensity Applications and for Specified Gas Compliance Reports.
269	32	17	Tolerable error	Is AESRD really willing to accept 50% error on individual line items or emission categories, such as is shown in the example in Table 10?	See response 259 above.
270	32	17	Tolerable error	Tolerable Error is very high. Will this allow other verifiers to do less work? E.g. needs clarification in order to provide comments.	See response 259 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
271	Webinar		Tolerable error	Going back to the tolerable error example in the document, when you aggregate the tolerable errors for each individual line items the total error is greater than the materiality threshold. I guess this is only for illustrative purposes	See response 259 above.
272	Webinar		Tolerable error	Could you please take us through an example of how you use the concept of tolerable error in materiality planning?	See response 259 above.
273	Webinar		Tolerable error	Need some more elaboration on "Tolerable Error". The example in the guidance document is a bit confusing. Adding up the errors at categories level results in overall error greater than the materiality threshold	See response 259 above.
274	Webinar		Tolerable error	The example for tolerable errors shows 25% for Fugitive emissions category which happens to be more than the 2% materiality threshold of the total emissions of 569,950.	See response 259 above.
275	Webinar		Tolerable Error	With the 2 methods of error used, in the example given, how would this affect the statement of verification?	See response 259 above.
276	Webinar		Tolerable Error	Could you please describe the assessment of error in more detail?	See response 259 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
277	33		Reliance on other audits	May use the work of other Auditors / Verifiers	The verifier must use professional judgement to assess whether the work done by another auditor is appropriate and of sufficient quality to support the greenhouse gas verification.
278	33	2	Reliance on other audits	Does this include use of a previously conducted AESRD audit of a facility/offset?	See response 277 above.
279	33	Section 3.5.3	Reliance on other audits	What procedures need to be executed to rely on other auditors/verifiers? What is the extent of the reliance? Are third party calibration records acceptable? Do we need to obtain their calibration procedures from them for every third party calibration consultant? What about internal instrumentation technicians who do the calibration? Can we rely on their data?	See response 277 above.
280	Webinar		Reliance on other audits	What about using Alberta Environment audits from previous years? Can these be used?	See response 277 above.
281	Webinar		Reliance on other audits	Regarding relying on other audit information, can we accept data from financial statement that is audited by certified accountant?	See response 277 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
282	33	Table 10		3% calculated in example is higher than user materiality for the sample facility.	The example was corrected.
283	33	12		Provide an example of how tolerable error was calculated.	See response 259 above.
284	34			May use Internal Audits - helpful	Thank you.
285	34	1-3		Other Auditors / Verifiers is sufficient and appropriate to support the GHG verifications. - How do we gain access to this information?	See response 277 above. If previous verifications or audit reports are being used, these must be provided by the client. AESRD does not disclose these reports to parties other than the auditee.
286	34	2		Why do we have this section? Are we allowing this?	Intent of this section is to clarify when the work of other auditors may be of value in supporting the greenhouse gas verification. See response 277 above.
287	34	4		Section 3.3 - Planning Analytics, “initiating the verification” – does this mean prior to the site visit? Or prior to the contract with the verifier being put in place? No detail on when this initiation occurs in the timeline of verification events, more detail would be good.	See response 50 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
288	Webinar			Under planning analytics the verifier is supposed to focus on significant items. Who defines what significant is?	The verifier must decide what is significant based on user materiality and the risk assessment.
289	34		Fig 6	Difficult to read text in graphic	Formatting was fixed.
290	34	5	Section 3.5.3.1	Does the internal auditor require any particular qualifications?	<p>Requirements for internal auditors will be specified based on the nature and expectation of the internal audit work. The lead verifier is required to make a decision on whether or not this work is of sufficient relevance and quality to support the greenhouse gas verification work.</p> <p>The verifier must assess the qualifications of the internal auditors to assess the relevance and reliability for the greenhouse gas verification. Work of other auditors may not, in all cases be relevant or useful for the purposes of assessing greenhouse gas verifications.</p> <p>See response 277 above.</p>
291	34		Section 3.6: line 16	Grammatical “based on”	Done.

	Page	Line	Comment Type /Topic	Comment	Follow-up
292	34-47		Section 3.6	<p>AESRD discusses the development of a Verification Plan and describes AESRD’s expectations for testing the data to verify assertions. An issue of concern, however, is that the AESRD’s Technical Guidance for GHG Reporting¹ offer reporting facilities the flexibility to use methods that have multiple tiers of data quality ranging from high-tier (i.e., facility-derived emission factors and metered data) to low-tier (i.e., generic default emission factors and best available data). Although specific guidance documents are referenced, AESRD does not specify what tier the reporting entity is required to adhere to. The result is a range in data quality from high-quality to low-quality with corresponding differences in accuracy and precision of the reporting. As such, facilities using lower-tier methods (that have minimal data quality requirements) may be verified to a reasonable level of assertion by using broad assumptions that, while high-risk, are acceptable using the lower-tiered methods employed. Conversely, facilities that use higher-tier methods to generate more precise data may receive qualified or even adverse statements if the reporting facility cannot produce all of the supporting data and quality forms necessary to support the higher-tier methods. The unintended result is that facilities using the higher-tiered methods will have a substantially higher threshold to meet and could be unfairly punished for selecting the more stringent reporting methods, while facilities using</p>	<p>AESRD has always required the most accurate methodology available be used and does not accept methodologies below generic emission factors (See Section 5.5 of the Technical Guidance for Completing Baseline Emission Intensity Applications for more information).</p> <p>Please note, the use of generic emission factors when site specific data was available has resulted in a number of facilities being required to restate their baseline and annual compliance reports.</p>

	Page	Line	Comment Type /Topic	Comment	Follow-up
293	35	2		Feel the statement as written means verifiers must use the use the work of external auditors.	See response 277 above.
294	35	4		Not comfortable with internal audit.	See response 277 above.
295	35		Figure 7	illustrating substantive and controls approach relationships	Unclear on the concern. No change made.
296	35	19		Verification strategy does not address the fact that there are no unversally agreed upon quantification methodologies. Can't be purely a controls issue – need to look at and verify inventory.	The criteria set by AESRD must be adhered to. Note, verification approach relying solely on controls will not be accepted by AESRD.
297	35	35		specify how many prior verification are required to be reviewed	AESRD is not mandating review the work of previous verifiers, however these may assist the verifier on a case-by case basis.
298	36	box		Typo last sent. Should be:will be reassessed	Done.
299	36	Table 11		excellent examples of control effectiveness tests	Thank you.

