

**Vedanta Resources Limited**

**Sustainability Governance  
System**

**Guidance Note GN48**

**Operational Work Control  
Handbook \_ Permit to Work  
System**

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

|                                 |                                                                  |                         |                |
|---------------------------------|------------------------------------------------------------------|-------------------------|----------------|
| <b>Guidance Document Title:</b> | <b>Operational Work Control Handbook _ Permit to Work System</b> | <b>Date of Revision</b> | September 2026 |
| <b>Document</b>                 | VED/CORP/SUST/GN48                                               | <b>Revision:</b>        | V.1            |

| Document Issue and Revision History |                 |                |
|-------------------------------------|-----------------|----------------|
| DATE                                | REVISION NUMBER | CHANGE SUMMARY |
| Sept' 2026                          | V.1             | Initial Issue  |
|                                     |                 |                |

|                       |                                                                                     |
|-----------------------|-------------------------------------------------------------------------------------|
| <b>Authorised by:</b> | Gaurav Sarup                                                                        |
| <b>Signature</b>      |  |
| <b>Position:</b>      | Group Dy Head HSE & Chief Sustainability Officer                                    |

## Confidentiality

This document and its contents are the copyright property of Vedanta Resources Limited. The release of this document to any third party outside of Vedanta is strictly prohibited without prior consent.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 1. PURPOSE OF THIS HANDBOOK

TS24 defines **what** every Vedanta Business Unit shall implement.

This handbook explains **how** those requirements can be applied consistently in the field.

It is intended to improve operational decision-making by:

- explaining the intent behind TS24;
- clarifying the responsibilities of each role within the Permit to Work (PTW) process;
- providing practical guidance for managing hazardous work;
- illustrating common failure modes; and
- promoting consistent implementation across Vedanta businesses.

This handbook does not introduce additional mandatory requirements beyond those established in TS24.

### 2. WHO SHOULD READ THIS HANDBOOK?

Different chapters have been written for different audiences.

| Role                                      | Recommended Chapters |
|-------------------------------------------|----------------------|
| Area Authority/Custodian                  | 1, 2, 8–12           |
| Permit Issuer or Permit Issuing Authority | 1, 3, 8–12           |
| Permit Initiator and Acceptor             | 1, 4, 8–12           |
| Work Party                                | 1, 5                 |
| Business Leadership                       | 1, 6, 12             |
| HSE Professionals                         | All Chapters         |

### 3. HOW TO USE THIS HANDBOOK

This handbook is not intended to be read cover to cover before someone can perform their role.

Instead:

- Read Chapter 1 to understand the philosophy and operational decision model.
- Read the chapter specific to your role.
- Refer to Chapters 8–12 when preparing, reviewing or supervising hazardous work.
- Use Appendices D and E for the PTW Playbook and field tools during day-to-day operations.

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## Contents

|                                                                             |     |
|-----------------------------------------------------------------------------|-----|
| PART 1: FOUNDATIONS                                                         | 4   |
| Chapter 1: Operational Work Control _ The Foundation of Safe Hazardous Work | 4   |
| PART 2: ROLE HANDBOOKS                                                      | 9   |
| Chapter 2: Area Authority or Custodian Handbook                             | 9   |
| Chapter 3: Permit Issuer or Permit Issuing Authority Handbook               | 16  |
| Chapter 4: Permit Initiator and Acceptor Handbook                           | 23  |
| Chapter 5: Work Party Handbook                                              | 29  |
| Chapter 6: Business Leadership Handbook                                     | 34  |
| Chapter 7: HSE Function Handbook                                            | 46  |
| PART 3: USING THE PERMIT                                                    | 52  |
| Chapter 8: Understanding the Permit                                         | 52  |
| Chapter 9: The Integrated Work Package                                      | 59  |
| PART 4: TECHNICAL GUIDANCE                                                  | 68  |
| Chapter 10: What Good Looks Like                                            | 68  |
| Chapter 11: Verifying Critical Controls                                     | 78  |
| Chapter 12: Managing Change During Work                                     | 94  |
| Chapter 13: Operational Work Control Assurance                              | 105 |
| PART 5: APPENDICES                                                          | 112 |
| Appendix A: Minimum Information Requirements for Permit to Work Systems     | 112 |
| Appendix B: Worked Example – Operational Work Control in Practice           | 115 |
| Appendix C: Operational Decision Guides                                     | 125 |
| Appendix D: Critical Control Verification Cards                             | 134 |
| Appendix E: PTW Playbook                                                    | 141 |
| Appendix F: Field Tools                                                     | 142 |

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## PART 1: FOUNDATIONS

### Chapter 1: Operational Work Control \_ The Foundation of Safe Hazardous Work

#### 1.1 Why This Handbook Exists

Every day, thousands of hazardous work activities are undertaken across Vedanta.

These activities include maintenance, construction, shutdowns, inspections, lifting operations, confined space entry, electrical work and many other tasks that expose people to potentially fatal hazards.

Most of these activities are completed safely.

