

MiQ Audit Protocol

v1.0

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Table of Contents

Part I: Auditing Bodies Recognition Protocol v2.0	5
I.1 Auditing Body Recognition Protocol Introduction	7
Background.....	7
Purpose	7
I.2 Scope and Key Terms	8
I.3 Timeline	8
I.4 Requirements and Duties of Auditing Bodies	9
I.4.1 Requirements Overview	9
I.4.2 Requirements	9
2027 Requirements	9
2029 Requirements	9
I.4.3 Independence and Impartiality	10
I.4.4 Auditing Body Resource Requirements	11
I.4.5 Management of Information	12
I.4.6 Quality Management System	12
I.4.7 Establishing the Framework to Conduct Audits	13
I.4.8 Documentation	13
I.4.9 Data Transmission	13
I.4.10 Complaints and Appeals	14
I.4.11 Records Management	14
I.4.12 MiQ Methane Audit Trainings	14
I.4.13 Requirements for Application, Recognition and Publication by MIQ	14
I.4.14 Competency Requirements for Audit Teams and Auditors	15
Audit Team Competency Requirements	15
Audit Team Roles.....	16
Maintenance of Knowledge and Skills	18
I.5 Details of Recognition	18
I.5.1 Publication of Information	18
I.5.2 Fees	19
I.5.3 Sanctions	20
Annex I.A - MiQ Recognition Process	21
Recognition Review Steps	21
Decision of Recognition	21
Training	21
MIQ Review	21

Trigger events for unscheduled or non-routine review may include:	22
Recognition cycles	22
Extension of Recognition	22
Corrective Actions and Non-conformities	22
Records and Confidentiality	23
Annex I.B – Appeals Process for Recognized MiQ Auditing Bodies.....	24
Annex I.C – Example Fee Schedule for Auditing Body.....	25
Annex I.D – List of External Authorizations, Recognitions or Accreditations Accepted for Recognition.....	26
Part II: Audit Guide v2.0	28
Audit Guide Introduction.....	29
II.1 Scope.....	30
II.2 Terms and Definitions.....	31
II.3 Roles and Responsibilities	33
II.4 Audit Process Overview.....	34
II.4.1 Parties and Responsibilities	34
II.4.2 Audit Assurance	37
II.4.2.1 Assurance Level	37
II.4.2.2 Partial Conformance.....	37
II.5 Audit Process Engagement	38
II.5.1 Audit Kickoff	39
II.5.1.1 Certification Boundary.....	40
II.5.1.2 Certification Period.....	40
II.5.1.3 Facility Operations.....	40
II.5.1.4 Data Transfer Plan.....	40
II.6 Audit Planning	41
II.6.1 Audit Personnel	41
II.6.2 Strategic Analysis	43
II.6.2.1 Uncertainty.....	44
II.6.2.2 Sensitivity Analysis	46
II.6.3 Pre-Audit Execution	46
II.6.3.1 Materiality.....	46
II.6.3.2 Risk Assessment	47
II.6.3.3 Audit Sampling and Site Visits.....	48
II.7 Audit Execution	49
II.7.1 MiQ-Specific Requirements	50
II.7.1.1 Methane Intensity	50
II.7.1.2 Company Practices	53
II.7.1.3 Monitoring Technology	63

<i>II.8 Independent Review</i>	65
<i>II.9 Audit Report</i>	66
<i>II.9.1 Opinion Statement & Reasonable Assurance</i>	66
<i>II.10 Audit Guide Document Status</i>	68

MiQ Certification Program

Part I: Auditing Bodies Recognition Protocol v2.0

Summary of Changes

These updates are intended to establish a new set of requirements for Auditing Bodies conducting certification audits against MiQ Standards. Globally, many voluntary certification programs, GHG reporting programs, and regulations require verification or certification bodies to be externally accredited to relevant international standards by an accreditation body.

Unique challenges within methane emissions monitoring, reporting and management for oil and gas facilities have resulted in a limited pool of available and competent auditors and verifiers with the necessary skills and experience to perform audit engagements of criteria. These include an operator's management practices, use of advanced site-level measurement technologies, and the incorporation of site-level measurement data into emission inventories.

As MiQ consolidates learnings from the last four years of operating its certification program and considers advancements in methane emissions knowledge, management, and quantification frameworks, it is updating its requirements for Auditing Bodies and auditors to reflect these learnings and expected future challenges. Secondly, as the market for certified or differentiated gas is growing in both the voluntary and compliance markets, MiQ aims to more transparently align the qualifications of recognized Auditing Bodies with recognized accreditation frameworks.

These updates base many recognition requirements on existing requirements in international standards, such as ISO 14065, and regional monitoring, reporting, and verification (MRV) programs and voluntary sustainability certification schemes.

This document details:

- The requirements of Auditing Bodies and Auditors;
- The process for applying for, receiving and maintaining recognition by MiQ as an Auditing Body;
- How external authorizations or accreditations will be evaluated and recognized by MiQ.

These new requirements provide clearer detail regarding how external accreditations will be recognized by MiQ. Requirements and deadlines¹ for MiQ Auditing Body recognition are as follows:

- **New Auditing Bodies:** Auditing Bodies not currently recognized by MiQ must follow this document's requirements from 1 January 2026.
- **Currently Recognized Auditing Bodies:** Auditing Bodies currently recognized by MiQ must follow this document's requirements for any audits for which the Certification Period starts on or after 1 January 2027.
- **All Auditing Bodies:** All Auditing Bodies must demonstrate compliance with the requirements of this document AND demonstrate external authorization or accreditation for any audits for which the Certification Period starts on or after 1 January 2029.

Auditors from recognized Auditing Bodies must participate in MiQ trainings before participating in any MiQ audits. The scope of MiQ's recognition and review of responsibilities will vary depending on the scope of external accreditation or authorization granted to the

¹ Deadlines may be subject to change.

Auditing Body and the review provided by the accreditation or authorization body. This document shall be used in conjunction with MiQ's Audit Protocol.

I.1 Auditing Body Recognition Protocol Introduction

Background

This document defines the requirements for Auditing Bodies² to become recognized by MiQ. The requirements and duties laid down in this document are based on industry best practices, including relevant international standards. They aim to ensure that Auditing Bodies and auditors are impartial, independent, and competent. MiQ requires external third-party audits of conformance to its Standards. This document states the requirements and necessary qualifications of collective audit teams and team members conducting audits against MiQ Standards. Auditing Bodies and auditors shall be independent of the responsible party, or operator, being audited, impartial and free of conflict of interest, and competent in the technical detail required to perform an audit engagement. Auditing Bodies and auditors must have both the appropriate skills necessary to conduct MiQ methane performance audits, including site-specific audits, and Auditing Bodies and auditors must have the appropriate general skills necessary to perform audits.

MiQ shall provide program-specific training to auditors from Auditing Bodies that have been recognized by MiQ. MiQ shall update this training, as appropriate, to reflect updates to its scheme.

Purpose

MiQ's audit and verification program is a core feature of MiQ's methane performance standard and, subsequently, MiQ's mission to drive down methane and greenhouse gas emissions from the oil and gas sector. MiQ's certification framework requires that third party Auditing Bodies carry out the necessary audits of facilities across the natural gas supply chain. To eliminate conflicts of interest, Auditing Bodies and their auditors have no contractual relationship with MiQ for specific audits – they are third party entities recognized by MiQ to audit against the MiQ methane performance standard. For the very reason that they are third party entities, these Auditing Bodies and auditors must be held to the highest standards – in terms of ethics, impartiality, and technical knowledge. MiQ also requires that MiQ-recognized Auditing Bodies and auditors have no financial interest in the outcome of any audit and certification process in which they are involved.

Given that MiQ-recognized Auditing Bodies and auditors occupy such a central role in auditing and verifying the methane performance of oil and gas operators being certified by MiQ, they must have the confidence of all stakeholders, including regulators, the public, investors, industry, and NGOs. This updated MiQ Auditing Body Recognition Protocol is designed to ensure that MiQ-recognized auditors engage at the highest and most impartial level to achieve that goal.

² Auditing Bodies currently conduct audits to assess conformity and grade determination to the MiQ Standards. Future Standards or associated protocols may include the verification of various GHG statements. The term "Auditing Body" is used in the interim to avoid conflation with the formal definitions of "Verification Body" and "Certification Body" at this time.

I.2 Scope and Key Terms

The requirements specified in this document apply to all Auditing Bodies and auditors conducting audits or performing certification services to standards that are recognized by MiQ. These requirements apply globally. This document shall be used in conjunction with MiQ's Audit Protocol.

An Auditing Body is the company that conducts the audit against the MiQ Standards.

Auditors are the representatives (i.e., individuals) of that Auditing Body (i.e., the company) that carry out the audit.

Recognition by MIQ means that an Auditing Body has been appointed by MiQ to engage in audit and verification activities against the MiQ standard.

I.3 Timeline

Auditing Bodies must be recognized by MiQ to begin audit engagements. Requirements and deadlines for MiQ Auditing Body recognition:

- **New Auditing Bodies:** Auditing Bodies not currently recognized by MiQ must follow this document's requirements from 1 January 2026.
- **Currently Recognized Auditing Bodies:** Auditing Bodies currently recognized by MiQ must follow this document's requirements for any audits for which the Certification Period starts on or after 1 January 2027.
- **All Auditing Bodies:** All Auditing Bodies must demonstrate compliance with the requirements of this document AND demonstrate external authorization or accreditation for any audits for which the Certification Period starts on or after 1 January 2029.

MiQ will accept applications for recognition from Auditing Bodies per these updated requirements as of the publication date of this document.

Under these updated requirements, an Auditing Body that has no formal external authorization (see Section 4.2) by 1 January 2029 will cease to be formally recognized by MiQ and will be ineligible to conduct audit engagements against the MiQ standards.

Auditing Bodies not currently recognized must apply for MiQ recognition under the newly updated requirements. All existing recognized Auditing Bodies may apply under the newly updated requirements at any time going forward.

These dates and subsequent recognition are subject to change. If, for example, a regulatory program requires a certain external accreditation in advance of 2029, MiQ may move the timeline forward.

Recognition cycles are 5 years in length. Full reassessments shall be completed every 5 years. After a reassessment, MiQ shall issue a statement of continued recognition. If this includes an extension to the scope of accreditation, this shall also be included in the statement.

I.4 Requirements and Duties of Auditing Bodies

I.4.1 Requirements Overview

Overview: MiQ Auditing Body recognition allows for an Auditing Body to conduct audit engagements against the MiQ standard. An absence of MiQ recognition means that an Auditing Body is unable to conduct audit engagements against the MiQ standard. Auditing Bodies must follow the formal process outlined in this document to apply for recognition.

The timeline for MiQ recognition is listed in Section 3.

MiQ-specific requirements are listed in Sections 4.3–4.14.

I.4.2 Requirements

2027 Requirements

In addition to alignment with the 2027 General Accreditation Requirements, Auditing Bodies must demonstrate compliance with MiQ-specific requirements to be recognized. All Auditing Bodies must demonstrate compliance with MiQ-specific requirements for any audits for which the Certification Period starts on or after January 1, 2027. These requirements are reflective of ISO standards 17029, 14065, 14066, 14064-3. Auditing Bodies recognized by MiQ are required to engage in audits using practices consistent with principles in these standards.

MiQ-specific requirements are listed in Sections 4.3–4.14.

2029 Requirements

Demonstration of external accreditation or authorization is required for any audits for which the Certification Period starts on or after 1 January 2029.³

As of January 1, 2029, an Auditing Body that does not have external authorization or accreditation will cease to be recognized by MiQ.

The following table lists external accreditations and authorizations and summarizes how they may be used to demonstrate fulfillment of the requirements of this section.

Categories for External Accreditation or Authorization	Accrediting or Authorizing Body	Impact on Recognition Process
ISO 17029, 14065, and ISO 14064-3 accreditation - to verify assertions related to GHG emissions and removals at the organizational level	IAF-affiliated accreditation body	This accreditation covers all requirements except for program-specific impartiality requirements (see Sections 4.3-4.4). MiQ will evaluate audit team competencies per Section 4.14

³ As of Jan. 1, 2029, an Auditing Body must be externally accredited **and** meet the updated requirements listed in this document for any audits for which the Certification Period starts on or after that date.

<p>Other accreditation or authorization related to the verification of assertions related to GHG emissions and removals or certification of oil & gas emissions management systems.</p>	<p>Varies but often a regional or national public authority or accreditation body (see Annex D for more details)</p>	<p>Other accreditations or authorizations will vary in detail.</p> <p>Applying Auditing Body should evaluate the details of their accreditation with the requirements set forth in this document.</p> <p>Applying Auditing Bodies should clearly state the review process conducted by the accreditation or authorizing body and demonstrate to MiQ.</p> <p>MiQ will evaluate audit team competencies per Section 4.14</p>
<p>No external authorization or accreditation</p>	<p>N/A</p>	<p>Auditing Body must conform to all requirements of this document.</p> <p>MiQ will conduct recognition and review to ensure compliance with all requirements of this document.</p> <p>An absence of external accreditation or authorization will be permitted until January 1, 2029. Failure to be externally authorized or accredited as of Jan.1, 2029 will result in loss of Auditing Body recognition by MiQ.</p>

The Auditing Body must maintain accreditation during the entirety of the period in which it is recognized by MiQ, or MiQ recognition will be suspended. The Auditing Body must also inform MiQ immediately if an external authorization or accreditation is suspended or expired.

I.4.3 Independence and Impartiality

The Auditing Body shall follow the impartiality requirements of the international standard (ISO 17029/14065) or agreement to which they are accredited or recognized.

The Auditing Body shall document their alignment to the impartiality requirements required per ISO 17029/14065. Impartiality management shall also be proactively managed in alignment with ISO 17029/14065 prior to conducting each audit engagement.

The following additional requirements apply to Auditing Bodies auditing against MiQ Standards:

The audit team shall have a clearly defined responsibility to audit to the relevant Standard for the client. This responsibility may not include consulting⁴ for the client on any topic in relation to the relevant Standard. Where the relationship between an entity providing consulting services and the Auditing Body poses an unacceptable threat to the impartiality of the Auditing Body, the Auditing Body shall not provide assurance services to a client. Impartiality and risk safeguards related to the risk assessment of impartiality threats must be clearly documented by the Auditing Body. This review is also proactively required as part of pre-engagement activities for each audit engagement.

In addition to the above requirements regarding assessment of threats to impartiality, audit team members shall not review or make decisions for an engagement which they have provided consulting services or served in an official capacity with the client for two years prior to acting as part of the audit team. Two years is defined as the time between the month of final provision of consulting services and the month that review and decision-making processes begin. The Auditing Body shall also conduct an annual impartiality review with respect to its relationships, its employees, and its outsourced resources maintained with its clients.

Lead auditors shall rotate off a client every seven years. An auditor shall not take part in an engagement with a client in which they served as lead auditor in the last five years, except as an independent reviewer. Information relating to MIQ audits and related documentation will be treated confidentially unless required by MIQ, or by relevant regulations.

I.4.4 Auditing Body Resource Requirements

The Auditing Body is an organization consisting of individual auditors employed in a single company or a single individual. In the case that the Auditing Body is a single individual, the individual and its legal entity shall fulfill all the requirements listed in Section 4, and maintain a process for outsourcing expertise and roles, as necessary, in alignment with this document.