	Page	Line	Comment Type /Topic	Comment	Follow-up
300	Webinar			Can you explain the difference between substantive and control checks in a little more detail?	These are verification fundamentals that verifiers should be familiar with. Controls assesses the data management system, data entry points, securities, etc. Substantive testing assess the records. See response 312 below.
301	36	16		Does not feel controls reliance verifies the assertion.	See response 296 above.
302	36	21		The table for testing the effectiveness of controls is useful. Would it be possible to have an example table for substantive tests?	See Table 11 in the final guidance document.
303	37			2) and 3) p - Seem to contradict each other? Re-word for clarity.	Done.
304	37	1		Needs to connect to risk assessment.	Agreed, there is a relationship between materiality and the risk assessment.
305	37	2		Does wording in text previous to this support concept that it is not necessary to use a controls approach (e.g. use of "should", "may")	Controls reliance is not necessary, but can be used to support the audit. Full reliance on controls is not permitted.
306	37	9		Not sure what is being said.	This is a discussion point to clarify how controls and substantive testing are used. Wording has been clarified.

	Page	Line	Comment Type /Topic	Comment	Follow-up
307	37	13 (Verif. Plan)		We recommend AESRD provides a summary table of mandatory requirements for the high-level Verification Plan and detailed Verification Plan, similar to Table 22 provided for Verification Report contents and Table 21 Working Paper contents.	See response 49 above.
308	37	15		Do not think samples a can be too big for substantive testing.	A substantive testing only approach for very large and/or complex projects/facilities or data sources with high frequency readings can be cost prohibitive. In these situations, substantive testing supported by controls assessment is encouraged.
309	37	18		What is meant by "previous assertions" and how is this relevant?	Prior assertions may provide context for the current assertion (e.g., if prior assertions had additional disclosures) that may be helpful to the verifier.
310	37	25		The guidance requires the Verification Plan to include the GHG subject matter associated with the assertion. Subject matter is defined as all relevant info used to develop the GHG assertion. It is not clear why this information should be in the Verification Plan. Perhaps it would be appropriate for the Verification Plan to identify where subject matter data will be sourced from.	This has been clarified.

	Page	Line	Comment Type /Topic	Comment	Follow-up
311	37	Section 3.6.2		again reference to “ ... such as CSAE 3000” should be CSAE 3410	Please note that CSAE 3410 does not apply to projects; CSAE 3000 must be used by the professional accountants.
312	37	27		What is meant by "control environment"?	Control environment refers to the electronic systems, data management systems, securities, calculations, etc that affect data collection.
313	37	32		typo should read "site visit"	Done.
314	37	33		please provide a reference that states the need for documenting health and safety requirements in a GHG verification	This is not mandated; however, this should be documented for corporate due diligence and may helpful to document the safety of the verifier on site should the verifier end up in litigation.
315	37	41		Text missing after Sections	Corrected.
316	37	41		Typo “Sectionso”	Corrected.
317	37	Section 3.6.2, Line 41		There appears to be a typographical error in the reference to the section numbers in the following sentence: <i>determine whether the risk is a reality. See Sections0 to 3.2.4 for more information on risks.</i>	Corrected.

	Page	Line	Comment Type /Topic	Comment	Follow-up
318	38			Flaring - "observe zero span testing" beyond the scope of a site visit to arrange for contractor to perform calibration while facility is operational	Calibrations do not need to be witnessed by the verifier; however calibration records do need to be retained as part of the supporting data for the greenhouse gas assertion.
319	38	34		Is material risk a new concept?	Text has been clarified.
320	38-39	Table 12		good examples of procedures in a VP	Thank you.
321	39			Production - what is meant by shrinkage?	Shrinkage is a common term that applies to product loss prior to sale.
322	40	30-33		<p>Direction for a responsible party is included here. Since this is more of a guidance document for verification bodies, suggest that it is rephrased such that the verification body is required to prompt the responsible party to contact AESRD.</p> <p>Also, this presents one example of where either an adverse statement or no statement might be issued should the responsible party not sort out these issues.</p>	Text has been clarified.
323	40	1		Typo on table reference should read "Table 12 above"	References have been corrected.

	Page	Line	Comment Type /Topic	Comment	Follow-up
324	40	8		Please provide a reference that states the need for the "element of surprise". This seems to imply the verifier should be somehow "sneaking up" on facility staff?	Some information must be provided to the responsible party in advance of the verification and site visit; however, the specific details are not disclosed to ensure independence during the review, and to prevent records from being developed after the fact to meet the verifier's needs. Text has been clarified.
325	40	7-8		We would appreciate if AESRD could provide more description about performing verification procedures with an "element of surprise". Does this simply mean that the verification should be conducted with independence, ensuring that objective evidence is collected in support of the verification conclusion? If so, perhaps the term "surprise" could be removed as it has many connotations, which are not related to professional conduct.	See response 324 above.
326	40	13		Not all the listed required disclosures can be provided before the site visit (e.g. a list of documents and records and even some procedures) if they are not known until the site visit. We recommend adding "where possible" to the wording.	Text has been clarified.
327	40	13-14		Same comment	See response 326 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
328	40	16		<p>The guidance indicates that the preliminary GHG assertion should be included in the information that is communicated to the Responsible Party before the site visit (High Level Verification Plan).</p> <p>This is often impractical because the site visit may occur before the end of the reporting period. The preliminary data review is obviously an important part of the verification planning process; however, we see no value in communicating a quantity (the GHG Assertion, past or present) back to the Responsible Party through the Verification Plan. Listing this value in the Verification Plan does not show that the verifier conducted verification planning; it simply shows that the verifier knows how to transcribe a value, and introduces the risk of transcription error into the verification documentation.</p> <p>Instead, it may be appropriate to indicate the version and/or date of the preliminary GHG assertion that was reviewed during the verification planning process.</p>	<p>Communication of the preliminary GHG assertion back to the responsible party is done to ensure that all parties (the responsible party and the verifier) acknowledge the preliminary GHG assertion at the start of the verification to ensure both the verifier and the responsible party have the same starting point for information.</p>

