

Summary of Questions and Answers from 2021 Verifier Training Sessions

Climate Implementation and Compliance

Alberta Environment and Parks

February 2021

| Question | AEP Response |
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| January 26, 2021 Session | |
| 1. In the term "Significant and Material findings", what is considered significant? | Significant errors are errors that represent a high risk for a material error even if the error itself does not result in a material error. These are errors that are significant enough that should be flagged and evaluated a bit further. For example, a verifier may identify persistent errors that points to an issue with the facility's controls or data management system, this could be considered a significant error. |
| 2. For a benchmark application, please clarify whether a total error (Equation 5-8) should be calculated separately for each of the 3 years OR it should be combined for all 3 years. | Total error should be calculated for each year in a benchmark application. If a material error is identified for a particular year, we expect that it would be corrected in the application before submission. |
| 3. Is it mandatory, in the AB GHG quantification standard, for the GHG emitter to provide a copy of the calibration certificate of their measuring equipment (flow meter, scale, etc.), so the verifier can verify the maximum allowed percentage of material quantifiable error was not exceeded ? or is it still based on "best available supporting data", without mandatory obligation to provide supporting calibration certificate ? | This is less about materiality and more about ensuring compliance with the calibration frequencies required for meters and equipment prescribed in the AQM. The AQM does not require reporters to provide calibration records to verifiers, however, these may be requested by the verifier in a verification based on their risk assessment and sampling plan. |
| 4. Regarding emissions at an aggregate for a benchmark application, please confirm that flaring and vented fuel volumes included in Petrinex for 2019 is understood to be included and that verifiers do not need to flag these inclusions as a discrepancy. | That is correct. We understand that there have been changes to Petrinex requirements on reporting venting and flaring however the use of fuel use volumes as reported is still accepted for 2019 and would not need to be flagged. |
| 5. Could you please confirm, was is that the DSA can or cannot be the lead verifier? | The DSA and lead verifier can be the same person. |
| 6. There are a number of facility operators looking to complete facility verifications by March 31 in order to meet fiscal deadlines. Is there an estimated timeline for publication of a new version of the AQM that includes emission sources beyond aggregates (that is not a draft)? | Estimated to be end of February 2021 or early March 2021. |
| 7. In the finding summary in the body of the verification report, are only the unresolved findings required to be presented with all resolved and unresolved findings presented in the appendix? | We would like to see significant and material errors resolved and unresolved findings in the body of the verification report. In the appendix, we would like to see a comprehensive list of issues identified during the verification process. |
| 8. Can you confirm, for aggregate FSBs, where option 1 is selected, that the selection of PROD, DISP or REC as the production metric should be within the scope of the verification? | A facility may be submitting an application for a benchmark unit, which does not require verification or they may be submitting a benchmark application using emissions and production data, where third party verification is required. For benchmark applications, the selection of data for the production metric and statistics that are part of the benchmark unit workbook are within the scope of the verification. |
| 9. Can you clarify the slide about 5 periods allowed for offset verifications. There was a bullet below identifying the LV and DSA, was not clear what that meant. | Even if the lead verifier or the designated signing authority changes companies, the requirement is still that they can only do five verifications in a row, and then they need to take a two verification break. |
| 10. Could you please provide some additional information regarding what might be considered "a reasonable approach" when evaluating the x,y coordinates for aggregate facility locations. Perhaps if you provide some information regarding how AEP uses this information, it would help to answer this question. | For facilities greater than 10,000 tonnes CO ₂ e, the requirement is to submit a boundary file with fence lines around the facility where emissions and processes occur. For facilities less than 10,000 tonnes CO ₂ e, facilities are required to submit x, y coordinates. The purpose of these files and coordinates is to provide assurance around the federal fuel exemption certificates that facilities are receiving. The test for the verifier is to evaluate whether a facility has a reasonable approach to ensure that x, y coordinates fall within the facility boundaries. As well, the verifier is ensuring the the facility's emissions and process emissions are captured within the facility boundary files for those facilities with greater than 10,000 tonnes CO ₂ e. |
| 11. The Alberta Greenhouse Gas Quantification Methodologies is currently in DRAFT. When can we expect it to be FINAL? | See response to (6.) |