The Auditing Body shall have a process to manage the competence of personnel to maintain MiQ program-specific competence requirements in Section 4.14, including:

- The ability to apply the concepts required for the audit process (e.g. risk assessment, evidence gathering)
- Sufficient knowledge about the content of the client's information
- Minimum annual review of the competency of individual team members and a process to close gaps in competence demonstration that personnel have the required competence to audit to the specific criteria (e.g., MiQ standard)

⁴ For the purposes of this document, consulting is defined consistently with ISO 17029:2019, "participation in establishing the claim that will be the object of the validation/verification." Participation in establishing a claim can involve designing or supporting the emissions reporting system, standard operating procedures, mitigation technologies, methane monitoring strategy and development of quantification methodologies and inputs. Participation can also include providing specific expertise that supports the preparation of a claim. Arranging or participating in training that relates to the claim is *not* considered consulting, as long as *client-specific* solutions are not provided. The provision of generic information is also not considered to be consulting, and includes the explanation of relevant methodologies, techniques or tools and sharing of non-confidential information related to best practices.

- Demonstration that team leaders have sufficient knowledge to manage the audit team to fully meet the objectives of the audit engagement, the ability to perform audit engagements, and the demonstrated ability to manage audit teams

Personnel shall follow all additional requirements related to confidentiality as per ISO 17029:2019, 7.2. Refer to Section 4.4 for program-specific requirements related to the impartiality of personnel in audit engagements.

The Auditing Body shall have access to enough competent audit team members to adequately perform the scope of services it is recognized under and the volume of work it is contracted against.

Per the requirements of ISO 17029:2019, 7.2.2, the Auditing Body shall require all personnel (internal or outsourced) to enter into a legally enforceable agreement. The details of these agreements shall be used when identifying threats to impartiality for audit engagements.

The Auditing Body may outsource audit activities via contract arrangement with another organization to fulfill required resourcing or competence requirements, following the requirements of ISO 17029:2019, 7.4.

It is acceptable for an Auditing Body to consist of an individual auditor. In these cases, the auditor must be able to serve as a team leader and technical expert. The individual auditor shall demonstrate how necessary resources are acquired per their competence management system. Whether an Auditing Body is composed of a single representative or multiple representatives, it must follow these updated requirements.

I.4.5 Management of Information

The Auditing Body shall provide a competence management system to MiQ. This includes available information related to its audit processes, impartiality commitments, its recognition to perform MiQ audit activities, and its complaints and appeals process as per ISO 17029:2019, 10.1.

The Auditing Body shall provide information to its clients as per ISO 17029:2019, 10.2, and ISO 14065.

The Auditing Body shall maintain an agreement with clients that ensures their assurance services are portrayed by the client in a manner consistent with the services provided by the Auditing Body, based on ISO 14065:2020, 10.3, and 17029:2019, 10.3.

The Auditing Body shall adhere to information confidentiality requirements as per ISO 17029:2019, 10.4.

I.4.6 Quality Management System

The Auditing Body shall establish, document, implement, and maintain a quality management system aligned to the requirements of ISO 17029/14065.

The management system shall include:

- A review of its management system by Auditing Body management is conducted at least annually. The inputs to and outputs of the management review shall be aligned with the requirements of ISO 17029:2019, 11.2
- Internal audits conducted at least annually that are aligned to the requirements of ISO 17029:2019, 11.3

- Establishing processes for the identification and management of nonconformities that are discovered within the Auditing Body’s own activities. The processes shall define requirements that are consistent with ISO 17029:2019, 11.4
- A continual process to consider the risks and opportunities associated with the activities, to achieve goals aligned with ISO 17029:2019, 11.5
- A process by which documented information is adequately controlled, retrieved, distributed, stored, and used consistent with ISO 17029:2019, 11.6.

This must include documented responsibilities and oversight, procedures for performing audits, engaging in corrective actions if noncompliance is identified, and managing relevant records. The Auditing Body shall have processes in place to manage appeals and complaints.

I.4.7 Establishing the Framework to Conduct Audits

Auditing Bodies are responsible for establishing the framework for the audits performed by the auditors working for the Auditing Body. Prior to the beginning of an engagement, the Auditing Body must have entered into an agreement with the client.

Prior to commencing an engagement, the Auditing Body must ensure that the auditors use the applicable and most up-to-date version of relevant audit guidance. Should questions or ambiguities arise during the audit process, the Auditing Body must contact MIQ to request clarification and guidance before proceeding with the audit.

Audits to verify conformity with the requirements of the MiQ standard must be conducted every 12 months. The Auditing Body should encourage a timely audit to avoid a gap between certification periods.

I.4.8 Documentation

Auditing Bodies must properly document all MIQ audits that are carried out. This includes the full completion of audit reports and, if applicable, embedded verification and/or validation statements of the audited clients based on the latest templates provided by MiQ. MIQ provides templates for audit procedures and audit reports that shall be followed.

MIQ may specify existing documentation requirements or may request additional information or documents to be provided to MIQ, if, among other purposes, this is deemed necessary to reduce the risk of fraudulent behavior and meet the intended uses of certification engagements. Appropriate transitional periods for fulfilling additional information or document requests will be provided by MiQ.

I.4.9 Data Transmission

The operator shall submit sufficient and required audit documentation to the MiQ Registry for each audit performed by an Auditing Body of their facility in a timely manner⁵. This should be prior to the date on which an audit report is due to be submitted to the MiQ Registry, as per the latest version of the MiQ Program Guide.

Sufficient documents include, but are not limited to:

⁵ MiQ requires operators, not Auditing Bodies, to submit audit documentation to the MiQ Registry. In instances where this document contradicts with the MiQ Program Guide, the MiQ Program Guide takes precedence.

- Audit reports or verification statements
- Audit checklists, if required to be submitted as part of the engagement
- Additional documentation within a certification period, as required by the MiQ Program, that may confirm or change the certification assessment

I.4.10 Complaints and Appeals

The Auditing Body shall have a procedure in place for handling complaints and appeals related to audit engagements. These procedures shall follow the requirements of ISO 17029:2019, 9.9 and 9.10, respectively.

I.4.11 Records Management

The Auditing Body shall maintain and manage records in accordance with MiQ program requirements associated with supporting documentation and the requirements of ISO 17029:2019, 9.11.

I.4.12 MiQ Methane Audit Trainings

Before an auditor can begin conducting MiQ Audits in any of the roles defined in Section 4.14, the Auditing Body must ensure that the auditor has participated in MiQ Methane Audit Training. These modules are currently being updated and will be published following the release of the updated requirements.

On an annual basis, after completion of the MiQ Methane Audit Training, auditors will need to demonstrate that they are continually to engage in professional development and/or remaining updated with methane emissions science and technology. MiQ will provide additional detail regarding these requirements. (See Maintenance of Knowledge and Skills *subsection on p. 16.*)

I.4.13 Requirements for Application, Recognition and Publication by MIQ

The Auditing Body must present an application to MiQ that includes the following, at minimum:

- The legal entity name, address(es), and legal status
- Its relationship with a larger corporate entity, if applicable, and a summary of associated activities
- Any external authorizations, accreditations, or recognitions, including expiration dates for those authorizations, accreditations, or recognitions
- A system in which impartiality threats are identified and managed, per Section 4.3
- A competence management system, per the requirements of Section 4.5
- A quality management system following the requirements of Section 4.6
- Complaints and appeals procedures following the requirements of Section 4.10
- A list of audit team members with relevant roles and qualifications per Section 4.14

Auditing Body registration shall take place after the Auditing Body has provided MiQ with all the necessary materials listed in this section.

If MIQ has received satisfactory evidence from the applying Auditing Body and the process defined in Annex A has been completed, MIQ will submit a notice of its recognition to the Auditing Body and a Recognition Agreement, to be signed by MiQ and the Auditing Body.

Once both parties have signed the Recognition Agreement, the Auditing Body is recognized by MIQ. Upon Auditing Body recognition, all Auditing Body team members participating in a MiQ audit must complete the MiQ training before commencing the audit. Certification engagements under this Recognition can only be conducted after the above steps have been completed. An exception to this rule can only be made with explicit approval in advance by MIQ.

Regulatory developments or clarifications might require timelines for external recognition to be changed. If, in such a circumstance, MiQ modifies the timeline for external recognition, Auditing Bodies must fulfill any new requirements necessary for their recognition to remain valid. For example, if regulatory requirements resulted in external accreditation being necessary for recognition in 2028, and not 2029, MiQ would amend dates in this document. Auditing Bodies would then have to seek formal accreditation as of 2028 – and not in 2029 – to be recognized by MiQ. MiQ would provide notice of such changes.

As soon as this recognition is finalized, MIQ will publish details of the MIQ-recognized Auditing Body per Section 5.1 on a public webpage.

I.4.14 Competency Requirements for Audit Teams and Auditors

Audit Team Competency Requirements

The following requirements are in place so that all Audit Teams collectively possess the requisite sector-specific and subject matter knowledge required. These requirements are program-specific requirements derived from the requirements as set out in Sections 6-9 of ISO 14066:2023.

The audit team must collectively possess the following general knowledge:

- Knowledge of the MiQ Program and the relevant Standards by which the Auditing Body is recognized to perform audits, including:
 - MiQ Standard requirements and other guidelines
 - Any non-voluntary intended use, including regulatory compliance, by which a certification engagement may be applied to
- Knowledge of the required and allowed quantification methodologies and qualitative requirements of the MiQ Program and their consequences for data quality, including:
 - The ability to assess the risk of systematic under-reporting of emissions or the lack of adherence to certain operational practices
 - The ability to sample complete representations of emissions data and supporting information
 - Evaluating systems that identify, collect, analyze and report emissions information including inventories and the raw inputs that go into those inventories
 - Evaluating the quantification methodologies employed by the operator, including any methodologies related to the usage of specific emissions factors, engineering calculations, process simulations and the reconciliation of methane emissions from various advanced methane detection technologies and other inspection procedures

- Calibration procedures of relevant equipment critical to emissions calculation
 - Reporting principles consistent with MiQ Standards
 - The potential impact of typical, atypical, or malfunctioning operating conditions
 - Materiality, as applicable, under relevant MiQ audit protocol
 - The principles, criteria, processes and procedures behind claims made per certification to the MiQ Standard, specifically MiQ grades, methane intensity bands and/or other data quality metrics
- General auditing knowledge of emissions data and relevant qualitative information and indicators. Auditing knowledge may be defined in greater detail in MiQ audit protocols but in general should include:
 - Methodologies for evaluating emissions data, qualitative information, and assessing risks based on the data and information received
 - Techniques for sampling data and information
 - Controls and supporting processes for data and information systems

Audit Team Roles

The audit team must consist of the following roles, at a minimum, based on ISO 14066:2023.  An audit team could be represented by a single individual that serves multiple of these roles, and in that situation the auditor shall be responsible for bringing on additional resources, as necessary.

- A team leader (e.g. lead auditor)
- A technical expert
- An independent reviewer
- Other auditors, as necessary

Each role is defined by the following program-specific requirements and shall maintain the following skills.

Team Leader: The team leader is responsible for managing the team and planning the overall audit engagement. The team leader shall oversee the planning of the audit, evaluate risks particularly related to methane emissions performance, and as needed, review audit activities and make decisions related to the audit engagements. They shall have the skills to assess the following.

- The competency of their team
- Largest risks associated with the audit activities, including the risk profile of large, unintended releases of methane emissions and the risk of those events not being captured in the client's reporting
- The conclusions and results of the audit

Team leaders must have the following experience:

- At least four years of relevant work experience, including two years in GHG emissions or other environmental auditing work
- Prior experience performing environmental audit engagements, which preferably includes methane emissions in oil and gas operations

Team leaders must possess the following technical knowledge:

- Emissions sources, control technologies, operational practices and quantification approaches across the oil and gas segments for which they are applying for recognition by MiQ
- Knowledge of the relevant frameworks for which they are performing evaluations. This includes relevant regulations and voluntary frameworks.
- Risk-based engagement planning and execution strategies
- Principles by which evidence is gathered (e.g. site visits, materiality)

Team leaders must be able to:

- Design audit engagement plans for methane emissions data review
- Apply effective auditing methodologies for operational data, estimation-based data, and measurement-based data
- Conduct site visits, operational interviews, and other evidence gathering in a professional manner
- Supervise audit teams and maintain internal quality management standards

Auditor: The auditor may assist the team leader with the planning and execution of the audit. The auditor carries out audit activities. Auditors must have:

- Experience conducting GHG audits, preferably with a focus on methane emissions
- Understanding of GHG quantification methods
- Working knowledge of advanced methane detection and quantification technologies and quantification techniques

Technical Expert: The technical expert provides specific knowledge on methane and/or greenhouse gas emissions within the oil and gas sector and of the stage of the oil and gas sector for which an audit is taking place. The technical expert must possess specific knowledge of the oil and gas industry in general, and emissions of the relevant oil and gas supply chain stage. Note that the team leader or auditor may also serve as the technical expert. This knowledge may be demonstrated by:

- Prior MiQ auditing experience or other audit experience related to oil and gas emissions, particularly methane emissions.
- Experience studying, calculating, or analyzing methane emissions from both site-level and source-level quantification approaches
- Experience implementing quantification programs and/or relevant emissions reduction projects
- Knowledge of calibration procedures for equipment critical to GHG emissions reporting to data quality
- Process or facilities engineering experience within the oil and gas sector
- Environmental compliance experience in the oil and gas sector, including
 - Air quality regulatory compliance, particularly around methane and VOCs
 - Execution of programs to improve oil and gas company practices relating to methane emissions awareness, quantification or mitigation
- Experience evaluating data from methane measurement and detection technologies, including
 - Attribution to certain equipment categories and sources
 - Uncertainties of quantified data, and the reasons for those uncertainties
 - Extrapolation methodologies associated with quantification approaches

- The use of operational and parametric monitoring to supplement methane measurement data
- Comparison of methane measurement data to other forms of calculations (e.g. emissions factors, engineering calculations, process modeling)

Independent Reviewer: The independent reviewer is a competent person who is not part of the audit team conducting the engagement. They shall perform a review of the quality and completeness of the audit engagement. The independent reviewer must maintain complete independence from the execution and opinion of the audit until they review the details of the audit. The independent reviewer may be part of the same Auditing Body. In a single member audit team, the independent reviewer must be a separate individual than the single team member.

The independent reviewer must possess the following qualifications:

- Sufficient technical knowledge to assess the associated boundary, risk factors, and engagement plan
- Experience leading, participating in, or reviewing environmental audits
- Familiarity with the regulatory or voluntary frameworks that underpin either the engagement or possible use cases

Maintenance of Knowledge and Skills

Individual auditors must continuously demonstrate their education, and work experience relevant to methane and greenhouse gas emissions in the oil and gas sector. Auditors will need to demonstrate evidence of this on an annual basis beginning the year after completion of the MiQ Methane Audit training. As needs are determined by the competence management system, auditors shall participate in training covering one or more of the following topics. These trainings can be conducted internally or externally, although it is preferred that key auditors have necessary external exposure. This maintenance of knowledge and skills can also include participation and presentation in conferences or technical working groups.