	Page	Line	Comment Type /Topic	Comment	Follow-up
329	40	22		This seems difficult considering the responsible party may have to facilitate sampling.	The verifier must provide a preliminary schedule for the verification. It is expected that some flexibility, within reason, may be needed to accommodate schedules.
330	40	25		Section 3.6.1 - “substantive testing,” definition? Refers to verification activities ranging from “controls reliance and substantive testing,” does this imply calculation methodology checks or other actual testing of measuring devices?	Please see the glossary.
331	40-43	Section 3.6.3		Good description of the procedures	Thank you.
332	41	7		Digital photographs? most companies prohibit taking photographs on site	AESRD has observed a number of audits and in all cases, audit teams were able to obtain permission to take photos to assist the audit.
333	41	23		Discuss role of sampling plan in pre-site visit correspondence.	The sample plan is not shared with the responsible party before the site visit. This could affect the independence of the audit. See response 324 above.
334	41	26		This implies the verification team should somehow "sneak up" on facility staff which is an unreasonable expectation.	See response 324 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
335	41	Section 3.6.3.2: Line 26		I'm not sure how practical this is as most industrial sites require "guests" to be accompanied by an employee	The project developer/facility is responsible for facilitating the verification, and is required to provide time, staff, and access to the site as needed by the verifier to complete their work. While we recognize that verifiers cannot be allowed free access to the site, the project developer/facility must work with them to ensure sufficient time and access are provided to complete the site visit.
336	41	14, 17		Please elaborate why tracing is used for understatements and cannot also be used for overstatements.	<p>Tracing follows the audit/data trail from measurement to reporting of the aggregated information. Tracing tests for understatements because, at every point in the data/audit trail, the verifier has a view of whether all information is properly recorded. Missing information would result in an understatement.</p> <p>Vouching follows the audit/data trail from the reporting of aggregate information back to measurement. It tests for overstatement because, at every point in the data/audit trail, the verifier has a view of whether the aggregated information is properly supported, but does not provide evidence that all information is properly recorded.</p>

	Page	Line	Comment Type /Topic	Comment	Follow-up
337	42	3		If an individual has agreed to be interviewed that is normally sufficient. It is an unreasonable burden to require additional approval.	This requirement is to ensure the verifier has accurately recorded the conversation, and not introduced error. It also provides a document trail for the verifier's working papers should the verifier ever end up in litigation.
338	42	Section 3.6.3.4	Confirmations	What is acceptable with respect to third party data? If the client provides us with third party data (e.g. lab results) clearly identifiable as third-party sourced is that acceptable? Is it necessary to contact the lab itself? Is it sufficient to get data from the third party website? In the past, we have gathered third party data (lab results, natural gas invoices, calibration records) from the client. These have been relied upon for our verification. The data is usually from a third party website or on a third party letterhead. We want to confirm that the confirmation section is not implying that we would need to independently confirm this data from third party organizations as this would create many delays in the verification process.	Confirmations has been clarified in the text and added to the glossary of terms. Confirmations for greenhouse gas verifications focus on information that is not addressed through criteria, but that AESRD requires the verifier to check, such as facility location, consistency in document names, correct dates, etc.

	Page	Line	Comment Type /Topic	Comment	Follow-up
339	43	box		<p>Suggest rewording below:</p> <p><i>Note: very poor quality evidence may not be appropriate regardless of the amount of evidence-quantity available. An example of poor quality evidence would be attestations without any form of supporting evidence documentation.</i></p>	Done.
340	43	24		The purpose of the diagram is not clear. It is our understanding that AESRD is looking for sufficient and appropriate evidence not the balance.	There is a relationship between sufficient and appropriate evidence as described in the text. If evidence is appropriate, less may be required to have sufficient evidence to support the assessment. Conversely, if evidence is not appropriate, no amount of evidence will be sufficient to complete the verification.
341	43	29		Should this be comparative analytics?	No, the text is correct.
342	43	33		Need clarification on why testing is done on original sample.	Unclear on the concern. Please note, AESRD requires the verifiers to test original records to support the greenhouse gas data and assertion. Lack of original records has resulted in a number of offset projects being required to restate their emissions reduction claims.

	Page	Line	Comment Type /Topic	Comment	Follow-up
343	43	36		Should be reported independently?	These are two separate concepts.
344	44	5		Left column of table is this meant to be continuum from high to low reliability? (presently marked as discrete rows) Suggest this be changed to be in line with Table 14 that uses an arrow graphic to convey this.	An arrow has been added to clarify the table.
345	44	5		Is the left column of the table meant to be a continuum from high to low reliability? Suggest that this be changed to be in line with Table 14 that uses an arrow graphic to convey this.	See response 344 above.
346	44	Section 3.6.4, Lines 3 and 4		The reference in the sentence below should be to Table 13: <ul style="list-style-type: none"> • <i>The reliability of the evidence depends on the nature and source of the evidence.</i> Table 14 below <ul style="list-style-type: none"> • <i>shows a general hierarchy of evidence.</i> 	References have been corrected.
347	45	3-14		I don't understand the need for this section and the content is unclear.	This section relates to transparency and qualitative aspects of the assertion.
348	45	2		Missing punctuation	Grammatical errors have been corrected.