| 12. A confirmation for signed SOC was removed from the new verification report template, does this mean that verifiers no longer require to obtain a signed SOC before final verification report? | The signed Statement of Certification is the responsibility of the facility to complete before submitting a report or application to the department. |
| 13. If a VB completed the verification of CR15, CR16, CR17, CR18 and CR19, is the VB allowed to complete the verification for re-verification of one these CRs? | Typically focused verifications or reverifications would count towards the number of verifications a verifier can complete. The verifier may contact the department for confirmation for a specific scenarios. |
| 14. What are the requirement for a company/person to be eligible to conduct GHG verification? should they apply for a certificate or license? | Requirements for verifiers are provided in section 27 of the Technology Innovation and Emissions Reduction Regulation (TIER) and in part 1 of the Standard for Validation, Verification and Audit. |
| 15. Please confirm, is there a blanket allowance to perform virtual site visits in lieu of physical site visits till September 2021, or is there still a case by case evaluation? | Yes, verifiers conducting verifications in Alberta may receive a letter from the director providing this authorization to conduct virtual site visits instead of physical on-site visits for verifications conducted up to September 1, 2021. If a verifier has not received this letter, they may reach out to the director to request this through AEP.GHG@gov.ab.ca. |
| 16. When calculating the total error for an FSB, are we to integrate production by assuming the benchmark the Site has calculated and is applying for? | There is no prescription under the standard for this; however, this is a reasonable approach that can be taken by verifiers to assess materiality for FSB applications. |

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|---|--|
| 17. Please clarify, are verifiers required to check if the facility has applied for or received a fuel exemption certificate? | Only as it relates to the exclusion of emissions for fuels where the federal fuel charge has been paid while the certificate is in place. |
| 18. What are the calibration requirements for FSBs when the benchmark period is 2013-2015 when some meter calibrations were not performed? Deviation requests? | There were no specific quantification methodology requirements in the 2013-2015 time period. Therefore, it's not necessary to submit a deviation request; however, the verifier may include this as a finding in the report. |
| 19. For aggregate facilities, when verifying a benchmark application (2019 benchmark year), how are the facilities that were added or removed during 2019 and/or 2020 to be dealt with? What is the final facilities list to be included in the verification? | At minimum the facilities that will be included for 2020 compliance reporting should be included. If there are additional sites that will be covered for 2021 they can be included also but we would like this noted in the application. |
| 20. Is QMD required for aggregate facility reporting? | A QMD document is not required. The methods applied by conventional oil and gas facility should be indicated in the form. |
| 21. Follow-up on fuel exemption certificate check: please confirm, for benchmark verifications (specifically for 2019 FSB application), are verifiers required to ensure a fuel exemption certificate is in place for the fuels being included in emissions calculations; or is it required to be checked only for compliance reports. | I believe the exemption could not have been in place for 2019 so no need to check for this in verifying the 2019 FSB. |
| 22. On-site transportation includes Motor vehicle usage on site for general transportation purposes. Does this mean that all vehicles owned by the company and used within the boundary should be included, or keep consistent with the baseline? | There is no limitation to ownership of vehicles. It would include all usage of vehicles within the boundary. We do exclude emissions from fuels where the federal charge is paid during a time period where the facility held an exemption certificate. This should cover most/all of the 3rd party vehicle use on site where the fuels are not supplied by the facility. |
| 23. Is monthly weighted average gas composition good even daily data are available? | The weighted average should be based on the highest frequency of data sampled even if it is higher than the frequencies prescribed in Chapter 17. In your case, the weighted average should be based on daily. |
| 24. When can pneumatic device default vent rates (draft AQM Section 4.7.2) be used? Draft AQM defines a default vent rate method as level 1 but CO2 and CH4 venting requires level 3 and 2, respectively. | Generally, level 1 methodologies are prescribed for reporters under the Specified Gas Reporting Regulation, whereas levels 2 and 3 are for reporters under TIER. |
| 25. Is all hydrogen assumed to be generated by steam methane reforming? | There is an allocation that you can receive for hydrogen that is exported from your facility. As well, there is a treatment of hydrogen production in the benchmarking for refineries and upgraders. In both cases, we are applying the high performance benchmark for hydrogen in terms of an assumed emissions or an allocation rate for the export of hydrogen. |