- Best practices in GHG measurements, quantification and emissions controls in the oil and gas sector
- Emerging methane measurement technologies in the oil and gas sector
- The landscape of voluntary and regulatory methane and GHG management programs within the oil and gas sector
- Updates to oil and gas regulatory landscape in jurisdictions relevant to their recognition for methane emissions mitigation and quantification.
- Fundamentals or updates to GHG assurance engagement best practices

I.5 Details of Recognition

I.5.1 Publication of Information

MiQ will publish the following information for each recognized Auditing Body on a website accessible to the public.

- Name of legal entity of Auditing Body
- Logo of Auditing Body
- Website of Auditing Body

- Name of company contact
- Contact information (e.g., email) of company contact
- Date of Recognition granted by MiQ
- Scope of Recognition, including Standards and regions of Recognition
- Name of external authorization or accreditation that Auditing Body applied under, if applicable
- Link to public information regarding external authorization or accreditation, if applicable

This information will be maintained as information changes.

I.5.2 Fees

MiQ’s updated requirement structure includes the following fee structure. This fee structure is meant to cover MiQ’s costs associated with recognizing and surveilling Auditing Bodies. New fees will go into effect as of the date of publication of these updated requirements.

Does Recognition include External Authorization or Accreditation?	Application Fee	Annual Fee
Yes, recognition includes external accreditation to ISO 17029, 14065, and ISO 14064-3	\$2,500	\$1,500
Yes, recognition includes a relevant external accreditation or authorization to requirements involving verifying or certifying GHG data and emissions management, but not including external accreditation to ISO 17029, 14065 ,and ISO 14064-3	\$4,000	\$2,500
No, recognition does not include a relevant external accreditation or authorization (Only applicable until Dec. 31, 2028)	\$7,500	\$5,500

- The Application Fee is charged in the year in which the Auditing Body initially applies for recognition or submits a renewal application, typically every 5 years (see Annex A). Payment is due within 30 days that the application is submitted to MiQ. Applying Auditing Bodies are charged the full application fee regardless of the outcome of the decision of recognition.
- The Annual Fee is charged each year. The annual fee is charged during the month of each anniversary of the recognition decision, due within 30 days. The annual fee is not charged in years in which the Auditing Body initially applies or applies for renewal of recognition.
- Auditing Bodies fundamentally updating their application basis, such as including an external accreditation or authorization, prior to the end date of their current recognition cycle will be charged the application and subsequent annual fee that most closely associated with the details of the external authorization in their application.
- See Annex C for example of fee structure.

I.5.3 Sanctions

In case of non-compliant behavior of the Auditing Body or of its audit teams, MIQ may impose sanctions against the Auditing Body. Determined on a case-by-case basis, MIQ shall evaluate the type and level of non-compliance and define the type and level of sanctions. If Auditing Bodies are suspended from conducting MIQ audits, they will be removed from the list of MIQ Auditing Bodies and Auditors until the underlying issues behind the sanctions are resolved. In severe cases, MIQ may bar the Auditing Body for a set period or permanently.

Annex I.A - MiQ Recognition Process

This process establishes a framework for MiQ's assessment of Auditing Bodies seeking recognition to perform audits against MiQ Standards.

Recognition Review Steps

1. Application Review
 - MiQ, or its designee, to review completeness of the application, requested scope by the applying Auditing Body, and legal entity status
 - MiQ to examine details of submitted documents and assess alignment to the requirements of this document
2. Interviews
 - MiQ, or its designee, may conduct interviews, as deemed necessary, to confirm details presented in the application.
3. On-Site Assessment
 - Onsite assessments are not part of the scope of recognition. This requirement may be subject to change in the future and can be required by MiQ on a case-by-case basis.

Decision of Recognition

A written report on the outcome of the assessment shall be provided to the Auditing Body within 30 days. Any extension to that timeframe shall be communicated by MiQ. The report shall summarize the scope assessed, include feedback on the competence of the audit team, and identify any findings that must be addressed prior to recognition.

If corrective findings exist, Auditing Bodies shall be given 30 days following the report to address any of these findings.

Training

Auditors in recognized Auditing Bodies must complete training modules prior to conducting MiQ audits. These training modules are currently in development and will be published as part of the facilitation of this new process. Auditors will need to demonstrate evidence of this on an annual basis beginning the year after completion of the MiQ Methane Audit training.

MIQ Review

Recognized Auditing Bodies will occasionally be observed and reviewed by MiQ or its designee.

MiQ will inform the Auditing Body in a timely manner of upcoming review activities. This process may include

- Evaluations of findings from witness assessments performed in the interim from the period from the last review period or recognition, whichever occurred more recently
- Assessment of the Auditing Body's impartiality and independence safeguards and policies
- Assessment of the Auditing Body's ongoing competency management system
- Review of new or promoted team members, particularly new Team Leaders

- Assessment of relevant external training conducted to maintain competencies in emissions management practices, methane measurement and detection practices, and changes to relevant regulatory regimes
- Witness statement assessments

Trigger events for unscheduled or non-routine review may include:

- Complaints filed by clients
- Significant changes to the audit team that reduce the availability of audit team roles to a concerning level, considering the volume of audits conducted by the Auditing Body
- Discovery of significant audit errors or omissions
- Potential breaches of impartiality or independence

Recognition cycles

Recognition cycles are 5 years in length. Full reassessments shall be completed every 5 years. After a reassessment and the resolution and closure of any findings, MiQ shall issue a statement of continued recognition. If this includes an extension to the scope of accreditation, this shall also be included in the statement.

Auditing Bodies may apply for recognition under a different pathway prior to the end of a recognition cycle. In this case, a 5-year recognition cycle shall restart upon the decision of recognition being communicated to the Auditing Body

Extension of Recognition

The scope of recognition specifically applies to Standards maintained or supported by the MiQ program. To extend the scope of recognition, the Auditing Body shall provide MiQ with additional evidence related to the scope extension. This may include relevant new skills developed or brought in by audit team members to warrant the extension request (e.g. increased experience with a particular operated asset class, completed GHG audit, consulting experience with methane data and/or emissions controls experience, completion of requisite training, and demonstration of annual professional development activities). MiQ will assess extensions in a timely manner and no later than the next review assessment of the Auditing Body. Scope extensions do not constitute a full recognition reassessment, but rather trigger review by MiQ, or its designee, of information related to the extension request. Auditing Bodies applying for a scope extension will remain on the same recognition cycle, regardless of the decision of the scope extension.

Corrective Actions and Non-conformities

Nonconformities may be uncovered during review, reassessment or complaints

- Nonconformities (NCs) graded as minor or major
 - o Major nonconformities include
 - Failure to follow MiQ Standard requirements
 - Inadequate conflict of interest safeguards

- Unqualified audit personnel used (e.g. no competency assessments)
- Misstatement of certification decisions
- Minor nonconformities include
 - Outdated documentation used (e.g. outdated MiQ audit checklists, report templates)
 - Lack of detail in evidence or site sampling rationale
- Follow-up assessments based on satisfactory follow-up, risk and NC severity

Records and Confidentiality

- Assessment records and decisions should be retained for at least 5 years
- Reviews as described in this document are kept confidential

Annex I.B – Appeals Process for Recognized MiQ Auditing Bodies

This procedure ensures that all accredited Auditing Bodies have access to a fair, transparent, and impartial process to appeal decisions made by MiQ.

This process applies to appeals related to:

- Non-renewal of accreditation
- Denial of scope extensions
- Suspension of accreditation
- Rejection of corrective action plans submitted to close non-conformity issues

Any Auditing Body subject to an adverse decision may submit a formal appeal. The appeal must be initiated by an authorized representative within the designated timeframe.

Appeals must be submitted within 30 calendar days from the date the decision was communicated.

Appeals should be made via written submission, which may be transmitted electronically.

Contents shall include:

- Identification of the decision being appealed
- Grounds for the appeal
- Supporting documentation or evidence

Appeals shall be reviewed by personnel not involved in the original decision.

All members must declare no conflicts of interest before reviewing the appeal.

MiQ may ultimately:

- Uphold the original decision
- Reverse or amend the decision
- Request further corrective actions

All records are retained for a minimum of five years.

Appeals will be handled confidentially.

Annex I.C – Example Fee Schedule for Auditing Body

Auditing Body Recognized on June 1, 2026 with no external accreditation, that converts to recognition that includes ISO accreditation on October 1, 2028

Year	Total Fees	Notes
2026	\$7,500	Application fee for Auditing Body that does not have a relevant external accreditation or authorization. (Recognition date: June 1, 2026)
2027	\$2,500	Annual fee for Auditing Body that does not have a relevant external accreditation or authorization.
2028	\$5,000	Annual fees for Auditing Body that does not have a relevant external accreditation or authorization; Application fee for recognition that includes accreditation to ISO 17029, 14065, & 14064-3 ⁶
2029	\$1,500	Annual fee for recognition that includes accreditation to ISO 17029, 14065, & 14064-3

⁶ If the Auditing Body is Recognized by MiQ and has been externally accredited under ISO 17029, 14065, & 14064-3 prior to June 1, 2028, then the former Annual Fee (for recognition that does not include a relevant external accreditation or authorization) would not apply. Total 2028 fees would just be the application fee of \$2,500 (i.e, application fee for recognition that includes accreditation to ISO 17029, 14065, & 14046-3).

Annex I.D – List of External Authorizations, Recognitions or Accreditations Accepted for Recognition

The following list is a non-inclusive list of external authorizations, recognitions, or accreditations that may be accepted as part of the scope of recognition. “Acceptance” only entails that MiQ recognizes these recognitions as having external components to them that are equal to or exceeding the base requirements within this document for recognition. For each Auditing Body recognized with an external authorization or accreditation, MiQ will assess the scope of review conducted by the public authority and tailor review activities to fill in gaps to these requirements. Gaps may be identified within any of these requirements. “Acceptance” also does not imply acceptance for all regions or segments. Auditing Bodies must still apply with a clear scope of requested recognition. Recognition will be granted based on commensurate experience and staffing for segments and regions. MiQ reserves the right to accept or reject external authorizations, recognitions, or accreditations, other than ISO 17029, 14065, 14064-3.

It is the responsibility of the applying Auditing Body to engage with MiQ in advance of seeking external authorization, recognition, or accreditation from a program other than ISO 17029, 14065, 14064-3.

List of External Authorizations, Recognitions or Accreditations accepted for MiQ Recognition

ISO 17029, 14065, and ISO 14064-3 accreditation via accreditation body within the International Accreditation Forum

Accreditation as a verification body for the CARB MRR regulation ⁷ or cap-and-trade regulation ⁸
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Accreditation as a lead verifier for the CARB MRR regulation or cap-and-trade regulation. Note that regardless of whether the lead verifier is acting alone or is part of a larger Auditing Body, all required documentation must be part of an application submitted to MiQ.

Accreditation by a national accreditation body pursuant to Regulation (EC) No 765/2008, as stipulated in Regulation (EU) 2024/1787 ^{9, 10}

Authorization of an individual verifier pursuant by a national authority that is different from the national accreditation body appointed pursuant to Article 4(1) of Regulation (EC) No 765/2008, as stipulated in Regulation (EU) 2024/1787

Approval of verification firms in British Columbia’s GHG Emission Reporting Regulation
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⁷ <https://ww2.arb.ca.gov/sites/default/files/classic/cc/reporting/ghg-rep/regulation/mrr-2018-unofficial-2019-4-3.pdf>

⁸ https://ww2.arb.ca.gov/sites/default/files/2021-02/ct_reg_unofficial.pdf

⁹ <https://eur-lex.europa.eu/eli/reg/2024/1787/oj/eng>

¹⁰ Note that relevant acts to further support accreditation or authorization via Regulation (EU) 2024/1787 have not yet been implemented. These authorizations are referenced here as they are *anticipated* to have overlap with the recognition requirements in this document.

This list is non-inclusive. Other schemes may be accepted as partial or full evidence of compliance with the requirements of this document. The Auditing Body should enquire with MiQ in advance.¹¹

¹¹ Note that relevant acts to further support accreditation or authorization via Regulation (EU) 2024/1787 have not yet been implemented. These authorizations are referenced here as they are *anticipated* to have overlap with the recognition requirements in this document.

MiQ Certification Program

Part II: Audit Guide v2.0



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Audit Guide Introduction

MiQ Audits are conducted by independent third-party auditors who determine the adequacy (i.e., process, procedure, policies), effectiveness (i.e., preventative and mitigative controls) and conformance (i.e., activities) of the Producer/Operators methane emission performance in relation to the segment Standard.

The intent of this guidance document is to provide a systematic approach and uniform understanding of the necessary activities to conduct robust annual audits against the MiQ Standard. These required elements include pre-audit activities, desktop audits, and onsite audits. The MiQ Standard – against which a participating operator will be audited and certified – includes a determination of methane intensity, company practices, and adoption of monitoring technologies. In following this Audit Guide, and consistent with the MiQ Standards, activities covered in this material qualifies as a mixed engagement – a combination of both verification and validation activities. MiQ’s Audit Guide is consistent with the audit, verification, and validation principles included in ISO 14064-3. In following the requirements of this Audit Guide, an MiQ auditor’s opinion statement can be made with reasonable assurance.

This Audit Guide is complementary to MiQ’s Auditing Body Recognition Protocol (ABRP). The ABRP provides the process by which MiQ recognizes auditing bodies. Upon being recognized, auditors that work for those auditing bodies may conduct audits against the relevant MiQ standard. Those auditors must complete MiQ trainings before commencing any audits. MiQ requires that recognized MiQ auditors utilize this Audit Guide document, in addition to using their professional expertise and experience, to ensure that MiQ audits are conducted with the maximal amount of integrity and consistency, and to provide reasonable assurance.

This document is intended to assist auditors in planning each phase of a MiQ Audit, make complete documentation requests, assess the data, calculations and information provided, conduct onsite audits, conduct interviews, and determine if received information is conforming to the MiQ Standard. These processes are consistent with ISO 14064-3.

As practices, technologies, and regulatory frameworks change over time, MiQ will aim to align its framework, standard, and audit process to align with these changes. This will result in more streamlined reporting, a more efficient certified gas market, and more effective methane emission reductions. In this regard, this Audit Guide is consistent with the monitoring, reporting, and verification and reasonable assurance requirements in the European Union Methane Regulation (EU Regulation 2024/1787).

This document will continue to be updated as methane auditing best practices are refined. MiQ encourages feedback to this document, to share learnings with stakeholders and other bodies.

Normative references

This Audit Guide is consistent with the following normative references and thus, ensures alignment with international best practices.