	Page	Line	Comment Type /Topic	Comment	Follow-up
349	45	13	Terms	The term “statement of unadjusted differences” is introduced in this section. Could this term be more clearly defined? Could further guidance, and possibly examples, be provided in the guidance document?	The statement of unadjusted errors is a list of errors, both fixed (adjusted) and unresolved (unadjusted) that affect the greenhouse gas assertion. The verifier needs to make sure the analysis of errors matches the opinion, but cannot control whether the client makes the adjustments. See the glossary.
350	Submitted		Terms	It seems that the terms “unadjusted differences” and “misstatements” are basically synonymous. To improve consistency throughout the document, could misstatements be used throughout?	See response 349 above.
351	45	17		Suggest "volume of gas emitted to the atmosphere or sequestered from the atmosphere."	Biological sequestration is typically emissions removed from the atmosphere and stored in the soil. Carbon capture and storage is also a form of sequestration that catches emissions before they are released to the atmosphere.
352	45	19		What is meant by "generic" fitting counts?	This is a standard industry measurement technique for assessing fugitive emissions and is widely used in oil and gas facilities.
353	45	24		Should this be moved to execution phase?	This is the development of procedure for estimates.

	Page	Line	Comment Type /Topic	Comment	Follow-up
354	46	6		What is meant by "undertaking additional disclosure"?	Additional disclosure occurs when the verifier feels uncertainty in an assertion is higher than is normally encountered in that industry or from prior years, and that this uncertainty should be brought to AESRD's attention.
355	46	13		typo - should state "Technical Guidance for Completing Specified Gas <u>Compliance</u> Reports"	Done.
356	47	1		last two rows of Measurement column are repeated	Done.
357	47	4		Suspected fraud rather than fraud (unless fraud is admitted I suppose). In the case of aggregated projects, where the suspected fraud may be at the farm operator rather than aggregator level, another option for the verifier could be to notify the aggregator and allow the aggregator to remove the suspect farm operator from the project, notwithstanding the fact that certain verification/ sampling tests would still have to be satisfied. This would allow a more detailed investigation of the problem while not jeopardizing the project as a whole.	It has always been the expectation that errors identified during verification be corrected before the verifier issues the final statement of verification. Material errors need to be resolved and projects must have a clean assurance finding before offset credits can be serialized on the registry.

	Page	Line	Comment Type /Topic	Comment	Follow-up
358	47	5		Expand this thought	Text was clarified.
359	47	7		Notifying AESRD should be sufficient for enforcement action. Requiring the verifier to seek legal advice adds significant costs and is unreasonable.	This is a measure that verifiers may need to take to protect themselves in situations that could result in litigation. While not mandatory, it may be good business practice in some situations.
360	47	Table 14:		Need a place where audited regulatory reporting for other reasons fits on this scale. For example, where do forms TM-09 and TM-44/35 fit into this scheme when used with weighed waste streams in determining additionality of biomass.	This would fall under the use of other verifiers' work. Please see response 236 above.
361	47	15		Table 15 as a whole is unclear. What is meant by the fairness of GHG assertions?	This refers to whether or not the GHG Assertion correctly represents the emissions, production, and emissions reductions.
362	47-48	Section 3.6.10		Summary of verification procedures	Text has been clarified.
363	48	Table		Reference	Table 16 was developed for this guidance document.

	Page	Line	Comment Type /Topic	Comment	Follow-up
364	48	6		In section 3.6.5 it states that AESRD <i>requires</i> verifiers to conduct site visits. However in section 4, page 48, line 6, AESRD states “ <i>Site visits, although not a verification procedure, are a convenient method...</i> ”. Could AESRD clarify if site visits are in fact required in the verification process?	Site visits are required.
365	48	9		Does AESRD require notification? Is there discretion	Concern was unclear. Reporting requirements are discussed throughout and summarized in Section 5.2, Verification Report.
366	49	15-18		Cannot know this in advance so scope changes may be required	The scope does not change; however, additional procedures may be required for the verifier to have sufficient and appropriate evidence to arrive at a conclusion.
367	49	5		What is the time limit for companies to respond to AESRD if unadjusted errors are found?	Facilities must submit the compliance report and verification report by March 31. If the facility is not able to resolve material errors prior to submission, this issue and timelines for resolution must be discussed with AESRD. Unadjusted immaterial differences will be assessed during AESRD’s compliance review. Offset projects must resolve material errors prior to submission to the registry.

	Page	Line	Comment Type /Topic	Comment	Follow-up
368	49	8		Add consistency of operations, production, baseline, etc.	These are likely not control risks, but rather symptoms of poorly performing or missing controls.
369	50	6		This may be a little confusing as this is a random sample by the definition used by statisticians. In order to use most statistics you need to have a random sample. Consider changing the random category below to Unstructured.	The term unstructured has been used. Note, accountants also use the term haphazard.
370	50	9		Unadjusted or uncorrected?	Grammatical errors were corrected.
371	50	13		Feel this needs more explanation.	There is a significant variety of approaches in how stratified sampling can be implemented. Additional examples have been added, however, if it remains unclear, please seek additional guidance on statistical sampling beyond this document.
372	50	14		See comment above. Consider changing to "Unstructured" or "biased" defined as: "the sampling has no structured technique. Random selection (e.g., selecting files from a box or drawer by hand) without ensuring unbiased (equal) opportunity for selection is not a valid sample. AESRD will not accept unstructured (biased) sampling."	See response 369 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
373	50	15		See above comment. Change random to unstructured or biased in this paragraph.	See response 369 above.
374	50	15		typo - Each form of sampling <u>except</u> ...	Done.
375	50-51	Section 4.1.1 Lines 6-14		Sampling types, table 19 helpful	Thank you.
376	50-51	Section 4.1.1 Lines 6-14		Disagree on definitions. Random is the way that statistical samples are chosen, each with same probability of being selected, not pattern or structure involved. All others cannot be projected onto the total populations (see section 4.1.1.2, ln 25-26) so how does one proceed with conclusions?	See response 369 above.
377	51	table		Explain why results from sampling data are not a range of values.	Text has been clarified.