| 26. For aggregate facility, does AEP expect verifiers to check the ragg (correlation between benchmark and SFC), CVagg (coefficient of variance of monthly intensity), and CVCOG (coefficient of variance of COG emission intensity)? If so, at what extent do we need to check? | Yes, it is within the scope of a verification. The verifier should assess the data and calculations and perform recalculations as appropriate. The verification procedures and sampling plan should be developed based on the verifier's risk assessment. |
| 27. Confirm whether facilities > 10,000 t CO2e in an aggregate need to follow ECCC GHGRP. | Yes. It is our understanding that the methodologies prescribed in chapter 15 meets the requirements of ECCC Greenhouse Gas Reporting Program. |
| 28. For aggregate verifications, for fuel used for drilling and completion, what's the expectation for accounting for the amount of fuel combusted? Facilities often don't have a good tracking system for fuel that was purchased or brought onsite, but not fully consumed (usually small amounts); that fuel may be moved to another site but is not tracked well; it's difficult to quantify the associated potential error for this. | The verifier may assess the potential magnitude of this error by conducting a sensitivity analyses (i.e. looking maximum and minimum emission scenarios) and determine whether it could result in a material error. The verifier may also consider what is conservative for benchmarking versus compliance reporting. As well, the verifier may include a qualification in the verification opinion. |
| 29. If applying Procedures for Estimating Missing Data when the R value <0.75 and data directly affects estimated emissions, the AQM says to replace the missing data with the highest data value sampled or analyzed during the preceding 3 years. Could you please clarify if the three year interval should include the compliance year (i.e. for a 2020 verification, take highest value from 2018, 2019 & 2020 or 2017, 2018 & 2019). It seems to me that 2020 data should be considered when determining the most conservative value but this is not necessarily what the AQM wording suggests. | The AQM indicates the three preceding years so for the 2020 reporting year, the three preceding years would be 2017, 2018, and 2019. |
| 30. Does TIER apply to a closed municipal landfill with GHG emissions of >100k t CO2e per year? | Yes. |
| 31. For COG aggregate facilities, is Petrinex production reporting considered a black box that the verifier needs to investigate further (production receipts, meter readings, etc) or can Petrinex production be accepted at face value? | We have set up the production metrics for aggregates as directly depending on the reported Petrinex values so those reported Petrinex values can be taken as correct. |
| 32. TIER describes production, output, etc. All these are irrelevant to a landfill, especially a Closed landfill. So what is your advice on benchmark? | We have typically used the modeled generation of methane as a surrogate for production. |
| 33. For facilities over 10,000 t CO2e, what is the fuel gas sampling requirements within the aggregate? | If the facility (regardless of whether they are above or below 10KT) would like to apply gas analysis, they would be required to conduct quarterly sampling. |

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|---|--|
| 34. Formation CO2 vented to air is classified as venting now. however, in AQM, Chapter 10 is for formation CO2. Should this be under Chapter 4 Venting. | The formation CO2 category will be removed as a chapter in the finalized AQM, but the emissions associated with CO2 that is entrained in fuel and feed must still be reported. If the CO2 is vented, it would be reported under the venting category. Whereas if there is CO2 that is entrained in fuel that is combusted, it would be reported under the stationary fuel combustion category. |
| 35. "Offset Project Report should be criteria": but we are verifying the Project Report, why should it be a criteria? | The verifier should look at the project plan and cross check with the project report and the project plan to see if there are any differences between the plan and the report to make sure that the report reflects those changes in the plan. |
| 36. SFC as per the definition in Chapter 15 excludes waste incineration sources. Is Petrinex FUEL still be acceptable to be used for SFC emission quantification for aggregate facilities if the Petrinex FUEL includes incinerator fuel gas? | Yes, Petrinex fuels may be used for the SFC calculations. We understand that moving into 2020, the FUEL definition in Petrinex has been updated to exclude flaring. |
| 37. It seems the biggest future risk item may be related to compressing regulatory deadlines closer to those of federal and other provincial verification deadlines as well as GHG /NPRI quantification. Qualified resources to quantify and resources will be spread thin across so many regulatory requirements. In addition to the impact to quantifiers and verifiers, it is likely that many verification bodies will have to significantly reduce the number of verifications they will complete in any year potentially leaving facilities unable to find a verification body. Will there be any consideration for returning to the March 31st deadline in the future? | We've had a lot of feedback that the March 31 deadline was challenging and so in response, we've moved the deadline to June. This gives people additional flexibility to manage their own time and engagements, as well as more time to complete their submissions. We are continuing to look for ways to harmonize requirements under ECCC's GHGRP and TIER that may result in some additional efficiencies and time savings in the future. |