- European Union Methane Regulation (EU Regulation 2024/1787)
- ISO14064-3:2019 (Specification with guidance for the verification and validation of greenhouse gas statements)

- ISO14065:2020 (General principles and requirements for bodies validating and verifying environmental information)
- ISO17029:2019 (Conformity assessment — General principles and requirements for validation and verification bodies)

Principles

The following principles – stated in ISO14064-3 – will guide this protocol to ensure that the audited information is true and fair. These are:

1. Impartiality: “Design and execute the verification/validation engagement so that it is objective and does not introduce bias.”
2. Evidence-based approach: “Ensure the audit engagement employs a rational method for reaching reliable and reproducible conclusions and is based on sufficient and appropriate evidence.”
3. Fair representation: “Ensure the verification and validation activities, findings, conclusions and opinions are truthfully and fairly presented. Report significant obstacles encountered during the process, as well as unresolved, diverging opinions among verifiers or validators, to the responsible party and the client”
4. Documentation: “Document the verification/validation and ensure it establishes the basis for the conclusion and conformity with the criteria.”
5. Conservativeness: “When assessing comparable alternatives, use a selection that is cautiously moderate- and do not rely on information until verified”

II.1 Scope

MiQ’s audit process consists of the following elements:

- Initial Operator Engagement – Auditor shall have initial engagement with operator (i.e., the potential auditee) to determine whether any internal or external conflict of interest conditions exist.
- Desktop review – evaluation of data, calculations, documentation, and corresponding interviews that support adherence to the MiQ Standard.
- Onsite Audit – field assessment and interviews that evaluate the implementation and effectiveness of company practices, deployment of monitoring technology, and confirm the inputs of an emissions inventory. The onsite audit is intended to compliment the findings of the Desktop review.
- Annual Audit Report – a document provided to the operator that contains a comprehensive analysis of the data and documentation from the Audit as well as recommended grade. Annual Audit Reports are submitted to the Registry in accordance with the MiQ Program Guide.
- Audit Checklist – a document in spreadsheet format and populated by the Auditor to help structure evidence gathering and analysis. Annual Audit Reports are submitted to the Registry in accordance with the MiQ Program Guide.

Auditor adherence to this process can result in the auditor providing reasonable assurance in the conclusions in the Opinion Statement.

This and all referenced guidance documents apply to all published MiQ Standard Segments.

In following the requirements of this Audit Guide, the opinion statement generated by auditors can be made with reasonable assurance. Audit activities undertaken for MiQ certification by auditors can be performed at a reasonable level of assurance. MiQ’s Audit Guide is based, in part, on ISO 14064-3 and adheres to the reasonable assurance elements contained therein.

II.1.1 Objectives

The auditor shall identify the objectives of the audit engagement. Ultimately this may include consultation with the operator being audited to understand the possible use cases for the operator.

II.1.2 Scope

The auditor is required to define the scope of the engagement. The scope shall include identification of the operational boundaries and processes within the audit engagement, the anticipated emissions sources, GHG types, and the timeframe for which the audit will cover.

II.1.3 Criteria

The criteria, which establish the methods that are used to prepare the statement, shall be stated and shall include one or multiple standards that are recognized by MiQ.

II.2 Terms and Definitions

The following is a list of terms found in Standard and/or Checklist and their definitions. This section may serve as a useful reference for the terms used throughout the document.

Term	Definition
Audit	An objective third-party review of management systems, equipment, and data related to the operator’s programs to manage and reduce emissions within their operations. The audit process is consistent with both validation and verification processes under ISO 14046-3.
Auditing Body	The company that conducts the audit against the MiQ Standards.
Auditing Team	The group of auditors from a recognised auditing body that conduct the audit.
Auditor	A member of an audit team that is part of an auditing body that has been recognized by MiQ. To conduct an audit – even if an employee of a recognized audit body – the auditor must have successfully completed MiQ audit training. Auditor is used interchangeably with verifier.
Assessment	Analytical process by which a Standard criteria or requirement is evaluated, classified, or dismissed.
Conformance	Based on the information made available and reviewed, no gaps or findings were identified for a Standard mandatory requirement. Auditor has no corrective actions or recommendations for the auditee.

	Recommendations may still result in the ability of operators to improve their certification grade, or improve performance.
Competency	Observable and demonstrable knowledge, skills, and behaviours to perform a specific task.
Corrective Action	An action that addresses the deviation from optimal or standard operating conditions and explains the solutions that will be used to correct them.
Demonstrate	Verify conformance via records, measurements, engineering analysis and/or interviews.
Effectiveness	The implementation of processes and procedures resulting in the achievement of goals, objectives, and targets. The results are easily quantifiable and continual improvement is demonstrated.
Engineering Assessment	A documented assessment using engineering principles conducted by a person with demonstrated understanding and experience in application of the principles and risk analysis.
Evidence	Records relevant to the audit criteria which confirm a task, event, or activity.
Finding	Results of the evaluation of collected audit evidence against Standard criteria.
Gap	Finding is deemed by auditor to not meet the intent of the Standard.
Implemented	A process or methodology that has been approved and communicated throughout the organization. All staff and persons working on or contracted on behalf of the company that may require knowledge of the requirement are aware of its existence and its application. Both written documentation and demonstration of a given process or methodology are necessary to prove implementation.
Knowledge	Ability to understand and explain the task.
Manual	Internal company specific design manuals that are referenced by engineering and field personnel.
Materiality	The concept that operator misstatements, individual or in the aggregate, could influence decisions by the operator or other parties. The results of a materiality assessment will determine whether actions must be taken by the operator in order to issue an opinion. Also concerns determination of significance of emissions from emission source types.
Non-Conformance	A statement of fact made during the audit and substantiated by objective evidence that a mandatory or improved requirement is not being implemented. (For example, an operator has not accounted for all emissions sources in their inventory, has not developed and implemented required company practices, or did not meet defined criteria for monitoring technology).
Observation	A state of fact made apparent during the audit and substantiated by objective evidence that a requirement is not being implemented with sufficient reliability.

Partial-Conformance	A judgment that a mandatory or improved requirement is only partially being implemented and is on a short- or near-term path to conformance.
Reasonable Assurance	The auditor has gathered sufficient and appropriate evidence to conclude that the subject matter is free from material misstatement'.
Recommendation	An optional observation or review of objective evidence by the auditor that, if implemented, may lead to conformance to the Standard, a higher grade, or improved operation.
Responsible	Individual who is tasked with performing the activity/work.
Skills	Ability to perform the task.
Standard	Internal company specific design and operating standards that are referenced by engineering and field personnel.
Training	A series of specific tasks completed to achieve competency. Tasks could include on the job training, instructor-led courses or self-study learning modules provided by employer.
Validation	Per ISO 14064-3, the process for evaluating the reasonableness of the assumptions, limitations and methods that support a statement about the outcome of future activities. Can be used interchangeably with audit.
Verification	Per ISO 14064-3, the process for evaluating a statement of historical data and information to determine if the statement is materially correct and conforms to understood criteria.

II.3 Roles and Responsibilities

The overarching roles and responsibilities for the Audit are outlined in the Table 1 below. Roles and responsibilities for audit bodies and audit team members are listed in MiQ's Auditing Body Recognition Protocol (ABRP). Auditing body recognition is contingent on demonstration of ABRP requirements 4.3-4.14 and subsequent MiQ approval.

Table 1: Roles and Responsibilities of Audit Program

ROLES	RESPONSIBILITIES
MiQ (Scheme Owner and Assurance Function)	<ul style="list-style-type: none"> Accountable for the certification program (i.e., scheme owner). Responsible for the overall effectiveness and maintenance of the audit process. Serves as an assurance function and may be engaged by either the auditor or auditee when there is a need for feedback, clarifications and/or resolutions. Accredits MiQ auditors. Onboard auditing bodies and auditors into the certification program. Controls this document and its content.
Issuing Body (Registry Operator)	<ul style="list-style-type: none"> Verify submitted audit report to MiQ Program Guide. Confirms final certification grade. Escalate concerns or discrepancies to scheme owner (MiQ).

Auditor/Auditing Body	<ul style="list-style-type: none"> • Assess operators' conformance to the MiQ Standard. • Maintain independence from the operator and any information relevant to the audit process (i.e., cannot audit their own work product). • Prepare audit report and associated documentation summarizing auditor performance to the MiQ Standard. • Identify non-conformance and areas of improvement in auditee process, procedures and/or programs. • Ensures all "partial conformance" associated with the audit are addressed. • Escalate clarifications, concerns, and outstanding non-conformance findings to the scheme owner (MiQ). • Prepares audit report and determines certification grade. • Independent reviewer shall perform a review of the quality and completeness of the audit engagement prior to the final submittal of the audit report. • Records management keeping, consistent with requirements in ISO 14064-3.
Auditee (Operator or Responsible Party)	<ul style="list-style-type: none"> • Conforms to Standard requirements • Provide auditor with all data and supporting information necessary to confirm conformance to each element of the MiQ Standard, including providing information kept by third parties (i.e., compressor contractor, monitoring tech provider) • Gather all data and supporting information by third-Party contractors/ monitoring technology providers requested by auditor • Provides required information to scheme owner

II.4 Audit Process Overview

II.4.1 Parties and Responsibilities

Audits involve three parties: the operator (i.e., responsible party), the auditor (i.e., third-party assurance provider and verifier), and MiQ (i.e., scheme owner).

The operator creates the statement to be verified and maintains the monitoring program. The operator is accountable for the information used to compile the statement and the monitoring program. The operator is required to engage a qualified third-party auditor to obtain and provide independent third-party verification to a reasonable level of assurance.

The auditor is responsible for providing assurance on the statement. The auditor must have skills and expertise that allow them to evaluate the conformity of the statement per the program's requirements.

MiQ, as the scheme owner, is responsible for establishing the monitoring and reporting programs to be followed by the operator. MiQ is also responsible for setting the criteria to be used to assess conformity, with reported statements and associated monitoring programs.

Initiation of Engagement between Third-Party and Operator

The auditor must assess relevant factors before entering into a contract with the operator. If issues are identified such as a potential conflict-of-interest between the auditor (or auditing body) and the operator, then the auditor must develop a plan to mitigate issues prior to finalizing an agreement to proceed with an engagement with the operator. This plan must be presented to MiQ for approval prior to beginning the engagement. MiQ may elect to reject the mitigation plans and/or disallow audits to be completed by that auditor or auditing body for that operator. MiQ will notify the auditor and operator of its decision.

Independence Evaluation

The auditor shall ensure it has true independence from the operator and monitor its independence throughout the engagement with the operator. Independence must be documented via its demonstration of compliance with ABRP conflict of interest requirements that will be a part of the final report. If a mitigation plan is also required, this will also be part of the final report along with documentation of MiQ's approval of the plan.

If a potential conflict arises during the engagement, the auditor shall immediately notify MiQ and determine actions to mitigate the potential or perceived conflict-of-interest. This will be documented as part of the mitigation plan and MiQ will decide to approve or reject the plan. If MiQ rejects the plan, then the engagement shall stop and the operator shall engage another qualified third-party auditor if they choose to continue with the audit.

The independence evaluation shall include:

- Self-interest
 - A member of the engagement team can directly benefit, financially or otherwise, based on the conclusion of the engagement
- Self-review
 - A member of the engagement team could be in a position of reviewing their own work
- Advocacy
 - A member of the engagement team or the auditing organization promotes the operator's business objectives that is directly related to the subject matter of the engagement.
- Familiarity
 - By virtue of a close relationship with a operator's directors, officers or relevant employees a member of the engagement team becomes compromised to the interests of the operator.
- Intimidation or Economic Implications
 - A member of the engagement team is deterred from acting objectively because of actual or perceived threats from the operator.

Auditing teams must demonstrate compliance with these elements through the ABRP process.

Engagement Team Evaluation

An engagement team must include the following roles at minimum:

- Team Leader
- Auditor and Technical Expert
- Independent Reviewer

The team leader may also serve as the designated signing authority if they are responsible for managing engagement risk. As discussed in the ABRP, the team leader and auditor/technical expert roles may be filled by the same individual. However, the independent reviewer must be a separate individual who was not involved in the specific audit.

The audit team must also have experience and technical competence in the oil and gas sector, as well as experience with methane emissions from oil and gas operations. Overall competence must be consistent with requirements in and provisions of MiQ's Auditing Body Recognition Protocol (ABRP).

Third-party Auditor Eligibility

Auditors must be either an employee or qualified contractor of an audit body that has been formally recognized by MiQ. All audit team members – whether an employee or qualified contractor of an auditing body – must complete MiQ's auditor training, as outlined in the ABRP.

Recognition eligibility shall be consistent with MiQ's ABRP.

Team Leader-Signing Authority

The Team Leader, serving as signing authority, is bound by legal responsibility and the professional code of conduct of their respective associations. The signing authority is responsible for:

- Representing the auditing team
- Ensuring the audit requirements have been met. If conflict-of-interest or other concerns are identified during the initial evaluation and kick-off meeting, the authority ensures mitigation procedures are implemented. This mitigation program must be presented to MiQ for approval.
- Selecting the audit team and ensuring the team has the appropriate skills, experience and qualifications
- Ensuring the audit will be conducted to the appropriate standards and criteria, and ensuring that the quality management system and independence has been applied during the engagement
- Signing the audit and opinion statement.

Finalization of Agreement

The verification agreement is in place to ensure the operator is aware of, understands, and agrees on the fundamental aspects of the audit engagement. The agreement shall include the assurance level, objectives, scope of the verification, criteria and materiality by which the statement(s) are assessed against.

II.4.2 Audit Assurance

II.4.2.1 Assurance Level

All verifications and audits of conformance to MiQ Standards shall be performed to a reasonable level of assurance

II.4.2.2 Partial Conformance

The MiQ Standard contains both mandatory requirements (minimum criteria to achieve certification of any grade) as well as improved requirements (criteria necessary to move from one grade band to the next). During the audit process, an auditor might identify partial conformance to a given Standard item or criteria. The following is generic guidance for how to proceed with the operator in the case of partial or non-conformance:

Mandatory Standard Requirements

Examples of mandatory standard requirements may include annual source-level monitoring requirements, mandatory company practices, methane Intensity emission minimum calculation criteria.

If an operator does not conform to a given criteria (either no or partial under the auditor's checklist), they may consider the following actions:

- Auditor can communicate this gap directly to the operator and they may choose to fulfill this gap prior to the completion of the audit report (preferred)
- Auditor can outline this gap within the Audit report with a grade of "No Certification" and allow the operator to fulfill these non- or partial- requirements before pursuing certification again at a later date.

Improved Standard Requirements

Examples of improved standard requirements include enhanced monitoring requirements, improved company practice points, measurement, or improved methane intensity calculations.

If an operator does not conform to a given *improved* criteria (either no or partial under the auditor's checklist), they may consider the following actions:

- Auditor can directly communicate any gap that might be preventing an operator from achieving a higher grade so they may have the opportunity to fulfill this gap prior to the completion of the audit report and achieve the highest grade possible.
- Auditor can outline this gap as part of their recommendations for continuous improvement within the audit report with suggestions for how to meet conformance the following year.

In some situations, an operator may be well on the path to conforming with a given mandatory or improved Standard item which will be expected to be completed during the certification year. In the case where the partial conformance does not materially impact the grade determination, and at the auditor's discretion, the auditor may choose to follow up on conformance of the criteria item during the certification period as opposed to delaying the

start of certification. Note, any follow up items should be documented in the Annual Audit report, and if not completed by the start of the next Annual Audit, must be flagged, fully evaluated and are grounds for denying re-certification.