	Page	Line	Comment Type /Topic	Comment	Follow-up
378	51	22-24		The section states that a verifier must demonstrate that an error is localized or affect the entire population. In fact, the verifier should analyze the population during the verification planning stage to determine if the population is homogenous. If it is not, then sampling may not be valid.	Note, the verifier must assess whether the population is normally distributed, not homogeneous.
379	51	3		This is a very general statement and not true. A sample of less than 100 can have a very normal looking distribution and support traditional parametric statistics. NOTE: If the underlying distribution is normal you do not need to consider the central limit theorem at all just select an appropriate sample size for the amount of error you are willing to accept. If the underlying distribution is symmetrical a sample as low as 10 may be a valid sample. For most cases a sample size of 30 yields a good approximation of normality.	Text has been clarified. Verifiers must assess whether a small population adheres to normal distributions if statistical sampling techniques that assume a normal distribution are going to be used. This information should be documented in the verifier's working papers.

	Page	Line	Comment Type /Topic	Comment	Follow-up
380	Webinar		Sampling	Could you please take us through the thinking required to develop a sampling plan strategy for facilities that use "black box" database GHG calculation systems? This is a tough area to audit.	<p>Black box data cannot be relied upon. AESRD requires the verifiers to have access to the underlying calculations to understand how data was manipulated and compiled. Please note, you cannot sample what you do not have access too and “sampling” a black box is impossible as the black box implies that you do not have access to the data within it.</p> <p>Facilities/project developers should have data flow sheets, including calculations for data management systems that can be provided to the verifier to assist in assessing data management systems.</p>
381	Webinar		Sampling	Can you please clarify if the "30 point" rule for sample plans should include all sources for site visits?	Text has been revised based on feedback received. Please see response 379 above.
382	Webinar		Sampling	sample size: 30 can be a lot of effort on a site visit	Site visits on aggregated projects must be done on a sample basis. Verifiers must justify the sample size selected.
383	Webinar		Site visits	Can you please elaborate on the suggested approach for "facility site visit" and "headquarters / data management system site visit".	Site visits are a convenient method of executing certain procedures. Verifiers must establish procedures based on risks. This will inform areas of focus during the site visit.

	Page	Line	Comment Type /Topic	Comment	Follow-up
384	51	4		Can statistical sampling be risk based?	The need for sampling is driven by the risks identified, in that manner, the sampling is risk based; however, the design of the sample (e.g., number, style, etc.) is not risk based.
385	51	4		If data does not look like a normal population there are non-parametric statistical techniques available that will allow clear assessment of the strength of the data and thus the robustness of the assertion. No disagreement with larger sample sizes as population size decreases.	Text was clarified.
386	51	Section 4.1.1.2 Sampling Process		The section states that a verifier must demonstrate that an error is localized. This suggests there to be an assumption that all errors are systemic in nature. This is a problem. When an odd or troubling problem is found, the verifier should take steps to determine if the issue is systemic or localized in nature, before providing justification for either determination.	Text was clarified.

	Page	Line	Comment Type /Topic	Comment	Follow-up
387	51	5		The correct approach is to sample based on the underlying distribution (normal, bimodal, exponential ...) and the desired confidence in the conclusion. This means choosing both an appropriate sampling method (e.g., stratified) for the population distribution and selecting enough samples to be within the acceptable error.	Text was clarified.
388	51	6		Please provide less vague reference "Please refer to any statistical text..."	Text was clarified.
389	51	8		The populations that we are selecting samples from can vary widely and this guidance doesn't take into consideration that 100% of small samples would result in excessive audit work for some tests. For e.g., if a facility has monthly gas samples, your guidance would suggest that we have to request them all. This equates to absolute assurance, not reasonable. We recommend removing this statement or adding a qualification statement.	Text was clarified.

	Page	Line	Comment Type /Topic	Comment	Follow-up
390	51	12		Most readers will not be familiar with type I and II null hypotheses. Please provide a more familiar example.	Text was clarified; however, verifiers should have sufficient background to be able to correctly apply statistics to support the verification. If the verifier does not have appropriate statistical knowledge, a statistician should be consulted, and may need to be engaged as a subject matter expert.
391	52	Section 4.1.1		Table 20 examples of a sample plan - How literal should this example be taken?	This is an example only. It should not be taken literally.
392	52	Section 4.1.2: line 9 and 10		Grammatical – make changes.....this change.....	Grammatical errors were corrected.
393	53	Table		Need to explain acceptable tolerance. Deviation error – reads that deviation of sample mean from population mean.	This was changed to acceptable deviation.
394	53	footnote		Suggest " a comprehensive site visit may not be feasible"	Done.
395	53	9-12		Strange example	This is a mandatory requirement under CSAE 3410 that is more applicable to larger reports.

	Page	Line	Comment Type /Topic	Comment	Follow-up
396	53	1		<p>The requirement that all the numbers match in all the reporting documents for offset registry require that a great deal of back and forth takes place after the fact. For example, if the verifiers issue a finding and exclude a number of tonnes then the assertion must change to reflect the verified tonnes and this leads to a change in the report to account for the change in the assertion and now we have a new report so we need a new verification report, and so on.... .</p> <p>No flexibility in the offset registry exist to simply modify the assertion to reflect the verified tonnes only. Particularly where it is a simple mathematical or difference in protocol interpretation. Can the verification be made on a draft or proposed assertion that can be modified before issue of the final verification report? Any substantive changes to the report would still need to be verified again but this may reduce the cost of what is now going to be the most costly portion of registering an offset (reasonable assurance verification). Can the back and forth (proponent-verifier-registry) occur earlier for simple cases rather than at the end where fixes cost more.</p>	<p>AESRD recognizes that confirmations are a new requirement; however, AESRD is repeatedly seeing project documentation being submitted to the registry with significant discrepancies. As documentations should be compiled in advance of the verification, the verifier should be able to assess confirmations without significant extra effort.</p> <p>If material errors exist in the greenhouse gas assertion, project documentation will need to be revised before the verifier can issue a statement of verification and the project documentation can be submitted to the registry.</p> <p>See response 69 and 338 above.</p>

