



UNDERSTANDING ISO 17025 CLAUSE 7.10 – NON-CONFORMING WORK

Understanding Non-Conforming Work – What It Is and Why It Matters

Non-conforming work is one of the most critical operational concepts in ISO/IEC 17025. It refers to **any work, result, process or condition that does not meet requirements** — whether those requirements come from methods, client specifications, regulatory limits, accreditation scope, or the laboratory's own quality system.

Clause 7.10 ensures that laboratories **recognise** non-conforming work early, contain it immediately, and respond with professionalism and technical discipline.

Non-conforming work can arise from equipment malfunction, environmental instability, incorrect sample handling, method deviation, contamination, calculation errors, reporting mistakes, or technician oversight. It can be minor or major, isolated or systemic. The **response matters**, not the occurrence.

Laboratories that **detect** non-conforming work **early** protect clients, credibility and accreditation.

Clause 7.10 exists because even **competent laboratories experience deviations**. The clause ensures that non-conforming work is **not ignored**, hidden or minimised. It must be documented, investigated and resolved in a way that **protects the integrity of results**.

A laboratory's strength is measured not by the absence of non-conforming work, but by the **maturity** of its response.

The core principle: **non-conforming work is a quality event, not a failure**.

It is an opportunity to **strengthen** processes, **improve** communication and **reinforce** trust.

Clause 7.10 ensures that laboratories **act** quickly, transparently and responsibly whenever something goes wrong.

Detecting and Containing Non-Conforming Work – Immediate Action That Protects Results

Clause 7.10 requires laboratories to **detect** non-conforming work **early** and **contain** it immediately. **Detection** is the first defence against compromised results. **Containment** prevents the issue from spreading, affecting other samples, or reaching clients.



Detection can occur through:

- Internal quality control checks
- Technician observations
- Equipment alarms or drift
- Environmental monitoring
- Method performance checks
- Review of technical records
- Reporting verification
- Client feedback

Once detected, **containment must be immediate.**

Clause 7.10 requires laboratories to:

- Stop work on affected samples
- Quarantine or label impacted items
- Isolate malfunctioning equipment
- Prevent further use of compromised methods
- Halt reporting until the issue is understood
- Notify responsible personnel
- Document the event clearly

Containment is not optional — it is a protective action. It prevents invalid results from being released and protects the laboratory's credibility.

Laboratories that delay containment **risk** compounding errors, affecting multiple clients, and damaging trust.

Clause 7.10 emphasises that containment must be decisive, disciplined and traceable. It is the moment where **vigilance** becomes action. A laboratory's ability to contain non-conforming work quickly demonstrates competence, maturity and **operational control**.

Investigating Non-conforming Work – Evidence-Based, Impact-Focused and Impartial

Once non-conforming work is contained, Clause 7.10 requires laboratories to **investigate** the issue objectively and thoroughly. Investigations must be factual, evidence-based and free from bias. The goal is not to assign blame — it is to understand the issue fully and **prevent recurrence**.

Investigations must determine:

- **What happened**
- **Why it happened** (root cause)
- **Which samples or clients are affected**
- **Whether results must be withdrawn or reissued**
- **Whether corrective action is required**
- **Whether the issue reveals deeper process weaknesses**



Evidence may include:

- Technical records
- Equipment logs/records
- Environmental data/records
- Communication records
- Method behaviour
- Technician actions
- Calibration or verification results
- Internal quality control trends

Investigations must be **documented** clearly and completely. Vague statements or unsupported conclusions weaken credibility.

Clause 7.10 requires laboratories to assess the **impact** of the non-conforming work — not only on the immediate sample, but on any related work, clients or processes.

A **strong investigation** demonstrates professionalism, impartiality and technical competence. It shows clients and auditors that the laboratory **understands** its processes and **responds** responsibly when deviations occur.

Communication and Client Notification – Transparency That Protects Trust

Clause 7.10 requires laboratories to **communicate** non-conforming work responsibly, especially when results may be affected. **Transparent** communication protects credibility and demonstrates professionalism. **Silence** or minimisation damages trust.