II.5 Audit Process Engagement

Engagement Planning

The engagement shall include the following activities during the planning phase:

- 1) Kick-off Meeting
- 2) Perform strategic analysis
- 3) Perform risk assessment
- 4) Design evidence-gathering activities
- 5) Develop audit plan
- 6) Develop evidence-gathering plan
- 7) Gain approval of audit and evidence-gathering plans

MiQ’s Audit Process captures the steps that are required to be conducted between auditor and party being certified. This provides a framework where all expectations are understood, and audits will be undertaken that are rigorous, transparent, and repeatable. Table 1 outlines the general activities and scheduling guidance for coordinating and conducting the annual audit.

Table 2: Audit Process

#	PROCESS	HIGH-LEVEL DESCRIPTION
1	Audit Kickoff	<ul style="list-style-type: none"> • Auditor communicates expectations to the Auditee • Auditor/Auditee align on timing expectations for key milestones of Audit • Auditor confirms operator kick off call with MiQ • Auditor confirms the certification boundary is in scope with the Standard’s definition of “facility” and intended certification period • Auditor familiarizes itself with facility operations to develop representative sampling plans • Auditor and auditee align on data transfer plan
2	Audit Planning	<ul style="list-style-type: none"> • Auditee and auditor set secure data sharing structure • Auditor provides a complete list of requested information including emissions/operational data, calculations, procedures, records, and other supporting information for evaluation • Auditor develops an information verification plan • Auditor distributes list of personnel/departments for Interviews and onsite audit support.
3	Audit Execution - Desktop Audit	<ul style="list-style-type: none"> • Auditee provides documentation, aligned with information requested, through agreed data transfer plan. • Auditor conducts a complete review of all information provided

		<ul style="list-style-type: none"> • Auditor documents evidence of conformance and lists information gaps in the auditor checklist • Auditor may request more records based on gaps identified • Auditor develops interview questions based on critical areas and areas where more information is needed to determine conformance
4	Audit Execution - Interviews	<ul style="list-style-type: none"> • Auditor interviews operator representatives to gather information on critical items within Standard, identified information gaps, and areas where demonstration of understanding is required.
5	Audit Execution - Onsite Audit	<ul style="list-style-type: none"> • Site visits are required on an annual basis under the MiQ Standard. • Auditor develops a representative site sampling plan • Auditor visits sites within facility based on a representative sampling plan • Auditor observes demonstrations of operating procedures, AVO inspections, LDAR surveys and other field-based duties¹² • Auditor interviews operator representatives to get an understanding of company culture, effectiveness of company practices and training
6	Audit Report	<ul style="list-style-type: none"> • Auditor finalizes audit checklist based on desktop information review, interviews, and onsite audit • Auditor completes audit report in format prescribed by MiQ audit report template • If requested, MiQ reviews audit report to check for completeness • Signed audit report is distributed to the operator • Operator is responsible for submitting audit report to the Registry to begin certification period

II.5.1 Audit Kickoff

Kick-off meeting

The kick off meeting is useful for the personnel involved from the operator and the auditing team to meet and understand their roles. The auditor shall review the preliminary schedule of the verification process and discuss important dates and deadlines as part of the engagement. This will provide each party the opportunity to clarify issues or concerns related to the engagement prior to more time-intensive activities beginning. Where feasible, scheme owner will participate in kick-off meeting.

Process 1 – Auditor confirms certification boundary (according to the MiQ standards), certification period, facility operations and audit focus with the Auditee and discusses audit activities, deliverables, and data transfer plan.

¹² Some activities, such as trainings or mock surveys, can be observed remotely. Auditor will use best judgement to determine.

II.5.1.1 Certification Boundary

Producer/Operator to provide marked up map depicting the certification boundary and a list of geographic coordinates of all sites within the boundary for reverification and alignment prior to the Desktop Review Kickoff.

Confirm the following items:

- Certification boundary conforms with the MiQ definition. Any discrepancies, including operators leaving out contiguous assets in a basin/sub-basin, should be resolved. MiQ can be consulted if needed during these conversations.
- Number and type of assets within facility boundary.
- Location of buried or underground assets/sources.
- List of decommissioned assets.
- Upstream and downstream connected assets.
- Any plans to drill new assets in the upcoming certification year.
- Any plans to acquire significant new or divest existing assets in the upcoming certification year.

II.5.1.2 Certification Period

The certification period is the forward-looking period (maximum 12 months) during which certified operations at a Facility are eligible for MiQ certificates.

Auditor should evaluate the Operator's desired date for achieving certification and ensure alignment with the time required to complete the Audit. Understanding this early on can help the Auditor manage expectations of the speed of the audit process from the beginning and help set dates for achieving key milestones.

II.5.1.3 Facility Operations

Confirm the following items:

- Scope of assets
 - Product streams, production volume.
 - Emission source types within assets and their corresponding quantification methodology.
 - Vintage of assets if relevant (i.e., legacy assets vs. drilled/built assets vs. acquired assets).
- Upstream and downstream assets (where gas is being taken from and/or where the gas is being sent).
- Major Operational events that occurred (e.g., startups, shutdowns, malfunction/upset events, changes in operations, equipment overhaul/retrofits and/or emergencies).
- Proposed operational plans for the certification period year including announced mergers/acquisitions and potential shutdowns/divestitures.
- Key staff from Producer/Operator's team.
- Roles and responsibilities of staff involved in methane mitigation, maintenance, monitoring and accounting activities.

II.5.1.4 Data Transfer Plan

The data transfer plan is determined by the Producer/Operator.

II.6 Audit Planning

The following is an overview of the audit planning process.

1. Set up data sharing structure
2. Develop audit plan
 - List documents and operational processes necessary to evaluate methodologies used to quantify methane emissions.
 - List documents, processes, and observations to provide assurance that company practices are integrated and implemented into core operations.
 - List of documents and processes for monitoring technology.
 - List of interview topics for both desktop and onsite component.
 - Identify all personnel/departments responsible for completion of methane related activities.
3. Information Request
 - Non-exhaustive list of documents stated in auditor checklist.
 - Process flow diagrams (e.g., Piping and Instrumentation Diagram (P&ID's)).
 - Operations data.
 - Consumption data.
 - Maintenance procedures (e.g., calibration procedures, maintenance best practices).
 - Operational and maintenance records (e.g., calibration logs, routine operational checks).
 - Emissions data.
4. Audit Schedule
 - Desktop interview timeline with list of topics and necessary personnel
 - Onsite audit timeline with list of topics, sample plan and necessary personnel

II.6.1 Audit Personnel

Table 3 lists personnel who should be involved in certain stages of the audit. MiQ recognizes that roles may be titled differently across various organizations. The responsibilities column in Table 3, below, is intended to help identify company specific roles based on MiQ descriptions.

If the responsibilities below are delegated under multiple roles, MiQ recommends the auditor interview staff representing all such roles. In addition, auditors are encouraged to request interviews of all personnel they deem essential to the evaluation process.

Table 3: Operator Personnel necessary to support each Audit Stage

Audit Process	Necessary Personnel	Responsibilities
Audit Kickoff	EHS/ESG director	<ul style="list-style-type: none"> • Accountable of supporting company's certification pursuit and ensuring that it's aligned with internal strategies and goals

	Environmental/Air compliance supervisor	<ul style="list-style-type: none"> • Assigning environmental advisor to support certification pursuit • Provides support to the environmental advisor(s) and engineer(s)
	Operations and maintenance supervisors	<ul style="list-style-type: none"> • Ensures that all workers who may be engaged or participate in air emission reporting practices receive the prescribed training prior to engaging in air emission reporting activities. • Contributes to preventative maintenance (PM) plan development
	Emissions engineer	<ul style="list-style-type: none"> • Conducts engineering analysis on abnormal operating conditions • Builds business cases to modify, upgrade and/or replace equipment to reduce methane emissions • Reviews monitoring data and develops recommendations or solutions for leak repairs • Develops PM plan for equipment with emission sources
	Air compliance advisor	<ul style="list-style-type: none"> • Accountable for emissions inventory; coordinating updates to GHG inventory, reporting and quality control • Provides guidance on air quality regulatory reporting requirements • Generates regulatory reports and verifies regulatory and operational changes are incorporated into inventory and calculations • Reviews monitoring data and prioritizes leak repairs that could cause a significant environmental impact • Manages third party contractors related to air quality programs • Contributes to PM plan development
	LDAR program owner	<ul style="list-style-type: none"> • Owns LDAR program
Desktop Review and Interviews	<ul style="list-style-type: none"> • EHS/Air compliance supervisor • Operations and maintenance supervisors • Air compliance advisor • LDAR program owner 	See above
	Site Operator(s)	<ul style="list-style-type: none"> • Field staff who perform routine operational and maintenance activities to minimize methane emissions • Documents well unloadings, blowdown data, compressor run hours, compressor starts etc. • Maintains equipment per defined frequency or maintenance strategy • Completes calibration/maintenance/inspection procedures • Adheres to implemented company practice regarding emissions detection and reporting
Onsite Audit	<ul style="list-style-type: none"> • EHS/Air compliance supervisor 	

	<ul style="list-style-type: none"> • Operations and maintenance supervisors • Air compliance advisor • Emissions engineer • LDAR program owner • Multiple site operators 	<p>See above</p>
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II.6.2 Strategic Analysis

The auditor shall perform a strategic analysis to understand the activities of the operator within the scope of the engagement and determine the complexity of the scope necessary to establish the nature and extent of the audit activities.

Within the context of the engagement, the auditor shall:

- Develop an understanding of the emissions source profile and assess against the requirements of the criteria.
- Confirm that the operational boundaries are consistent with the requirements of the criteria.
- Determine at a high-level if the quantification methodologies that are applied conform with the criteria.
- Consider any potential regulatory or other context by which the results of the verification may be used and determine if the statement(s) and report(s) include all required information per the template.
- Assess data management systems and quality control practices at a high-level and determine if they are consistent with the requirements of the criteria.

To assist in the above requirements, the auditor shall request the following information from the operator to perform

- The statement(s) or report(s) prepared by the operator per the criteria the auditor is assessing conformity against.
 - This statement shall include emissions of the relevant methane emissions (and, if applicable, other GHG types) that are required per the criteria.
 - This statement may include additional requirements prescribed by the criteria including production, sales or throughput volumes, a description of quantification methodologies for each reported source, compliance with practices related to the statement and required by the criteria monitoring plans, and auditable decision-making processes and results related to conformity with the criteria.

The auditor may request additional information as needed related to information provided in the statement(s) or report(s) to assist in the strategic analysis, including but not limited to:

- Documents detailing emissions quantification methods and results.
- Raw data and analysis feeding directly into emissions calculations.
- Documents detailing emissions calculations.
- Diagrams or specifications related to unit processes and emissions source categories.
- Documents detailing the monitoring programs and the rationale behind the programs which feed into the emissions reports. Monitoring programs shall include:
 - Site-level measurement methodology selection strategies.
 - Risk assessments or procedures which determine site-level measurement methodology selection strategies.
- Operations and management procedures related to material emissions sources and the criteria being assessed.

The results of the strategic analysis shall be used in the risk assessment. If the auditor determines via strategic analysis that there is a high risk of non-conformity to the criteria, the auditor may terminate the agreement with the operator prior to moving forward with the audit engagement.

II.6.2.1 Uncertainty

Purpose

Uncertainty is inherent in methane measurement, emissions rate quantification, and emissions extrapolation. This inherent uncertainty exists even when an emissions statement is prepared correctly. This section sets expectations for how uncertainty is characterized, evaluated, and documented so that auditors can plan and perform an ISO 14064-3–aligned engagement and reach a reasonable assurance conclusion supported by sufficient and appropriate evidence.

Definition

For purposes of this Audit Guide, and as defined by the ISO 14064-3, uncertainty is a parameter associated with a quantification result that describes the dispersion of values that could reasonably be attributed to the quantified amount. Uncertainty information typically includes a quantitative estimate of that likely dispersion with a qualitative explanation of the main drivers.

Materiality and uncertainty are related, but they serve different purposes. Materiality is an assurance concept used in planning and evaluation – i.e., whether individual misstatements or a combination of misstatements could influence intended users' decisions. Uncertainty, by contrast, reflects the normal variability and limits of precision in the underlying data – even when the information has been compiled correctly and no misstatement has occurred.

Because of that distinction, uncertainty assessment is not a materiality test. Instead, it helps the auditor exercise professional judgment about (a) how reliable the reported values are, and (b) whether the level of uncertainty could increase the risk of a material misstatement such that additional evidence-gathering is needed.

Potential Sources of Uncertainties

Uncertainty commonly arises from one or more categories. Uncertainties in emissions estimates most often arise in the steps used to develop the methane emissions statement (including any supporting inventory and reconciliation outputs), including measurement and data collection, emission rate determination (i.e., converting measured parameters into an

emission rate), and scaling of emission rates and estimation of total emissions (e.g., annualizing emissions using spatial and temporal extrapolation methods).

Uncertainty in Company Practices evidence (under the MiQ standard) can also affect audit confidence. This includes uncertainty associated with the completeness, reliability, and traceability of documentation and other evidence used to demonstrate that practices are implemented, as well as the consistency of interview and site visit observations. Auditors should particularly increase their focus where gaps in internal controls or data governance exist, or where documentation is incomplete, since these conditions can undermine traceability and confidence in the evidence.

Roles and Responsibilities

To support reasonable assurance audit, the operator should investigate uncertainty characterizations, including but not limited to the methane emissions statement, supporting inventory, reconciliation outputs, company practices, and measurement technology deployment. Depending on the nature of the source of uncertainty, characterizations may be qualitative, quantitative, or hybrid. The investigation should (i) identify key sources of uncertainty, (ii) describe the methods, assumptions, and data used to estimate or characterize uncertainty, (iii) provide quantitative ranges (e.g., percent error, confidence intervals) and/or qualitative descriptions (e.g., data quality scoring, expert judgement) where appropriate, and (iv) include complementary approaches where a single numerical uncertainty bound is not practical.

The operator should maintain objective evidence sufficient to support the uncertainty characterization (e.g., instrument performance specifications, calibration/QA/QC records, controlled-test documentation where relevant, model inputs/limitations, and documentation supporting representativeness assumptions).

Auditors should evaluate the uncertainty characterization provided by the operator and integrate uncertainty into audit planning (strategic analysis and risk assessment). During planning, the auditor shall perform a strategic analysis to understand the activities/complexity of the operator and determine the nature and extent of audit activities. As part of this strategic analysis, the auditor shall consider, as relevant, the sources of emissions information, data systems and controls, availability of evidence, and the results of any sensitivity or uncertainty analysis. The auditor shall perform a risk assessment and use it to develop the audit plan and evidence-gathering plan. Where applicable, the risk assessment shall consider whether operating conditions reflect the assumptions, limitations, methods and uncertainties embedded in the applicable quantification approach/criteria. The auditor shall design evidence-gathering activities to obtain sufficient and appropriate evidence to support the conclusion. The auditor shall obtain more persuasive evidence when the risk of misstatement is higher and consider different risk factors in designing procedures.

The outcomes of this approach are used by auditor in their evaluation of the uncertainty characterization and its implications for the conclusion. The auditor is responsible for assessing (i) whether the uncertainty characterization is complete, reasonable, and consistent with the claimed reporting approach/criteria, (ii) the methods used to estimate or characterize uncertainty are appropriate for the data and reporting scope, and (iii) any unaddressed sources of uncertainty could be significant enough to affect the audit conclusion (i.e., contribute to risk of material misstatement).