	Page	Line	Comment Type /Topic	Comment	Follow-up
397	53	Section 4.1.4.1 and 4.1.4.2		should be in a check-list table format	This is a guidance document only. Verifiers are required to develop their own checklists, if appropriate.
398	53	footnote 11	Editing	use 'rationale' instead of 'rational'	Done.
399	53-54	Section 4.1.4	Availability and Cost of Verification	Mandatory procedures – potential cost implications	Mandatory procedures have been bolded, and may result in cost implications for some verifiers.
400	Webinar		Availability and Cost of Verification	What kind of pricing impact do you see with the new reasonable level of assurance compared to old for the proponent? Cheaper or more expensive?	Reasonable assurance will require more effort on behalf of the verifier than limited assurance. As such, we do expect some cost increase. However, many verifiers were conducting verifications that were beyond limit levels of assurance. Actual cost changes will vary between verifiers. See response 23 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
401	Submitted		Availability and Cost of Verification	As the owner of a smaller and more complex facility covered by the SGER, we have had difficulty procuring contractors willing to complete verification at even a limited level of assurance. With numerous other jurisdictions implementing verification requirements, we anticipate it becoming harder to obtain contractors. In addition, we anticipate that contractor and administrative costs of verification in accordance with the guidance document will now exceed the cost of compliance with SGER.	Noted. See response 23 above. Project developers/facilities can take steps to improve documentation that can assist in data management, and help to manage verification costs. Examples include implementing automated data management systems, maintaining electronic records, developing procedures manuals, providing data flow charts and sample calculations, etc.
402	Submitted		Availability and Cost of Verification	Potential impact to producers/emitters: moving from limited to reasonable level of assurance will result in higher verification budgets (up to 50% more), could also limit our choices in third party verifiers, as some may not be qualified or trained in reasonable yet	See response 23 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
403	Submitted		Availability and Cost of Verification	There is some concern that the reasonable assurance approach may impact the availability of firms willing – or qualified – to conduct verification for offset project types that fall under the biological sequestration type. There needs to be greater clarity as to how to apply the reasonable assurance approach to biological systems vs. projects that have accurate measuring devices such as meters or dials.	Protocols have been revised to address records needs, however as with any other activity type, verifiers must have appropriate knowledge, or engage appropriate knowledge to complete the audit in this activity type.
404	54		Editing	Typo in footnote 3, such as is duplicated in first sentence	Done.
405	54	1-3		Don't understand the concept of testing three points along the data trail, please elaborate. What is meant by "close to the assertion"?	Close to assertion means s close to the final report (the assertion) as is appropriate. The intent of this requirement is to test data along the data trail to test for errors that may occur do to transcription errors, calculation errors, etc.
406	54	16		Delete bracket	Done.
407	54	16		Use of the word “inventories” here could be confusing for readers since this is an offset-related section. Could an alternate word be used?	Projects have inventories for the baseline and the project. Please see the glossary for definitions.

	Page	Line	Comment Type /Topic	Comment	Follow-up
408	54	16		typo - extra bracket)	Done.
409	54	16		Given that this section is focused on “offsets-related” verification issues, use of the word “inventories” could be confusing for readers and practitioners. Could an alternative word be used?	See response 407 above.
410	55	4		This is new. Should be a review of EPC request form.	Yes, this is new. It is intended to provide AESRD with some background on why the EPCs occurred to help with internal reviews.
411	55	12		No foot note 14.	Done.
412	55	15		Peer review typically involves signing off on the verification report.	Peer reviewers are required to review the report and working papers to ensure the verification was conducted appropriately and the conclusion has been properly supported. For independence reasons, they do not sign off on the report, but do sign off on the working papers.

	Page	Line	Comment Type /Topic	Comment	Follow-up
413	55	16		See comment about flexibility to correct simple errors or differences in interpretation before finalizing verification report. This would be a three way dialog (registry-verifier-proponent) to avoid costly delays and would be step 6 in this list. This is just a more formal approach to what already goes on in some cases. Keeps changes transparent, provides documentation (working paper files), and ensures open 3-way dialogue.	The registry is a listing service. They do not get involved in the verifications. The project developer and verifier must ensure program requirements are met before submission to the registry.
414	55	16		For the ultimate submission of the verification to the regulator, it is sometimes not possible to get signoff on the same day that verifiers sign off since regulated facilities may be reviewing the submission with the plant managers. The regulated facility's letter to AESRD may predate or postdate the verifier date. Does AESRD consider the misaligned dates as an issue?	That would depend on whether there is a possibility that any changes were made that affect the verifier's assertion. It is unclear how the verifier would be able to sign off in advance of the facility completing all its internal reviews.
415	56	20-23		Question – how would AESRD view this situation?	See response 367 above.
416	56	3		Not necessary to repeat the table.	Removed and added a cross-reference.
417	56	32		What is materiality referring to?	Unclear on the concern. No changes made.

	Page	Line	Comment Type /Topic	Comment	Follow-up
418	57	Table		Used previously.	See response 416 above.
419	57	4-5	Working papers	AESRD may review working papers - New requirement and will lead to extra cost	AESRD has always had the ability to request access to working papers through facility compliance, and has done so on several occasions.
420	57	4	Working Papers	Can AESRD please identify how long a verifier must maintain its working papers?	Text has been clarified.
421	Submitted		Working Papers	Are they required to be hard copies? Are electronic files sufficient?	No preference as long as files are retained and accessible.
422	Webinar		Working Papers	Are verifiers required to submit their Working Papers to AESRD?	No, however, AESRD may request access to a verifier's working papers if needed to understand facility compliance.
423	57	10	Editing	Table 22 referenced but it is actually Table 21. Titles do not match. However, information contained within the Table is useful overall.	Done.