| 38. Is this training being required of reporting companies as well? This is all great stuff, and we as verification bodies do our best to fulfill AEP expectations. It would help if the companies do the reporting right in the first place. | It is not mandatory for facilities to take this training, but it is available for all stakeholders to participate in. As well, we will be holding an annual compliance workshop to review similar materials with reporters. |
| 39. Rechecking - it was noted on one of the slides that fuel consumption from Petrinex is frequently not reviewed and this is a concern; this does not need to be done for aggregates and is not a concern, correct? | There is a bit of distinction for aggregate facilities as the use of Petrinex fuels are specifically prescribed for methodologies used by aggregate facilities. The verifier is required to verify that the correct Petrinex data is applied in the methodologies. |
| 40. It was mentioned in this training that venting methods should be followed for formation of CO2 if it is vented. If tail gas from gas sweetening process is incinerated, which AQM method should be followed? | Emissions from incineration are considered to be flaring emissions. The draft flaring chapter will be posted shortly for stakeholder comments. |
| 41. Because this training is mandatory, how do we prove our attendance at this training? | We will receive a participant log for the verifier sessions. |
| 42. For CWB/FCCU, what is data requirement for relative humidity for calculation of dry air flow? (e.g. can annual arithmetic average relative humidity be used? Note AQM does not list a specific requirement for this). | Ensure that the relative humidity applied is consistent with the calculations for the % volume of coking in the FCC unit. You can also apply a value based on a measurement point that is geographically close. |
| 43. When would final AQM be published? | See response to (6.) |
| January 28, 2021 Session | |
| 44. Will the slides and recording be available after the session? | Yes, we intend to post the session on the TIER website. |
| 45. Do we use the draft v 2. Oct 2020 AQM with 17 chapters now? | We intend to post the finalized AQM in the next 2-3 weeks, which can be used for 2020 reporting. |
| 46. For an aggregate under tier when would payment be due for 2020? | For the 2020 reporting year, compliance reports are due June 30, 2021. The compliance obligation would have to be met by this date as well. |
| 47. Do the virtual site visits include remote site visits for office headquarters (i.e to verify data management systems, emissions spreadsheets, etc)? | Yes, virtual site visits can apply to site visits at office headquarters. |
| 48. Just double checking, the Designated signing authority and lead verifier don't need to have P.eng status, right? | If the DSA and lead verifier are conducting the verification as part of a verification body that is accredited by a member of the IAF, then no, they would not need to have a P.Eng or CPA. However, if the DSA and/or lead verifier are not performing the verification as part of an accredited verification body, then a P.Eng or CPA designation would be allowed up until June 2023. |
| 49. For the compliance obligation, if there are no offset credits, is payment made to the GOA? | A submission of fund credits may be submitted to the GOA through the Financial Services Branch. |
| 50. In terms of the mitigation plan for impartiality (when applicable) to be submitted to AEP, is this a new requirement process as part of the TIER regulation? | It is not a requirement to submit a mitigation plan for impartiality to the department. However, it is an option for the verifier to do this if the verifier would like the department to review and provide confirmation. |
| 51. Is the sampling plan only required for the verification report and not the plan? the new ISO 14064 indicates that the evidence gathering plan should not be communicated to the client or responsible party. I didn't catch that part! | For clarification, we would like to ensure that the evidence that is being requested from the facility or project is clearly communicated in the verification plan. We would like to see that the sampling plan is directly correlated with the risk assessment. We will review the noted section in the ISO document to determine whether further clarification is needed. |
| 53. What are the qualifications requirements for AEP staff that will be reviewing applications and verification reports | Compliance reviewers are typically licensed professional engineers with a variety of experience including experience in greenhouse gas quantification. |

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|--|--|
| 54. For an offset project, if a site visit was completed in Q4 of 2020 for the verification of 2020 Q1-Q3 data. Is this site visit sufficient for 2020 Q4 verification or a separate site visit needs to be completed for Q4 verification? | A site visit is needed for each reporting period. In the example provided, a separate site visit will be needed for the Q4 verification. |