If the auditor determines there is insufficient information to properly address uncertainties, the auditor shall request additional information. If sufficient information cannot be obtained and it is necessary to form a conclusion, the auditor shall not proceed and shall disclaim the issuance of an opinion. At completion, the auditor shall determine whether collected

evidence is sufficient and appropriate; if not, the auditor shall develop additional evidence-gathering activities.

Uncertainty considerations should be documented in the audit plan in a manner that establishes the basis for the auditor's conclusion. As part of the audit outcomes reporting, the auditor should clearly summarize (i) the key sources of inherent uncertainty and how they were evaluated, (ii) any limitations or data gaps and their implications, and (iii) how uncertainty and data quality considerations influenced the verification testing and the final conclusion.

II.6.2.2 Sensitivity Analysis

The auditor must identify those assumptions (from historical data and future estimates) that have high potential for change and determine if those changes are material to the methane statement, and, if so, to what degree. The auditor's question in relation to MiQ standards should be: "If the assumption/data point surpasses the materiality threshold, how would it impact the grade? Would it change grade bands?"

II.6.3 Pre-Audit Execution

Prior to audit execution, the auditor shall engage in the following considerations:

- Materiality scope
- Risk assessment
- Audit sampling scheme

II.6.3.1 Materiality

Materiality is the concept that operator misstatements, individual or in the aggregate, could influence decisions by the operator or other parties. As a key concept in ISO 14064-3, MiQ requires that the potential for materiality be taken into account. It will be considered by the auditor in audit planning and during the assessment of data, information, and evidence prior to reaching an opinion. The results of a materiality assessment will inform further actions that must be taken by the operator prior to the Auditor issuing an opinion.

Materiality can take both quantitative and qualitative forms.

- Quantitative Materiality: Refers to an error in value in methane performance and GHG emissions accounting. This could include calculation errors, misclassified emissions, and incomplete inventories, amongst others.
- Qualitative Materiality: Includes factors that would affect a methane performance and GHG emissions statement. These could include documentation issues, poorly managed information, and nonconformance with guidance or regulations concerning emissions and emissions accounting, amongst others.

The quantitative threshold for material errors and misstatements is 5 percent of total reported emissions, or a level that would cause a grade change on the MiQ certification

grading scale, based on the assessment of the auditor. To be conservative, MiQ states the upper range of the grade band.

Assurance Materiality: Using their expert judgment, auditors will determine there are no material misstatements, errors, or omissions regarding company practice and monitoring technology deployment (respective to the MiQ Standard.)

II.6.3.2 Risk Assessment

Risk assessment is the determination of areas with higher likelihood of material misstatement or nonconformity with criteria. This will result in the auditor's consideration of the nature and extent of the information and the evidence gathering activities needed to address those risks. As a central element of ISO 14064-3, MiQ will continue to require risk assessments be conducted demonstrating that materiality has been taken into account.

Types of risks that shall be considered, include:

- Likelihood of intentional misstatement.
- Relative effect of emission sources on overall methane performance and GHG statement and materiality.
- Likelihood of omission of a potentially significant emissions source.
- Whether there may be any significant emissions that are outside the normal course of reporting by the operator.
- The nature of operations specific to a facility.
- The degree of complexity in determining the facility boundary.
- Changes from prior periods.
- Assessment of likelihood of non-compliance with applicable laws and regulations that can have a direct effect on the content of the methane performance or GHG statement.
- Assessment of significant economic or regulatory changes that might impact emissions.
- Selection, quality, and sources of methane performance or GHG data.
- The level of detail of the available documentation; The nature and complexity of quantification methods.
- The degree of subjectivity in the quantification of emissions.
- Any significant estimates and assessment of the data on which those are based.
- The characteristics of the data management system and controls.
- The apparent effectiveness of the operator's control systems in identifying and preventing errors or omissions.
- Assessment of controls used to monitor and report methane emissions or GHG data.
- The experience, skills, and training of operator staff.

Information from this risk assessment shall be used to develop the audit and information- and evidence-gathering plans.

II.6.3.3 Audit Sampling and Site Visits

Onsite visits are required for every facility being audited against the MiQ standard. These required site visits shall take place on an annual basis. Audits or verifications that consist solely of 'desktop' reviews, data analyses, or do not involve onsite audits do not qualify under the MiQ standard.

When developing a sample size, auditors should use a quantitative sampling methodology. This is to ensure that auditors have a methodical reasoning when conducting the onsite audit. The methodology should be informed by and aligned with the findings of the risk assessment to ensure abatement of identified risks. This is consistent with ISO 14064-3.

The following is guidance for the determination of sample sites and the site visitation approach.

Determine sample sites:

Request a site list from operator that includes site characteristics including date of first flow, latitude/longitude, county (parish), production rate, product type, equipment (compressor, dehydration, vapor recovery, etc.), and locations acquired from other operators. Sort the sites within the certification boundary into categories based on operational characteristics, then select sites that provide a reasonable representation of the operator's operations, with consideration to geographic dispersion.

The following should be considered when developing categories:

- Site vintage (original asset or acquired).
- Infrastructure age (old operations, new operations, mid-construction, mid-decommission).
- Production rate/throughput (low/high).
- Product slate (variability in products produced, dry gas, HC liquids).
- Equipment variability (compressors, stationary combustion, flares etc.).
- Equipment types (w/ electric, pneumatic only, with and without VRU controls, permanent flares/no flares).
- Site ownership (owned, leased, co-owned).

Determine minimum number of sites to visits during onsite audit

- Within each group, a representative number of sites should be selected for closer inspection and review using quantitative sampling procedures, such as:
 - square root of the total number of sites/well pads/compressor stations
e.g., Producer has 278 total well pads, an Auditor will need to visit a minimum of 17 pads
 - Representation of sites in each category

For facilities (processing plants, liquefaction, regassification facilities, offshore platforms) where the site makes up the entirety of the certification boundary, the auditor will visit that site. Quantitative sampling methodologies, as described above, may be applied to inspection and review of emission sources within a stand-alone facility.

Evidence gathering plan

The evidence gathering plan must be approved by the team leader.

The evidence gathering activities are implemented to address previously identified risks. These shall include:

- Analytical testing-checking high level data to identify errors, omissions or inconsistencies in the methane statement.
- Control testing-evaluating if the operator's internal controls and procedures work adeptly.
- Estimate testing-determining the rationality of the data and methodologies used to develop estimates.
- Sampling- selecting which group of sites are the best representation of the operators' operations.
- Inquiring-obtaining information from interviewing employees as per MiQ Specific Requirements.

If the auditor is unable to gather sufficient evidence to conduct the audit and provide an opinion, the auditor will provide a statement to this effect. (*See Section 9.1*)

II.7 Audit Execution

This section defines the requirements for carrying out the execution process. Activities shall be performed in accordance with the agreed engagement plan, scope, level of assurance and materiality criteria. Risk assessment results shall also be considered to make sure sufficient and appropriate evidence is obtained to be able to justify the auditor's engagement conclusion. These activities shall involve the following:

Verification

The auditor shall conduct the verification as agreed in the kick-off meeting and verification planning and shall conduct the evidence-gathering activities according to the MiQ Audit Checklist.

Validation

The auditor, or validator, shall use the assessment and evaluations and the evidence gathered to assess the methane statement against the criteria. The auditor shall assess, individually and in the aggregate, whether uncorrected misstatements are material to the statement. The auditor shall assess conformity with the criteria.

MiQ Intervention

In the following situations MiQ will assume its Assurance role and determine the resolution

- Requirements of the Standard are interpreted differently by auditor and operator.
- Significant anomaly is detected by the auditor and common ground cannot be reached between auditor and operator, MiQ will assume its assurance role and investigate further.

The auditor is encouraged to reach out to MiQ, the scheme owner for any necessary resolutions, as per the MiQ Program Guide.

Audit Process

In order to undertake the audit, auditors will utilize existing MiQ audit process materials. These include:

- Reference to the relevant MiQ Standard(s) and Audit Guide.
- Audit checklist.
- Criteria for documented evidence.

Auditors will use the segment-specific checklist provided by MiQ to document and interview the producer/operators. The checklist is intended to be a single 'source of truth' on the information and evidence gathered for determination of the outcomes of the Audit including the final grade. Evidence documented in the checklist should transparently showcase the validity, accuracy, and effectiveness of the operator's performance. To be conservative, MiQ states the upper range of the grade band.

Documented evidence should showcase the following criteria:

1. Validity: meets the intent of the criteria prescribed in the standard.
2. Accuracy: appropriate application of quantification methodologies, company practices and monitoring technology to meet Standard criteria.
3. Effectiveness: procedures, policies and programs implemented have a measurable impact in reducing the risk of large methane emissions events or directly mitigating methane emissions.

II.7.1 MiQ-Specific Requirements

II.7.1.1 Methane Intensity

Methane intensity is a ratio of methane emissions relative to natural gas and crude oil production and other segments. This is a baseline indicator of methane performance. Methane intensity is indicative of whether a facility's design will achieve minimal methane emissions and eliminates, to the greatest degree possible, the potential for fugitive methane emissions. The specific process for the determination of methane intensity is included in the respective MiQ Standard.

The audit process evaluates the methodologies used to quantify methane emissions and the quality assurance process the operator has in place to ensure emission data is complete and accurate.

Data Quality Assurance

Table 4 shows examples of quality management documents and processes an operator has implemented to ensure emissions data and calculations are gathered with a high level of quality and are free from known errors to provide assurance to the Standard. Each type of

evidence should be reviewed and evaluated for sufficiency in order to meet the elements of the MiQ Standard.

MiQ recognizes that auditors have internal quality management procedures and workflows for evaluating the data presented to them. The table below is intended to provide a detailed example of documentation that is import to support the MiQ certification process.

Table 4: Data Quality Management

MI Quality Management	Evidence Type	Examples of Evidence
Data Collection	Document	<ul style="list-style-type: none"> • <i>Field Collection of Component Counts and Fugitive Emissions Document (or equivalent)</i> <ul style="list-style-type: none"> ○ Document states data collection process ○ Document states work process to include new new/replacement components into inventory • <i>Emission Management Standard Operating Procedure (SOPs) (or equivalent)</i> <ul style="list-style-type: none"> ○ Data contributors and validators are identified in document ○ Document lists inventory requirements and follow up actions for any findings ○ Document lists the data collected during Operations, Capital Projects, Shutdowns, Startup's, and Incidents (abnormal)
	Observation	Observe field personnel input of data and the work processes for data validation
Data Collection Quality Control	Document	QA/QC measures implemented by Producer/Operator: <ul style="list-style-type: none"> ○ Frequency at which data is reviewed for completion (month over month or year over year) ○ Frequency at which data is reviewed for accuracy upon submission ○ Frequency at which quantification methodology is reviewed
	Observation	Observe environmental advisor review and evaluate data for completeness and accuracy
Calibration Procedures and Maintenance Schedule	Document	<i>Environmental Maintenance Program (or equivalent)</i> <ul style="list-style-type: none"> ○ List of meters and instruments used for GHG reporting ○ Maintenance schedules identified for meters/instruments on list <ul style="list-style-type: none"> - per manufacturer specifications or engineering analysis based on historical operational failures ○ Work management program/process (ex. Maximo, SAP, GSAP) which ensures maintenance is performed at required frequency
	Observation	<ul style="list-style-type: none"> • Spot check completed calibration procedures of a specific instrument based on calibration frequency • Example of work order showcasing person the WO was assigned to, as well as the due date for the task
Emissions Analysis/Calculations	Document	<i>Air Emissions Reporting Guide (or equivalent)</i> <ul style="list-style-type: none"> ○ Document states how calculations are completed and the assurances in place to minimize error

		<ul style="list-style-type: none"> ○ Document identifies emission source and corresponding quantification method
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Calculation Methodology

Table 5 provides evaluation guidance on the common quantification methodologies prescribed in the Standard to quantify emissions.

Table 5: Calculation of Methane Emissions

Quantification Method	Evidence Type	Examples of Evidence
Methane measurement	Document	<ul style="list-style-type: none"> • Emission flux calculations (if any) completed by Auditee for reconciliation purposes • Procedure to estimate source specific emission based on measurement historical data (i.e., produced water tank flashing losses, open thief hatches estimation, unlit/malfunctioning flaring). <ul style="list-style-type: none"> ○ Measurement method ○ Stack testing • Minimum detection limit (MDL) of the method used compared to the expected distribution of emissions the method is quantifying (can be full-site measurement or source-specific measurement) • Controlled release testing results from which the MDL was determined • Sample size measured relative to the total population of the emission source to be quantified • Deployment methodology of the method • Documentation of measurement uncertainty • Temporal frequency of the measurement
Engineering Calculations/Process Simulation	Document	<ul style="list-style-type: none"> • List of sources that are quantified using engineering calculations; if calculations are regulatory-based: review accuracy and completeness • Review of the data inputs and assumptions made in calculations/ process modeling and engineering justifications <ul style="list-style-type: none"> ○ Estimation should be made conservatively to ensure emissions are not being underestimated ○ Compare sample calculations made by auditor to an independent process model to verify Auditee's estimation approach • Operating conditions specified in calculations/models and the frequency with which they are reviewed and updated • Methodology for internal review of MI calculations and accuracy • Processes the operator uses to maintains the accuracy of calculation inputs over time.
	Observation	Confirm meter location relative to inventories and reported data

Equipment-specific Emission Factors	Document	<ul style="list-style-type: none"> • List of sources that are calculated using equipment specific emissions factors: • Vendor spec sheet with leakage/vent rate • References to peer reviewed studies for emission factors (EF) used • Inventory contains information regarding equipment manufactured, make, model, capacity, installation date, equipment operational status (operational, interim, shutdown) etc.
	Interview	What is the reasoning for utilizing equipment specific emission factors vs. generic factors
Generic Emission Factors	Document	<p>List of sources that are calculated using generic emission factors</p> <ul style="list-style-type: none"> ○ Regulatory: if use of EF is prescribed by regulations - confirm accuracy and completeness of calculations ○ Operator Selection: if Operator is choosing to use generic EF in lieu of Equipment specific EF: review reasoning and justification + confirm this is the conservative approach <ul style="list-style-type: none"> • Emission Factor Reference (NGSI, Subpart W) • Activity Data

Reconciliation

See **MiQ Reconciliation Guidance and Example Documents**

Use of Public Protocols

MiQ allows the operators to use public protocols such as the GTI Veritas measurement and reconciliation protocol or the OGMP 2.0 uncertainty and reconciliation protocol to meet the MiQ Standards Reconciliation requirements.

Evaluation Criteria:

- Conformance with public protocol and MiQ reconciliation requirements
- Emissions estimation methodology: assumptions and estimations consider all relevant data

II.7.1.2 Company Practices

The MiQ certification framework includes a set of mandatory company practices to identify and minimize emissions that an operator must have in place to be eligible for MiQ certification. Additional optional company practices that are characterized as 'improved policies and practices' are also included in the framework. These practices, and associated performance criteria, have been adopted from global regulated and voluntary best practices. An operator should be able to produce documentation of their company practices, as well as be able to demonstrate understanding and the effective implementation of these practices by company staff. Specific company practices are included in the respective MiQ Standards.