	Page	Line	Comment Type /Topic	Comment	Follow-up
424	57	10		The guidance document seems to imply that in order to gain an understanding, process flows must be part of our documentation. In some cases, when process flows are not readily available, we will document our understanding in a narrative. We recommend that AESRD consider removing process flow diagrams as a requirement, and instead indicate that understanding of process flow should be documented, either in diagrams or narratives.	Process flow diagrams have been a requirement of for the past several years. These must be provided by the facility/project developer.
425	57	Table 21		Blank “Information” cell corresponding to “Planning”; and no header in cell below “Risk Identification”.	Done.
426	57-58	Table 21	minimum working paper files	May be more than we do, so increase budget	Working papers must include these minimum records.
427	59	17-21		Cannot know this at the beginning so may need scope change	This is not a scope change, but a normal part of verification.
428	59	3		Disclosure violates ISO 14065 accreditation requirements	See response 419 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
429	59	5		Not sure checklist fully captures the conformance assessment.	Unclear on the concern. AESRD has not provided or stipulated the need for a checklist.
430	59	11		Not sure about reasonable assurance for baseline restatements.	Please note, the same data is required for limited and reasonable assurance. What changes is the amount of effort required by the verifier to assess the assertion.
431	59	27		Two approaches to materiality, but only one of which is used to assess whether materiality has been reached. – is the absolute error method simply to help in assessing the effectiveness of internal controls? If so, and considering that a project might not pass verification on qualitative grounds (e.g. due to ineffective internal controls), is there not a risk that this absolute error method will become a means of establishing materiality ‘by the back door’, and will hinder transparency in the verification process? It seems risky for the system to entertain a methodology which might end up leading to informal or arbitrary materiality thresholds.	AESRD currently uses the absolute value approach to assessing materiality. Both tests will be required, and materiality using both methods. Verifications that exceed 5% error on either approach will have a material error in the verification and will need to take appropriate corrective actions. See response 260 above for more information.
432	60	22-23		Section 5.1.5.2.1 - Not sure I agree with this last sentence. Perhaps re-word?	Text has been clarified.
433	60	9		Net error is new.	See response 260 and 431 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
434	60	20		Consistent with current requirements.	Emphasis of matter has always been permissible; however, this guidance specifically mentions this technique.
435	60	25		Require a breakdown of individual errors.	A qualified opinion does need to identify the issues that resulted in the qualification. These would be documented in the verifier's working files, and in the verification report.
436	60	37		Reconcile form requirements with this section	The verifier should understand and have documented individual errors in a SUD table, and in the verifier's working papers. Deficiencies should also be documented in the verification report that accompanies the disclaimer of opinion.
437	61	13-18		Could more guidance be provided on what circumstances would necessitate providing an "adverse verification opinion"? Here, an example or comparative hint-box would prove helpful. Based on recent industry experience, an adverse opinion is rarely issued and typically no opinion would be issued in these circumstances. Should this also be mentioned in the guidance document?	AESRD has received a number of adverse opinions from government audits. Issues triggering adverse opinions have included lack of supporting documentation, missing records, records that could not support verification, quantification methodology that could not be duplicated by the auditor, use of outdated or less accurate methodologies, etc.
438	61	19		Awkward to read.	Text clarified.

	Page	Line	Comment Type /Topic	Comment	Follow-up
439	61	19		At first glance, this paragraph appears to be part of the preceding sub-section. Perhaps introduce a space or something to differentiate it a little more.	See response 438 above.
440	61	25		Why only a qualified opinion of verifier is appointed to late to conduct work?	Text has been clarified. This would result in a scope restriction.
441	62			Text in middle diamond on left should read: “Is the GHG assertion by affected significant uncertainties?”	Done.
442	62			Text in final diamond on left should read: “Does the GHG assertion give a true and fair view?”	Done.
443	62			Text in the middle diamond on the left should read: “Is the GHG assertion by affected significant uncertainties?”	Done.
444	62			Text in the final diamond on the left should read: “Does the GHG assertion give a true and fair view?”	Done.
445	62	Figure 11		VS decision flow chart is helpful	Thank you.
446	63	Fig		Want to test the flow diagram.	Okay.

	Page	Line	Comment Type /Topic	Comment	Follow-up
447	63	4		"within the company". In some cases the peer reviewer is external to the company - independent expert.	Text was clarified.
448	63	Section 5.1.6		Peer Review hours may need to increase	Okay.
449	63	8		Peer reviewer must review the verification report	Done.
450	64	1	Editing	Wrong reference to Table 23 (Table 22 appears below). This error occurs frequently when Tables are referenced throughout the document where text references to Tables and the Tables themselves are off by 1.	Done.

	Page	Line	Comment Type /Topic	Comment	Follow-up
451	64	3		<p>There is a lot of repetition between the contents of the Verification report, Verification plan, and Sampling Plan which makes it time consuming to complete. The Verification Report requires Verification Plan and Sampling attached. All three documents require the level of assurance, scope, criteria, and objectives be disclosed. Verification Report and Plan require materiality, timing, and procedures. With all of this documentation requiring completion, this becomes a burdensome task, which means higher costs for verifiers and higher fees to be paid by the industry. AESRD should consider consolidating the information requirements between the Verification Plan, Sampling Plan and Verification Report. An option would be to have the Verification Plan attached to the Verification Report and reducing the Verification Report to the statement of verification.</p>	<p>Information does not need to be duplicated, but does need to be included. For example the sample plan does not need to include the verification objectives if already stated in the verification report.</p>
452	64	37		<p>Do we need to talk about signed COI and other docs as well?</p>	<p>These are and have always been required documents for both facilities and offset projects. Required documents are listed in appropriate program guidance documents.</p>

	Page	Line	Comment Type /Topic	Comment	Follow-up
453	64-67	table 22		VR contents helpful	Thank you.
454	65	Table		Check against current	Technical guidance will be reconciled to this document.
455	65	item 6		"not in need to go into detail that compromises verifier's proprietary methods". Strongly disagree with this because it violates ISO 14064 requirement for transparency. All verification procedures must be clearly and transparently documented.	Removed.
456	65	23		Cross reference.	Unclear on the concern.
457	66	right column		delete 'from' after Statement of Verification;	Done.
458	67	10		"discussed in Section 5.4" (delete "below")	Done.
459	68	24-27		Extra scope because job was finished	This is standard best practice and is required.
460	68	Table 23		Do not agree with examples	These are examples, and are not an exhaustive list.