Communication must be:

- Clear
- Complete
- Respectful
- Factual
- Free from defensive language
- Supported by evidence

Clients must understand:

- What went wrong
- What work is affected
- What investigations were performed
- What corrective actions will be taken
- Whether results must be withdrawn or reissued
- How recurrence will be prevented

Clause 7.10 emphasises that **client notification is not optional** when results are compromised.

Laboratories must **communicate** promptly and professionally. Even when the issue is minor, transparency strengthens relationships.



Communication must be **documented**. The laboratory must **record** what was communicated, when it was communicated and to whom. These records demonstrate compliance and protect the laboratory during audits or disputes.

A **well-handled** notification shows maturity, accountability and integrity. It **reinforces** that the laboratory values accuracy over convenience and transparency over silence.

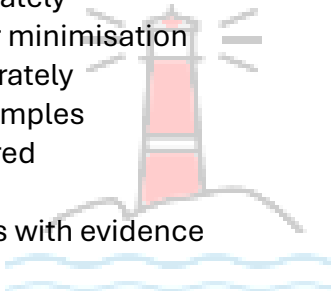
Technician and Management Responsibilities – Vigilance, Honesty and Authoritative Oversight

Technicians and **management** play **critical roles** in managing non-conforming work.

Clause 7.10 emphasises that **detection**, containment and communication depend heavily on **staff behaviour**, discipline and honesty.

Technician responsibilities include:

- Recognising deviations early
- Reporting issues immediately
- Avoiding concealment or minimisation
- Documenting facts accurately
- Quarantining affected samples
- Halting work when required
- Maintaining impartiality
- Supporting investigations with evidence



Technicians are often the **first** to notice non-conforming work. Their **vigilance** protects clients and prevents escalation.

Management responsibilities include:

- Overseeing investigations
- Ensuring containment is effective
- Verifying completeness and traceability of records
- Authorising communication and client notification
- Ensuring corrective actions are implemented
- Protecting impartiality throughout the process
- Ensuring alignment with the quality system

Management provide **authoritative** assurance that non-conforming work has been handled correctly. Their **oversight** demonstrates accountability and reinforces the laboratory's **commitment** to transparency and scientific integrity.

Together, technicians and management form a **durable defence** that protects the laboratory's credibility.

Clause 7.10 ensures that non-conforming work is **addressed** with discipline, honesty and responsible action.



Vigilance, Transparency and Responsible Action

Non-conforming work is not a failure — it is a quality event.

What distinguishes a mature, trustworthy laboratory is how it **responds** to non-conforming work.

Clause 7.10 ensures that issues are **detected early**, contained immediately, investigated objectively and communicated responsibly.

Understanding Non-Conforming Work – Recognising Deviations Early

Non-conforming work includes any work, result, process or condition that **does not meet requirements** — whether those requirements come from methods, specifications, regulations or the quality system. Laboratories that **identify** deviations quickly demonstrate vigilance, competence and operational control.

Detecting and Containing Non-conforming Work – Immediate Protective Action

We explored how **detection** occurs through personnel observations, equipment behaviour, environmental monitoring, internal quality control and reporting checks. Clause 7.10 requires **immediate containment**: stopping work, quarantining samples, isolating equipment and preventing further use until the issue is understood. Containment is decisive **action** that protects clients and prevents invalid results from being released.

Investigating Non-Conforming Work – Evidence-Based and Impact-Focused

Clause 7.10 requires laboratories to determine what happened, why it happened, which clients are affected and whether corrective action is required. Investigations must assess **impact**, not just symptoms.

Communication and Client Notification – Transparency That Builds Trust

When **results** may be affected, **clients** must be notified promptly, respectfully and completely. Clause 7.10 requires laboratories to explain the issue, outline corrective actions and **document** all communication.

Responsibilities – Discipline and Authoritative Oversight

Technicians and personnel often detect non-conforming work **first** — their honesty, **vigilance** and discipline determine whether issues are caught **early**. Management ensure investigations are impartial, containment is effective, communication is correct and records are **complete**.

A powerful truth: **Non-conforming work is not the problem — failing to respond correctly is.**