MiQ believes the most efficient way to reduce methane emission is through prudent design, construction, and maintenance practices (cradle to grave philosophy):

1. Design and Construction: most efficient way to reduce the possibility of emissions is through design and construction practices.
2. Operation and Maintenance: through effective O&M practices, asset life can be prolonged, and the risk of emissions significantly decreased.

When evaluating adherence to company practices for the following equipment classes and operational activities, auditors should review the operator’s design standards, equipment specifications, and O&M Procedures to validate the operator’s commitment to eliminating and minimizing emissions

The tables below provide examples of evidence that show adherence to corresponding company practices. In the table “I” stands for improved practice and the number denominations – “I1”, “I2” and “I3” – correspond to specific practice. For example, for compressor specific company practices, I1, I2 and I3 correspond to Comp 2.1, 2.2 and 2.3 respectively. In the table “M” stands for mandatory practice, and must be demonstrated by the operator in order to qualify for the Standard.

General Company Practices

Table 6: General Company Practices Evaluation Criteria

Company Practice	Evidence Type	Examples of Evidence
Employee Training and Awareness	Document	<ul style="list-style-type: none"> • Methane Emission Specific Training available (i.e., Web-based self-guided or in class training) • Training should include the following: <ul style="list-style-type: none"> ○ States significant source of emissions present within facility ○ Signs of methane emissions ○ Internal work processes an employee is expected to follow when emissions are observed/detected • Training includes a competency evaluation material with minimum passing grade • List of identified personnel required to completed training based on job + frequency in which training is received (minimum annually)
	Observation	<ul style="list-style-type: none"> • Observe multiple operators’ AVO inspection processes for overall quality • Observe completed training logs – spot check evaluation material
	Interview	<ul style="list-style-type: none"> • ‘What are the on-the-job tasks (for staff/operations) that present training opportunities?’ • ‘State role specific knowledge, skills and abilities that requires methane training’ • ‘How is competency assured for those who complete the training?’
Reporting Methane	Document	<ul style="list-style-type: none"> • Onboarding documents for emissions reporting system: i.e., Incident Reporting Program (training criteria, account information)

Emissions observations and incidents		<ul style="list-style-type: none"> • Training material provides guidance on completing reporting process <ul style="list-style-type: none"> ○ Example of emissions observation report • Documented list of roles/department affected or involved by incident reporting • Documented Incident Investigation process: guidance on how to conduct investigations to determine causal factors
	Observation	<ul style="list-style-type: none"> • Observe field personnel (minimum 2) demonstrating emissions reporting process • Review incident report trigger notification process and confirm the chain of command for field operations reporting
	Interview	<ul style="list-style-type: none"> • 'In your own words, describe the chain of command and notification process.' • 'What does your role play in reporting methane emissions?'
Estimating and measuring Methane Emissions	Document	<ul style="list-style-type: none"> • Documented Best Practice/Measurement methodology for methane measurement and calculations • List of all site emission sources and corresponding quantification method • List of equipment available for the measurement of emissions and their documented maintenance/calibration frequency • Documented process for calculating unintended emission sources with guidance on determining duration and calculating emission rates
	Interview	<ul style="list-style-type: none"> • 'How is the time frame for unintended emissions calculated?'
Continual Improvement	Document	<ul style="list-style-type: none"> • Management messaging that promotes a positive environmental safety culture: both internal and external employees • Performance against documented KPI target for methane emissions how is the KPI integrated into daily operations, how is it tracked and at what frequency it is reviewed by management • Status of continual improvements initiatives/projects and projected effectiveness in emissions reductions based on engineering analysis
	Interview	<ul style="list-style-type: none"> • 'How is area of continual improvement identified? Who are the roles that contribute to business and operational projects?'

Company Practices for Managing and Reducing Unintended Methane Emissions

Table 7: Company Practices for Unintended Methane Emissions Evaluation Criteria

Company Practice	Evidence Type	Examples of Evidence
Employee Training and awareness	Document	<p><i>Training of Internal Employee:</i></p> <ul style="list-style-type: none"> • Inspect specific training material. Training includes types of checks and observations • List of identified personnel required to completed training based on job + frequency in which they need to be trained <p><i>Training for Third Party:</i></p> <ul style="list-style-type: none"> • Documented training records and certifications
	Observation	Observe OGI inspection and calibration
	Interview	<ul style="list-style-type: none"> • 'What is the frequency of inspections and how is that managed?'

		<ul style="list-style-type: none"> • ‘What is the review process for the data collected during inspections? If an emission was detected during an inspection describe the process for repair.’
Source Level Detection Plan	Document	<ul style="list-style-type: none"> • List of equipment/components included in LDAR survey • <i>Leak Operating Standard (or equivalent)</i> <ul style="list-style-type: none"> ○ States frequency of leak surveys ○ States classification of leak by degree of hazard and response criteria based on leak classification • <i>Inspection Frequency Methodology (or equivalent)</i> <ul style="list-style-type: none"> ○ States how frequencies are determined ○ States how historical inspection data feeds into frequency review • <i>Guidelines for Equipment Maintenance (or equivalent)</i> <ul style="list-style-type: none"> ○ Identifies the information taken into consideration during the decision-making process for repairs, replacements and/or upgrades ○ Identifies the personnel involved in decision making process
	Observation	<ul style="list-style-type: none"> • Tagged equipment waiting for repair and the current mitigations in place in the field to mitigate emissions • Observe the maintenance work management program for equipment in queue for 30-day and 60-day repair
	Interview	<p>‘Once an emission is detected, what is the criteria used to determine if it’s a repair, replacement, or monitor?’</p>
Managing methane emissions from tanks (Onshore Only)	Document	<ul style="list-style-type: none"> • M: AVO Inspection Procedure <ul style="list-style-type: none"> ○ Includes thief hatches and vapor recovery systems • I: Tank Upgrade Strategy (or equivalent) <ul style="list-style-type: none"> ○ States methodology used to determine the type of tank monitoring solutions ○ States how tanks are selected for upgrade • I: List of tanks with solution implemented • I: Tank Operation Procedure (or equivalent) <ul style="list-style-type: none"> ○ Alarming philosophy (alerts/alarms) and follow up process ○ Alarm set points • I: Tank Monitoring System PM
	Observation	<ul style="list-style-type: none"> • Routine Tank observations performed by site personnel to manage methane emissions from tanks • Spot-check completed AVO inspection procedures to confirm • thief hatches and vapor recovery systems were thoroughly checked to ensure nothing abnormal
	Interview	<p>‘What is the course of action when a tank pressure alarm is received?’</p> <p>How long does it take to be attended to?’</p>
Directed inspection and maintenance	Document	<ul style="list-style-type: none"> • <i>Guidelines for Equipment Maintenance (or equivalent)</i> <ul style="list-style-type: none"> ○ Identifies risk assessment factors taken into consideration when developing inspection schedules (types of components at each site, potential leak modes, leak detection measures already in place) • <i>Inspection Frequency Methodology (or equivalent)</i> <ul style="list-style-type: none"> ○ States how frequencies are determined ○ States how historical inspection data feeds into frequency review • <i>Work Management System (ex. GSAP)</i> <ul style="list-style-type: none"> ○ Houses inspection plans and maintenance procedures • List of inspection requirements and frequencies for all major equipment listed in Standard (at minimum)

		<ul style="list-style-type: none"> • <i>PM Procedures for all major equipment listed</i> <ul style="list-style-type: none"> ○ States frequency of PM ○ Details maintenance requirements
	Observation	<ul style="list-style-type: none"> • Observe field personnel conducting inspection of major equipment and evaluate conformance to PM procedure • Spot-check historical PM procedure of a specific equipment – evaluate the consistency of execution
	Interview	<ul style="list-style-type: none"> • Walk through the workflow of how historical data is analyzed and the factors that contribute to determining frequency of PM inspections • ‘What factors would require the operator to evaluate a PM plan sooner than the predetermined frequency?’
RCA of unintended emission events	Document	<i>Incident Investigation Procedure (or equivalent)</i> <ul style="list-style-type: none"> ○ Identifies investigation determination (type of failure/incident) ○ Documentation required (investigation log, visuals) ○ Root cause methodology (guidance on the personnel required, chain of command, type of RCA methods recommended) ○ Corrective action process (identification and implementation)
	Observation	Review of most recent incident investigation and the corrective actions determined
	Interview	‘What is the incident reporting and notification process?’

Company Practices for Managing and Reducing Methane Emissions from Individual Equipment Classes

Table 8: Company Practices for Individual Equipment Classes Evaluation Criteria

Company Practice	Segment	Evidence Type	Examples of Evidence
Blowdown/Pumpdown	Onshore GB&P T&S	Document	<ul style="list-style-type: none"> • <i>Work Management System (ex. GSAP, Maximo) or Maintenance Planner</i> <ul style="list-style-type: none"> ○ Maintenance requests are reviewed to optimize and streamline O&M activities • Organized log of equipment blowdowns that includes equipment type, reasoning, emissions amount, and calculation methodology. Many operators may already have to calculate emissions to ensure they remain below permit limits. • <i>Blowdown/Pumpdown Procedure</i> <ul style="list-style-type: none"> ○ Procedure identifies blowdown/pumpdown requirements for shutdown (remove natural gas) and start up (purge with air) activities ○ Procedure states blowdown/pump down activities must be routed to flare

			<ul style="list-style-type: none"> ○ Procedure identifies data that need to be recorded and submitted (volumes if line is metered, blowdown/pumpdown time) • <i>Air Emissions Reporting Guide (or equivalent)</i> <ul style="list-style-type: none"> ○ Blowdown calculation methodology is stated • <i>Emission Reduction Program (or equivalent)</i> <ul style="list-style-type: none"> ○ I1: Program states completed plans/ approved solutions implemented to minimize blowdowns and ESD emissions ○ I1: Program progress tracker demonstrates emissions reduction % because of implementation ○ I2: Program progress tracker demonstrates emissions reduction % non-emergency blowdown events • <i>Emission Management Program (or equivalent)</i> <ul style="list-style-type: none"> ○ I1: Program details the solutions being evaluated internally for feasibility/applicability to minimize blowdown and ESD emissions
		Observation	Field personnel walk through the set-up procedure for a planned blowdown event and identifies key steps that contribute to emission reduction
Combustion Equipment	GB&P T&S	Document	Emission Inventory (or equivalent) <ul style="list-style-type: none"> • Compressor emissions calculated using measurement or representative emission factors • Detailed fuel records including the volume of fuel burned per engine or engine type • Stack testing data that includes methane analysis quantification • Engine tuning and calibration procedures including valve train inspections and replacements, and filter replacements • Alarm strategy for engine operation
		Observation	<ul style="list-style-type: none"> • Process monitoring routine for critical engine operating variables
		Interview	<ul style="list-style-type: none"> • 'Describe the alarm strategy on fuel mixing ratios, fuel valve openings and other variables that affect methane slip?' • 'Describe your engine tuning and calibration procedures'
Compressors	Onshore	Document	<ul style="list-style-type: none"> • <i>Compressor Maintenance Program/ PM's (or equivalent)</i> <ul style="list-style-type: none"> ○ Frequencies for inspection and replacement of critical components are identified ○ Document states reasoning if replacement frequency exceeds manufacturer's recommendation

			<ul style="list-style-type: none"> • <i>Compressor Design Manual (or equivalent)</i> <ul style="list-style-type: none"> ○ Manual states new centrifugal compressors are to be with dry seals or designed with a gas recovery system/flare route • <i>Emission Reduction Program (or equivalent)</i> <ul style="list-style-type: none"> ○ Program states implemented plan/approved solutions to retrofit existing centrifugal compressors with dry seals (if feasible) or implement gas recovery system/flare route • Equipment inventory includes all centrifugal compressors and their seal types
		Observation	<ul style="list-style-type: none"> • Spot check maintenance records that showcase most replace component replacement per inspection findings • Field observation of compressors to confirm compressor and seal types • Observe compressors in the field with flare route and/or gas recovery systems
		Interview	<ul style="list-style-type: none"> • ‘What evaluation criteria is used to determine if a compressor must be shut down to complete a repair, or if the repair can wait until the next scheduled shutdown?’
Compressors	GB&P T&S	Document	<ul style="list-style-type: none"> • <i>LDAR Plan</i> • <i>Compressor Maintenance Program/ PM's (or equivalent)</i> • <i>Compressor Design Manual (or equivalent)</i> <ul style="list-style-type: none"> ○ Manual states new centrifugal compressors are to be with dry seals or designed with a gas recovery system/flare route ○ I2: Manual states new compressors need to be non-venting • <i>Emission Reduction Program (or equivalent)</i> <ul style="list-style-type: none"> ○ Program states implemented plan/approved solutions to retrofit existing centrifugal compressor with dry seals (if feasible) or implement gas recovery system/flare route ○ I2: Program states plan/approved solutions to replace existing compressor seals with non-venting ○ I2: Program tracker shows replacement progress to 50% of inventory • <i>Emission Management Program (or equivalent)</i> <ul style="list-style-type: none"> ○ Program details the solutions being evaluated internally for feasibility/applicability to minimize emissions from wet seal oil degassing systems

			<ul style="list-style-type: none"> • <i>Compressor Operation Procedure</i> <ul style="list-style-type: none"> ○ I3: States operating practice before and during downtime
		Observation	See Compressor - Onshore
		Interview	See Compressor - Onshore
Dehydrator	GB&P T&S	Document	<ul style="list-style-type: none"> • <i>Emission Reduction Program (or equivalent)</i> <ul style="list-style-type: none"> ○ Program states implemented plan/approved solutions to optimize and control circulation rates: Upgrade/retrofit existing dehydrators with separators and flash gas recovery • <i>Emission Management Program (or equivalent)</i> <ul style="list-style-type: none"> ○ Program details the solutions being evaluated internally for feasibility/applicability to optimize operations of glycol dehydrators • <i>Site Design Manual/ Dehydrator Design Manual (or equivalent)</i> <ul style="list-style-type: none"> ○ I1: Manual states new construction to use a dehydration process in lieu of glycol dehydrations (if feasible) ○ I1: Manual states new dehydrators are to be installed with separators and flash gas recovery ○ I1: New design to include automatic controls for circulation rates • Inventory of dehydrators (i.e., type, if they have existing emission controls)
		Observation	<ul style="list-style-type: none"> • Process monitoring of upstream emission controls on glycol dehydrator?
		Interview	<ul style="list-style-type: none"> • 'Describe how glycol circulation can affect methane emissions, and how to minimize vented emissions?'
Flare	Onshore GB&P T&S	Document	<ul style="list-style-type: none"> • <i>Flare Design Manual (or equivalent)</i> <ul style="list-style-type: none"> ○ Manual states design criteria for permanent flares ○ Manual states design criteria for temporary flares: Design criteria requirements are exchanged with vendor ○ I1: Manual states design must include one/more monitoring • <i>Flare Operating Procedure</i> <ul style="list-style-type: none"> ○ Procedure states routine and non-routine operational scenarios for flare usage with approved time limits ○ Procedure describes a chain of command sign off (business, engineering, and operations personnel) for long flaring periods ○ Procedure states the data that needs to be recorded and submitted for a flaring ○ States operating parameters of flare to ensure max efficiency ○ States the use of flare gas capture system