	Page	Line	Comment Type /Topic	Comment	Follow-up
461				Subsequent events – would the verifier go back and assess if final true up has occurred.	<p>Verification is on the emission numbers, not the qualitative data in the report. The verifier must ensure information is complete and correct at the time of the verification. It is not appropriate for the verifier to undertake further work on evidence that was not made available during the verification or that was compiled after the verification as the verification engagement and responsibility ends at the date of the verification statement.</p> <p>See responses 69, 338 and 396 above for more information on confirmations.</p>
462	69	1		Suggest deleting “intended user”, as “AESRD” would suffice	Done.
463	69	1		Recommend deleting “intended user”. “AESRD” would suffice	Done.
464	69	4		Table 25 provides more information <u>on</u> ...	Done.
465	69	5		Second row, far right column includes a period at the start.	Done.
466	69	5		Suggest removing period at the start of the sentence in the second row of the far right column	Done.

	Page	Line	Comment Type /Topic	Comment	Follow-up
467	69	8		extra period	Done.
468	69	8		Please elaborate on what is meant by "standard verification"	Text has been clarified.
469	69	16		Requirement to disclose/address baseline uncertainty	Unclear on concern.
470	69	Table 24		subsequent events types helpful	Thank you.
471	69-70	Table 25		Confirmations - helpful	Thank you.
472	70	Table		Cross reference.	This table was developed for this document and to meet AESRD requirements for confirmations assessments.
473	70	Table 25		Can we say all tabs?	No, Much of the information in the tabs applies to verification criteria. Those that don't must be assessed as confirmation.
474			Appendices	Include wording from Section 18(1) of SGER that describes qualifications of third party auditors and introduce principles in main text	Regulations have been referenced as needed in the document.
475	71-73	Appendix A		Table A-1 helpful But extensive	Thank you. Noted.

	Page	Line	Comment Type /Topic	Comment	Follow-up
476	71-73	Appendix A:		This is a very helpful section. We recommend moving it to the beginning of the document as part of an overview.	It now appears at the front of the document.
477	71			Why is there a need for this when the verifier develops the risk assessment, not the entity?	The entity should have an understanding of risks and design appropriate controls. This can assist the verifier in identifying areas of focus for the verification.
478	72			Aggregation Process – what does “Material adjustments” refer to here?	Text has been clarified.
479	72	2		Does reasonable assurance apply to baseline restatements?	See response 31 and 53 above.
480	74			Site visit, Reasonable assurance statement is confusing. How does it apply?	Text has been clarified.
481	74	Appendix B:		same type comment regarding the references s/b CSAE 3410 (not ISAE 3410)	Done.
482	74-77	Appendix B	Terms	Terminology diff between ISO and Accounting helpful	Thank you.

	Page	Line	Comment Type /Topic	Comment	Follow-up
483	74-77	Appendix B	Terms	Appendix B describes AESRD's preferred terminology, but this terminology is not used consistently throughout the document. For example, according to the table, AESRD prefers "omission" or "misstatement" over "discrepancy"; however, the term "discrepancy" is used in eight places throughout the document.	The term misstatement has been used instead of discrepancy.
484	Submitted		Terms	The document is somewhat academic in nature introducing new terminology and concepts but it is not clear how this will improve the verification process. I noticed some practical examples are included but more of these are needed and simpler language will improve understanding. As someone who has relied extensively on ISO 14063-3, I noticed the document introduces new terminology I am not familiar with which I assume are from accounting standards.	Appendix B was moved to the front of the document and contains a listing of terms and AESRD's preferred terminology used in this document.

	Page	Line	Comment Type /Topic	Comment	Follow-up
485	Submitted			The current version is not succinct regarding AESRD's expectations with respect to reasonable versus past limited assurance verifications. My suggestions are: Stick to the KISS writing style, i.e., Keep It Short & Simple . The KISS main document text (say 20 pages) should refer to the current Appendix C Glossary, which will need substantial augmentation in the final version – to define the full meaning of the many cryptic verification/audit & undefined technical wordings used throughout the current draft version.	AESRD acknowledges that the document is substantive; however, the document also reflects the amount of space we felt was needed to adequately explain concepts given the shift to reasonable assurance, and the blending of accounting and engineering audit principles needed to meet AESRD's regulatory requirements. Please note, familiarity with audit practices, procedures, and standards is required.
486	75			formatting of the table needs adjustment	Formatting issues have been corrected.
487	78-85	Appendix C		Glossary helpful	Thank you.
488	81			Want to change greenhouse gas assertion to Assertion.	The term was left as is for this version.

	Page	Line	Comment Type /Topic	Comment	Follow-up
489	81	Appendix C		“Management Systems”: the definition appears to be “circular”, i.e., uses the same term (at the beginning, the first two words) as the one being defined. Perhaps the first two words in the definition (“management system”) can be deleted, since the remainder seems to stand on its own quite well (“framework of processes...”). Also, the defined term is in plural form (“management systems”), and it should be in singular (“management system”).	Done.
490	Submitted		Terms	Neutrality should be conservativeness.	They are separate concepts and apply to different things (e.g., neutrality to the assessment of criteria and conservativeness to the assertion).
491	Submitted		Terms	Uncertainty needs to be defined because it is confusing.	Uncertainty is discussed in other program guidance as it applies to facilities and offset projects.
492	Submitted		Terms	We support the need for data accuracy, but concern has been expressed about clarity around the understanding and applicability of terms such as “tolerable error”, “appropriate materiality”, “acceptable uncertainty” which relate to verification risk and will require verifiers judgement. More clarity may reduce the scope of the verifier judgement required.	Note, this document has been developed using a principles-based, rather than prescriptive approach. Verifier judgement must be used during the verification. See response 6 above.

	Page	Line	Comment Type /Topic	Comment	Follow-up
493	Webinar		Terms	Could you please elaborate on the Detection Confidence column (and concept)?	Text has been clarified.
494	Webinar		Terms	Perhaps it would be clearer to describe "Detection Risk" rather than "Detection Confidence" in this table.	Text has been clarified.
495	84			Add sampling plan	Terminology has been clarified.