| 55. Do you contact verifiers if their reports are deficient? | Typically, questions related to a submission is routed through the facility or project developer and it's up to the facility or project developer to reach out to their verifier for clarification if there are issues with the verification. This is because the verifier has a contractual agreement with the facility or project developer and not with AEP. |
| 56. In the use of ICT, would you expect the verifier to be more familiar with a facility as a result of no site visit considering the slide on drivers for missed verification findings | Having familiarity of the facility prior to conducting a remote site visit would be beneficial for a verifier in terms of understanding processes and facility layouts. |
| 57. We all need natural gas characteristics that suppliers have. However, I find I sometimes have to request for each reporter. Can AEP work with suppliers to make the required information more readily available? | Thanks for the comment. We'll take this back for consideration. |
| 58. Similarly for diesel, gasoline and propane. Can AEP work with suppliers to make their data in a format that is easier to use for reporters and verifiers? | See response to (57.) |
| 59. For on-site transportation emissions, you mentioned that fuel under the carbon levy are not required to be included in the GHG reporting. just double checking that the carbon levy would no longer apply since it has been revoked in 2019, right? So all fuel used for on-site transportation would need to be included as of 2020 reporting year? | The federal levy was implemented on Jan 1, 2020. The emissions from fuels consumed at the facility that are subject to this levy would not be included in the facility's total regulated emissions. |
| 60. For the station load as mentioned as used by the electricity generating facility. Are there specific requirements/quantification required to calculate this load? Or is an estimate by the facility sufficient? | We don't typically require reporting of station load. I believe the main flag was to ensure it is not reported as exported when it is in fact consumed on site. |
| 61. Does facility definition includes wells linked to the facility? | For an aggregate facility we would consider the wells connected to a battery to be part of that battery. For sites over 10,000 tonnes we typically require a boundary file that sets out the geographic boundary of the facility. |
| 62. Oh I see. In that case for the federal levy, would the verifier need to request for the facilities fuel exemption certificate to indicate which fuel types are applicable to the levy? | Typically the exemption will be available for fuels consumed on site only. In some cases facilities may choose to pay the levy on some fuels used on site, for example in vehicles that go on and off site. They do not have to report emissions from fuels used on site where the levy is paid while the exemption was in place. This may also often apply to contractor fuels. |
| 63. I was wondering if wells linked to a facility should be included in GHG calculations reported under AB SGRR (for facilities over 10,000 tonnes) and/or federal (ECCC)? Is the definition of facility different for TIER than SGRR? | Definitions are very similar under SGRR and TIER for large emitters or sites that opt in. There is some further definition in TIER for conventional oil and gas facilities that are not under SGRR. |
| 64. Will the TIER cogen benchmark need to be verified by the third party? | A stand alone cogeneration plant that produces only electricity and heat does not need a benchmark as the high performance benchmarks would apply. |
| 65. For aggregate facilities, when is the higher level methodology mandatory for CO2 EF? is it whenever the sampling frequency is quarterly or more frequent? or can they go with the default EF? | The default emissions factor is generally available and can be used if desired. The higher levels require quarterly or greater sampling. |
| 66. For requirements of production data....missing data procedures... is this referring to not describing the way the data is collected and tracked sufficiently? | The application of the missing data procedures by a facility is sometimes not reviewed adequately by the verifier so this includes the review of the source data used to quantify emissions and production. |
| 67. Has GoA provided comments to the new Federal Clean Fuel Regulation on diesel production in terms of overlapping on fuel generation from CWB for refineries in Alberta? | Yes, we have been involved in the development and consultation process for the Federal Clean Fuels Regulation. Currently, facilities have the ability calculate emissions accurately based on the actual blending in the fuel. Facilities may apply the actual % biomass content in the fuel to separate the biogenic CO2 emissions. |
| 68. For biomass fuel, does this include any renewable fuel that may be added to stationary combustion fuel (i.e diesel)? | Yes, a facility may use the default emission factors for "Diesel in Alberta" or "Gasoline in Alberta", which incorporates the minimum required biofuel contents. Alternatively, if the facility has the composition of the biofuel component in the fuel, they may calculate the SFC emissions and CO2 from biomass combustion separately. |
| 69. Is quarterly sampling required for each individual Petrinex IDs at a COG? | If the aggregate facility is choosing to use gas compositions to calculate emissions, quarterly sampling is required for each fuel gas stream in the COG (not necessarily for each Petrinex ID). A fuel gas stream is characterized by its gas composition. |