However, investigations into serious incidents across the mining, metals, oil and gas industries consistently show that catastrophic events rarely occur because people intended to work unsafely.

More often, they occur because

- Operational control was gradually lost.
- Work began before the workplace was fully prepared.
- Conditions changed but the work continued.
- Critical Controls were assumed rather than verified.
- Responsibilities became unclear.
- People relied on previous experience instead of current evidence.

The Permit to Work existed. The paperwork was complete.

Yet the event still occurred.

This handbook has been developed to help prevent those failures.

Its purpose is not simply to explain how to operate a Permit to Work system.

Its purpose is to help every person involved in hazardous work make better operational decisions by applying the principles of TS24 consistently in the field.

#### 1.2 The Difference Between Paperwork and Operational Control

A Permit to Work is one of the most widely used tools for managing hazardous work.

It is also one of the most misunderstood.

A Permit does not make work safe.

A Permit **records the decision** that work may proceed because the **conditions required for safe execution have been demonstrated**.

The effectiveness of a Permit therefore depends not on the quality of the paperwork, but on the quality of the decisions that support it.

An organisation with excellent paperwork can still experience catastrophic failures if those decisions are poor.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

Conversely, an organisation that consistently makes good operational decisions will usually produce good documentation because the paperwork reflects a disciplined decision-making process.

This handbook focuses on improving those decisions.

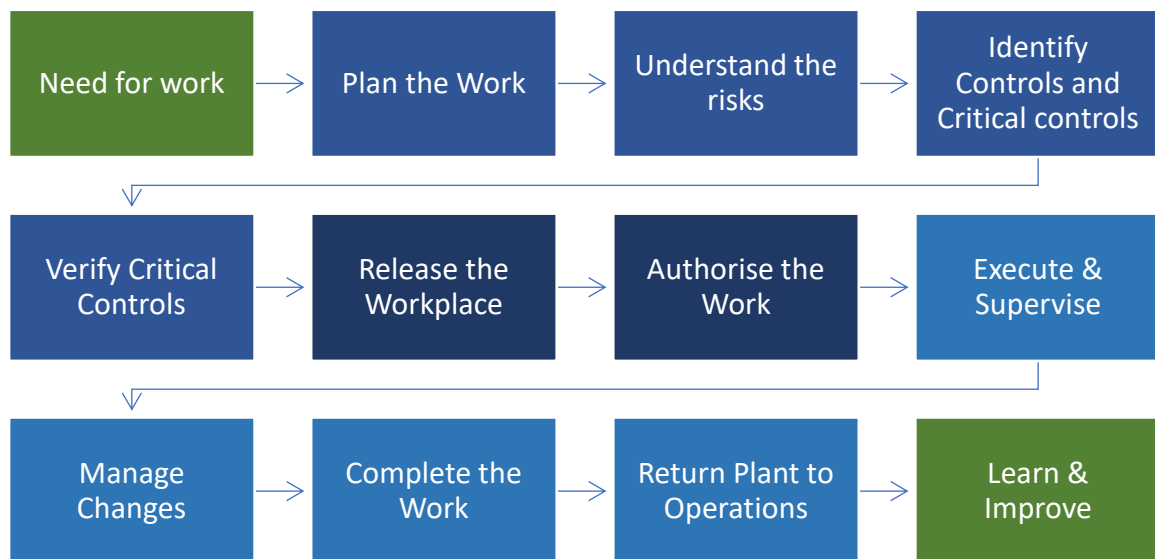
### 1.3 What is Operational Work Control?

Operational Work Control is the systematic process of ensuring that hazardous work is:

- properly planned;
- supported by a suitable risk assessment;
- protected by effective Critical Controls;
- authorised by competent personnel;
- continuously supervised;
- reassessed when conditions change; and
- safely completed before the workplace is returned to Operations.

The Permit to Work is one component of this process. It should never be viewed as the process itself.

**Figure 1.1 – Operational Work Control Lifecycle**



- ✓ Every stage in this lifecycle contributes to maintaining operational control.
- ✓ Failure at any stage weakens the system and increases the likelihood of a high-consequence event.

### 1.4 The Philosophy Behind TS24

TS24 is founded on a single principle:

**“Hazardous work shall only proceed when operational control can be demonstrated and maintained.”**

- ✓ This principle is deliberately simple.
- ✓ It recognises that every work activity is different, but every operational decision should be judged against the same question: **“Can this work be undertaken without losing operational control?”**
- ✓ If the answer is uncertain, work should not proceed

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 1.5 The Four Questions

Every Area Authority or Custodian and Permit Issuer or Permit Issuing Authority should be able to confidently answer the following **four questions** before hazardous work begins:

1. **Do we fully understand the work?**
2. **Do we fully understand the risks?**
3. **Have we verified the Critical Controls?**
4. **Can operational control be maintained until the work is complete?**

These are not checklist items. They are decision-making questions.

Throughout this handbook, they are referred to simply as “**The Four Questions**”

These questions should be applied before every significant operational decision throughout the Permit to Work process.

Subsequent chapters will reference them rather than repeat them.