			<ul style="list-style-type: none"> • <i>Flare Gas Capture System Design (or equivalent)</i> <ul style="list-style-type: none"> ○ Design criteria states volume reduction • <i>Flare Preventative Maintenance Procedures</i>
		Observation	<ul style="list-style-type: none"> • Review SCADA screens showcasing real time flare monitoring • Review engineering drawings for permanent flares and/or vendors drawings
Gathering Lines	GB&P	Document	<ul style="list-style-type: none"> • <i>Pipeline Marker Program (or equivalent)</i> <ul style="list-style-type: none"> ○ Program identifies physical locations of pipeline using markers and includes asset maps • <i>Leakage Survey Program (or equivalent)</i> <ul style="list-style-type: none"> ○ I1: Visual inspections conducted annually • <i>Corrosion Control Survey Program</i> <ul style="list-style-type: none"> ○ I1: Programs implemented for cathodic protection or other corrosive minimization systems implemented ○ I1: Program checks operation of the corrosive control systems for operation and recommends follow up action for deficiencies found • <i>Assets Management Program</i> <ul style="list-style-type: none"> ○ I2: Program intent is to develop life cycle management strategies for assets ○ I2: Program documents key asset information which is reviewed for upgrades, repairs and emission reduction opportunities • <i>Pipeline Condition Monitoring Program (or equivalent)</i> <ul style="list-style-type: none"> ○ I2: program inspects pipelines on a set frequency and monitors the condition
Manual Liquid Unloading	Onshore	Document	<p><i>Manual Liquid Unloading Procedure (or equivalent)</i></p> <ul style="list-style-type: none"> ○ Procedure identifies key operational conditions (time, pressure) and execution requirements (number of personnel required) ○ Procedure identifies instrumentation used to monitor and alarms that are in place as a control barrier ○ I1: procedure explicitly states its non-venting ○ I1: procedure describes a chain of command sign off (business, engineering, and operations personnel) before vented unloading is attempted
		Observation	<ul style="list-style-type: none"> • Field check the instrumentation in place to monitor process conditions • Spot-check completed unloading procedures (Auditor to review procedures for completeness and consistency)

		Interview	Field personnel can identify barriers put in place to minimize venting?
Pneumatic Devices	Onshore GB&P T&S	Document	<ul style="list-style-type: none"> • <i>Field Collection of Component Counts and Fugitive Emissions Document (or equivalent)</i> <ul style="list-style-type: none"> ○ Includes all pneumatic devices ○ States frequency in which inventory is reviewed and updated ○ Operational scenarios that require inventory to be updated • <i>Controller Design Standard (or equivalent)</i> <ul style="list-style-type: none"> ○ Manual states design parameters for controller design and procurement: operating conditions, service type, venting criteria ○ I2: Standard states new controllers are to be non-venting design • <i>LDAR Plan</i> <ul style="list-style-type: none"> ○ Surveys include gas driven pneumatic devices • <i>Emission Reduction Program (or equivalent)</i> <ul style="list-style-type: none"> ○ I1: Program states plan/approved solutions to upgrade existing pneumatic equipment to non-venting ○ Program progress tracker confirms >50% of inventory is non venting controllers, actuators, pumps. ○ I2: Program explicitly states 3-year timeline to upgrade existing pneumatic equipment to non-venting • <i>Pneumatic Actuator/Pump Design Standard (or equivalent)</i> <ul style="list-style-type: none"> ○ I2: Standard states new controllers are to be non-venting design • <i>Pneumatic Device PM's</i>
		Observation	<p>I2: Observe the non-venting pneumatic controllers installed and confirm design is non-venting</p> <p>I2: Review controller design from vendor/engineering to confirm non-venting design</p>
		Interview	'Explain what scenarios require the inventory to be updated and what the process by which the inventory is to be updated'
Storage Tank	GB&P T&S	Document	<ul style="list-style-type: none"> • <i>Storage Tank Operating Standard (or equivalent)</i> <ul style="list-style-type: none"> ○ States frequency of operational inspections and requirements of routine observations ○ Observations include sources of emissions • <i>Storage Tank Preventative Maintenance Procedures</i> • <i>Storage Tank Design Manual (or equivalent)</i>

			<ul style="list-style-type: none"> ○ I1: Manual states all new tanks are designed with gas recovery, route to combustion device and/or emissions mitigative controls ○ I2: Manual states all new tanks are designed with one of the solutions identified in standard (at minimum) • <i>Emission Reduction Program (or equivalent)</i> <ul style="list-style-type: none"> ○ Program states plan to modify existing storage tanks with one or more of the vapor recovery solutions stated in the Standard (or equivalent)
		Observation	Review the business evaluation/engineering assessment that determined the choice of solution/controls implemented by operator
Well Operation	Onshore	Document	<ul style="list-style-type: none"> • <i>Well Design Standard (or equivalent)</i> <ul style="list-style-type: none"> ○ Standard states new wells are designed with gas recovery and/or route to combustion device ○ Emission control barriers included in the design criteria (monitoring instrumentation, alerts/alarms, routine inspections, PM's) • <i>Well Operating Standard (or equivalent)</i> <ul style="list-style-type: none"> ○ Standard states frequency of inspections and observations at wellhead ○ Response criteria based on inspection and observation results • <i>Emission Reduction Program (or equivalent)</i> <ul style="list-style-type: none"> ○ Plans for modification to existing wells for gas capture and routing
		Observation	Observe a Well inspection
Well Completion and workovers	Onshore	Document	<ul style="list-style-type: none"> • <i>Reduced Emission Completion Procedure</i> • <i>Well Design Standard (or equivalent)</i> <ul style="list-style-type: none"> ○ Standard states new wells are designed with gas recovery and/or route to combustion device
		Observation	Observe a well undergoing completion activities or a well workover (when possible)
		Interview	Interview completions supervisor for contracted company on how the contractor minimizes gas to the atmosphere during well completions/well workovers

II.7.1.3 Monitoring Technology

MiQ requires operators being certified under the MiQ certification framework to deploy monitoring technology to detect emissions. Systematic and regular surveys are essential to ensure that methane emissions are effectively managed in practice. The MiQ Standard requires two categories of monitoring take place: source-level and facility-level surveys.

These two levels of deployment are intended to capture and provide assurance that both smaller component-level leaks, as well as large (super-emitter) emission events are identified and remedied. Deployment at both scales is scored, based on the frequency and spatial coverage of the surveys. Effective deployment of monitoring technologies varies based on technology and asset characteristics. To promote a technology agnostic, flexible, and rigorous approach to technology deployment MiQ maintains a list of deployment programs that can be used during the certification process. Specific details of MiQ's monitoring technology certification component can be found in the respective MiQ Standard.

When evaluating monitoring technology deployment, MiQ encourages auditors to evaluate the monitoring work practices, technology performance and detection follow-up.

Table 9: MTD Evaluation Criteria

Monitoring Technology	Evidence Type	Examples of Evidence
Monitoring Work Practice	Documentation	<ul style="list-style-type: none"> • <i>LDAR Plan</i> • <i>Monitoring Tech Applicability Methodology</i> • <i>Monitoring Tech Vendor Contract</i> <ul style="list-style-type: none"> ○ States number of deployment ○ Predetermining time of deployment • <i>Monitoring Deployment Plan (or equivalent)</i> <ul style="list-style-type: none"> ○ Route of facility scale inspection identified and matches certification boundary ○ Sites/Locations identified ○ Components identified
	Interview	<ul style="list-style-type: none"> • 'Does a typical monitoring event or survey capture 100% of potential emission sources? Including buried and elevated sources?'
Technology Performance	Documentation	<ul style="list-style-type: none"> • Vendor Spec Sheet and Manual <ul style="list-style-type: none"> ○ Description of how technology works ○ Spec sheet of sensor that includes performance specifications and operating envelopes (wind speed, temperature, moisture, etc.) • Probability of Detection (PoD) curve(s) and MDL at 90% PoD • <i>Single Blind Testing Results</i> <ul style="list-style-type: none"> ○ States operational envelopes evaluated during testing • Independent testing of localization performance (if being used for Source Level Monitoring)
	Observation	<ul style="list-style-type: none"> • Confirm the operating conditions during single blind testing mirror Facility's operating conditions • Review historical inspection data with recorded demonstration of technology's ability (attribute emission source to component or equipment level)
	Interview	<ul style="list-style-type: none"> • 'Is technology being used to fulfill Source Level Monitoring requirements?' • 'What weather conditions impact the performance of the system/method (wind speeds, cloud cover, snow cover, etc.)?'
	Documentation	Emissions Management or equivalent <ul style="list-style-type: none"> ○ Emissions detection and source identification

Detection Follow-Up		<ul style="list-style-type: none"> ○ Emission reporting and follow up process (work process policy when emission is detected and roles that need to be notified) ○ Corrective action time frame ● Description of how emissions data is transferred from technology/method to operator (SCADA integration, email alerts, etc.)
	Observation	<ul style="list-style-type: none"> ● Review historical emissions reports
	Interview	<ul style="list-style-type: none"> ● 'How often do you receive emissions data from technology?' ● 'What is the typical procedure once an emission event is detected?'

Continuous Monitoring Systems (CMS)

Producers/Operators utilizing CMS must ensure the following criteria is met in addition to those stated above.

Table 10: CMS Evaluation Criteria

Monitoring Tech	Evaluation Criteria	Example of Evidence
Continuous Monitoring Systems (CMS)	Documentation	<ul style="list-style-type: none"> ● Vendor Documentation <ul style="list-style-type: none"> ○ Spec sheet ○ Manual: Explains how technology provides continuous measurement ○ Calibration Requirements ○ Maintenance Requirements ● Sensor Placement Assessment <ul style="list-style-type: none"> ○ Vendor completed or Engineering ● CMS Data Acquisition and Handling System ● CMS Maintenance Procedures <ul style="list-style-type: none"> ○ PM procedures ○ Predetermining time of deployment ● CMS Alarm Management <ul style="list-style-type: none"> ○ Alarm thresholds ○ Alarming philosophy ○ Alarm responses
	Interview	<ul style="list-style-type: none"> ● 'What assessment (business/engineering) was done to determine which CMS system to implement?'

Equivalency Determination

See **Monitoring Technology Deployment Equivalency Determination Guide**

II.8 Independent Review

The independent reviewer shall perform a review of the quality and completeness of the audit engagement. The independent reviewer is a competent person who is not part of the audit team conducting the engagement. This individual must maintain complete

independence from the execution and opinion of the audit until they review the details of the audit. The independent reviewer may be part of the same Auditing Body. In a single member audit team, the independent reviewer must be a separate individual than the single team member. More details about this role are included in MiQ's ABRP.

The scope of the work of the independent reviewer shall involve the following actions and questions:

- Review the quality and completeness of the audit engagement.
- Review whether the report adequately assesses operators' conformance to the MiQ Standard.
- Do the audit process and audit report maintain independence from the operator and any information relevant to the audit process (i.e., cannot audit their own work product)?
- Does the audit report and associated documentation provide evidence of auditor performance conforming to the MiQ Standard?
- Does the audit report identify non-conformance and areas of improvement in auditee process, procedures and/or programs?
- Does the audit report ensure that all "partial conformance" associated with the audit is addressed?
- Have any concerns and/or outstanding non-conformance findings been escalated to the scheme owner?
- Does the audit report and certification grade need to be revised, in the opinion of the independent reviewer?

II.9 Audit Report

The final audit report is to be written using the **Audit Report Template** provided by MiQ. The template is intended to standardize the presentation of key information thus streamlining reviews done by the Registry.

Once finalized, the signed report and checklist is to be sent to both operator and MiQ.

II.9.1 Opinion Statement & Reasonable Assurance

The audit report shall include an opinion statement. The opinion statement is a written declaration that provides confidence concerning methane performance or GHG findings in the operator's methane performance or GHG report and confirms conformity with the criteria contained in the relevant MiQ standard. In following the requirements of this Audit Guide, this opinion statement can be made with reasonable assurance.

The opinion statement shall include the following elements:

1. Identification of the methane performance or GHG activity;
2. Identification of the methane performance or GHG statement, including the date and period covered by the statement;
3. Identification of the auditing body, and statement that the methane performance or GHG statement is the responsibility of that party;

4. Identification of the criteria used to compile and assess the methane performance or GHG statement;
5. A declaration that the verification or validation of the methane performance or GHG statement was conducted in accordance with this Audit Guide and in accordance with the principles and elements of ISO 14064-3;
6. The auditor's conclusion, including level of assurance;
7. The date of the opinion.

There are four types of opinions possible:

1. Unmodified opinion: The auditor reaches the conclusion that the statement is **free from material misstatement** and **conforms to the applicable criteria**.
2. Modified opinion: The auditor agrees with the methane statement, however, identifies **clearly described issues** that are material but not prevalent.
3. Adverse opinion: The auditor reaches the conclusion that the methane statement is **materially misstated** and **does not conform** to the criteria.
4. Disclaimed opinion: If sufficient information cannot be obtained, the auditor shall not proceed with the verification/validation and shall disclaim the issuance of an opinion.

The following are *examples* of these opinion statements:

Positive Statement

"In our opinion—having carried out an audit process in accordance with EU Methane Regulation and MiQ's Audit Protocol—the auditing team **claims with reasonable assurance** that the methane emissions inventory of (operator's name) is presented adequately, in all material respects, as of (date of conclusion). The auditing team did not identify any misstatements that were material."

Qualified Statement (A case in which the misstatements that are material but not prevalent.)

"In our opinion—having carried out an audit process in accordance with EU Methane Regulation and MiQ's Audit Protocol—the auditing team **claims with reasonable assurance** that the methane emissions inventory of (operator's name) is presented adequately, in all material respects, as of (date of conclusion). The identified matters addressed in (section name in the Audit Report) are material but not pervasive in the emissions statement."

Adverse Statement (Cases in which, due to the matters being material and prevalent, auditors are not able to provide reasonable assurance.)

"In our opinion—having carried out an audit process in accordance with EU Methane Regulation and MiQ's Audit Protocol—the auditing team **cannot claim with reasonable assurance** that the methane emissions inventory of (operator's name) is presented adequately, in all material respects, as of (date of conclusion). The matters described in (section name in the Audit Report) are material and pervasive in the emissions report and

consequently, we are not able to provide reasonable assurance on the compliance of the report.”

Disclaimed opinion (To be used in a case where the auditor was not able to gather sufficient and/or appropriate evidence to issue an opinion.)

“We **disclaim the issuance of an opinion** because we were not able to carry out an audit process in accordance with EU Methane Regulation and MiQ’s Audit Protocol, or form an opinion, due to the insufficiency of appropriate evidence to support the methane statement.”

II.10 Audit Guide Document Status

Table: Version History

Version	Date	Summary of Change
1.0	2023-01	First Publication
2.0	2026-02	<ul style="list-style-type: none"> • New name: from Audit Guide to Audit Protocol • Merged with ABRP • This version includes a new structure as per ISO14064-3 and in compliance with EUMR. Key additions include changes in the introduction explaining alignment with EU Methane Regulation, Assurance level (section 5), strategic analysis (section 5.2), sensitivity analysis (section 5.3), materiality threshold (section 5.4) risk assessment (section 5.5), opinion statement (section 9.1), independent review (section 8.2.4).