| 70. can the reporter choose any unit under option 1 or do they have to demonstrate they selected the best unit based on their regression analysis? | Facilities are expected to choose the production unit that best correlates with the facility's emissions based on the regression analysis. |
| 71. An aggregate facility has their HHV's of the fuel measured but they choose to use the default CO2 emission factor to calculate the CO2 emission for both benchmark and compliance reporting. In this case, should the Facility be using energy-based CH4 and N2O emission factors (as they have their HHV) or using the volume-based CH4 and N2O emission factors is acceptable? | If an aggregate facility has HHV data for the fuel that is consumed, the preference would be for them to apply energy based emission factors. |

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| Question | AEP Response |
|--|--|
| 72. Are CEMS emissions data acceptable for TIER aggregate facilities? | CEMS is currently not a method that is prescribed for aggregate facilities in chapter 15. If this is a method that an aggregate facility would like to apply, the facility may submit a deviation request to the department for review and consideration. |
| 73. When should we be hearing back on our benchmarking unit applications? | We are reviewing a lot of benchmark applications and it will likely be few weeks at least before you'll hear back from the department. |
| 74. If an individual facility within an aggregate has an emission greater than 10,000 tCO ₂ e should the Facility use ECCC consistent methodology from AQM for TIER reporting or the facility can use a different method for TIER and ECCC reporting? | Theoretically yes, you can use different methods for TIER and ECCC GHGRP reporting; however, we believe the methodologies in chapter 15 would meet GHGRP requirements for aggregate facilities. |
| 75. AER gas sampling requirements for composition and volume determination are typically annual and it sounds like gas sampling requirements for TIER submissions are quarterly. How would this discrepancy be addressed? | An aggregate facility is free to use the default emission factors prescribed in chapter 15 in a benchmark application and/or compliance reporting, which does not require any sampling. |
| 76. What does the verifier need to do to adequately verify the regression analysis? | Benchmark unit applications do not require verification. The verifier may consider reviewing the data entries and the regression output. |
| 77. Please consider providing calculation guides for each situation with sample calc based on real data | Thanks for the comment. We'll take this back for consideration. |
| 78. Could different methodologies be used for each COG in an aggregate facility? | Different methods can be used for each COG within the aggregate facility, but the expectation is that the methods for the COG would be the same for both the benchmark and compliance periods. |
| 79. So the verifier would not need to recalculate all three benchmark units PROD, DISP and REC | No, that is not a requirement. |
| February 3, 2021 Session | |
| 80. If a verification started in 2020 using V5.0 of the Standard for Validation, Verification, and Audit, can the verifiers continue using that version or should change to V5.1? | Version 5.1 came into effect Dec 1, 2020 so if a verification is completed after this date, this version should be used. For verifications conducted for emission offset project reports, version 5.1 is used starting Feb 1, 2021. |
| 81. Does focused verification count in the 5 consecutive years? | Yes, though if it is additional work on a year already verified that does not impact the count. |
| 82. Will this training session be offered annually or periodically in future? (in case a lead verifier or peer reviewer missed this year's training) | A lead verifier and/or peer reviewer who will be completing verifications for 2020 compliance reports and benchmark applications due in Sept 2021 are required to take this training. For those who missed the live training sessions, an online version and a quiz will be posted that can be taken at a later date. Note that the lead verifier and peer reviewer must complete the training before completing a verification. |
| 83. At a COG facility (including wells and one or more facility IDs), if fuel gas analysis at the wells are different from the facility fuel gas and only one sampling was done at the wells but quarterly sampling was available for the facility, can the carbon content methodology (or a composition-based methodology) be used for CO ₂ emissions calculations? if yes, is it ok to use the fuel gas analysis for the wells (based on one sampling) and quarterly gas analysis for the facility? | The method requires the identification of fuel gas streams where they are distinct. It sounds like these are distinct streams and quarterly sampling would be required for both. If the intent is to adopt quarterly sampling but it was not done for 2020 the aggregate could seek a deviation or they could apply the default for the COG for the 2020 year. If this is for benchmarking I believe we also have a default that could be used for this purpose with the intent to move later to quarterly sampling. |
| 84. Can you confirm if the Environment Canada GHG Training course (2006) will still be considered acceptable for ISO 14064 training under TIER? | Under part 1 of the Standard for Validation, Verification and Audit, the requirement is to complete training specific to ISO 14064-3:2006 or ISO 14064-3:2019. There are various training platforms available for verifiers. The verifier is required to document that the training completed meets these requirements. |
| 85. If an aggregate is using 2020 as the benchmark year for 2020 compliance year (i.e. 10% of the stationary combustion emissions), shall that facility still report production in 2020 and have it verified? | Yes. The production still needs to be reported and verified. |
| 86. Hello John to follow-up, can different methodologies be applied to wells and facilities in a COG? For a COG facility (including wells and facilities), if quarterly sampling for wells is not available and it's available for facilities, applying the default compositions for wells and composition-based methodologies for facilities? | We are looking for a single method to be applied at the COG level. Different COGs can use different methods as long as they are consistent over time. |
| 87. Hello John, to confirm this means that for a COG facility if fuel gas compositions at wells are different than facilities and only one sampling is available for either wells or facilities, we should use default compositions or apply for deviation in case we would like to use composition-based methodologies. | Yes, facilities may use default gas compositions or submit a deviation request if they're not meeting the quarterly sampling requirement. |
| 88. How does the Province know that pricing is an issue that is affecting verification quality? Does the Province monitor the price of verifications completed? | The evidence is based on government's reverification process and also anecdotally from verifiers. The province does not monitor pricing. |
| 89. There is currently no personal certification for GHG verifiers. Have you lobbied CSA to re-instate their GHG Verifier certifications? It would likely assist in ensuring that verifiers have the necessary skills, education and experience. | Thank you for your comment. We'll take this back for consideration. |

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| Question | AEP Response |
|--|---|
| 90. And as a follow up, how does the Province think the pricing issue should be addressed when it is know there are verification bodies that are underpricing the services and thereby affecting all verification providers | We are doing a number of things including this verification training to ensure that verifiers understand the expectations of verifications conducted under TIER. As well, the transition to the accreditation requirement is meant to further standardize verification requirements. |
| 91. Regarding your comment on being conservative with respect to benchmarking, can you clarify if this means that the benchmark emissions should be higher or lower? | Estimating the emissions to be potentially lower than they actually are would represent a conservative approach for benchmarking. |
| 92. During drilling and completion activities in the aggregates, clear diesel is used for on-road vehicles (i.e. on highway) and dyed diesel is used for off-road equipment. In reality, some off-road equipment may be used for some sort of on-site transportation as well, but the amount of the dyed diesel used for this purpose is not usually tracked and in some cases is difficult to track. Since only stationary combustion is quantified for aggregates, would it be acceptable to consider all dyed diesel consumption (off-road) as a part of the stationary combustion? If not, what is your recommendation for quantification of off-road emissions? | It's up to the aggregate facility to provide records to demonstrate the use of fuels for drilling and completion activities versus on-site transportation. One clarification is that fuels that have been subject to the federal fuel charge are excluded from the facility's direct emissions. |
| 93. What's the vent gas capture efficiency for a vapor recovery unit (VRU)? 95% as per EPA or 100% as per AER D39? | In the venting chapter (ch 4), the facility is required to assess the capture efficiency for any control equipment being used based on manufacturer or design specifications/data or an engineering assessment conducted by the facility. |
| 94. Regarding the level of deficiencies, are the red/orange dependent on how often the error occurs or does it depend on the impact of the error? | It represents the level of impact to a particular source area or parameter. |
| 95. Could you please confirm if fuel charge exemption certificate should be reviewed/checked during verification of benchmarks that will be developed based on 2020 data and onwards? I understand that this is not applicable to 2019 benchmarks. | The only connection to the exemption certificate is to determine the period for which fuels that have had the levy paid can be excluded. |
| 96. How a fuel user to obtain a Fuel Charge Exemption Certificate? Can a fuel user exclude the emissions from taxed fuel if they don't know whether they have an Exemption Certificate? | Fuel that has the fuel charge paid can only be excluded for the period that the exemption certificate is held. The regulated facility should know if they have exemption certificate. If they do not know they should get in touch with Canada Revenue Agency. |
| 97. If you have fuel used at a well , for method 2 do you need quarterly sampling there | Any method that doesn't apply the default emission factors would require quarterly sampling. |