### 1.6 Applicability

The requirements of the Standard apply whenever work has the potential to expose personnel, assets or the environment to hazards requiring formal operational control.

Businesses shall **identify the activities requiring a Permit to Work within their operations.**

As a minimum, permits shall be required for activities involving:

- Cold Work
- Hot Work
- Confined Space Entry
- Excavation
- Electrical Work
- Energy Isolation
- Temporary Energization
- Work at Height
- Critical Lifting Operations
- Radiography
- **Other activities designated by the Business following risk assessment.**

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 1.7 Operational Decision Gates

TS24 requires defined decision points at which work readiness, Critical Controls and continued Operational Work Control are confirmed.

GN48 uses **nine Operational Decision Gates** as a practical implementation model for applying that requirement.

- ✓ The gates should not be viewed as administrative approvals.
- ✓ They are operational pause points where evidence is considered before the next stage of work proceeds.

| Decision Gate | Operational Question                    |
|---------------|-----------------------------------------|
| DG1           | Have we planned the work?               |
| DG2           | Do we understand the risks?             |
| DG3           | Have Critical Controls been verified?   |
| DG4           | Is the workplace ready?                 |
| DG5           | Can work safely begin?                  |
| DG6           | Can work safely continue?               |
| DG7           | Has the work been completed?            |
| DG8           | Can the plant safely return to service? |
| DG9           | Can the Permit be closed?               |

The gates are a practical way of applying TS24; **Businesses may use an equivalent structure provided the minimum requirements of TS24 are met.**

### 1.8 Everyone Has a Role

Operational Work Control is a shared responsibility.

No single person can establish or maintain operational control alone.

The following chapters describe the responsibilities of each role:

- Area Authority or Custodian
- Permit Issuer or Permit Issuing Authority
- Permit Initiator and Acceptor
- Work Party
- Business Leadership
- HSE Function

Each chapter has been written specifically for that audience.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● Learning from Failure

#### Scenario

During a planned maintenance shutdown, a contractor was instructed to replace a section of process piping.

The work had been thoroughly planned. The Permit had been issued. The isolations had been completed.

Several hours later, Operations temporarily reinstated part of the system to support commissioning elsewhere on the plant.

The maintenance team was not informed because the original Permit remained active.

When the pipe was opened, pressurised chemical was released, causing severe burns to two workers.

#### Why Did Operational Control Fail?

The investigation found that:

- planning had been completed;
- documentation was accurate at the time of issue;
- plant conditions changed after authorisation;
- no one recognised that the basis for the original decision no longer existed.

✓ The Permit remained valid.

× The assumptions behind it did not.

#### How TS24 Would Have Prevented This

This event would have been interrupted by several requirements within TS24:

- **Decision Gate DG6 – Work Controlled** requires operational control to be actively maintained throughout the work. When Operations temporarily reinstated part of the system, the conditions supporting the original authorization changed. This should have triggered a reassessment before work continued.
- **TS24 Section 3.13.2 – Suspension and Revalidation** requires work to be suspended, revalidated or reauthorized whenever significant changes occur that may affect the validity of the Permit or the basis upon which the work was authorized.
- **Critical Control Verification** requires controls to remain effective throughout the work, not only at the time the Permit is issued. Reinstating part of the process changed the effectiveness of the original isolation strategy and should have prompted repeat verification before work resumed.

Viewed individually, each requirement provides an important safeguard. Applied together, they create multiple opportunities to recognize that the original operational decision was no longer valid and to restore operational control before the work continued.

The lesson is simple:

**“A Permit authorises work under a specific set of conditions. If those conditions change, the decision to continue working must be reevaluated.”**

### Chapter Summary

- Operational Work Control is not about producing better paperwork.
- It is about making better operational decisions.
- Everything in TS24—and everything in this handbook—supports that objective.

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## PART 2: ROLE HANDBOOKS

### Chapter 2: Area Authority or Custodian Handbook

#### The Custodian of the workplace

**“Operations owns the plant. Therefore, Operations owns the decision to release it for hazardous work.”**

#### 2.1 Why Your Role Matters

Every Permit to Work begins and ends with Operations.

Maintenance may repair the equipment.

Contractors may perform the work.

The Permit Issuer or Permit Issuing Authority may authorise the Permit.

HSE may provide assurance.

**But only the Area Authority or Custodian understands the complete operational picture.**

You know:

- what the plant is doing;
- what has changed since yesterday;
- what equipment is operating;
- what equipment is isolated;
- what other work is taking place nearby;
- what temporary modifications exist;
- what operational constraints exist.

No one else has this complete understanding.

For that reason, you are the custodian of the workplace.

✓ **Your decisions determine whether Operations can safely release the workplace for hazardous work and safely recover it afterwards.**

#### 2.2 Your Primary Responsibility

Many Area Authorities or Custodians believe their role is to approve permits. It is not.

**Your role is to maintain operational control.**

Everything else is secondary.

Every decision you make should answer one question: **“Can this workplace be safely released for the work that is proposed?”**

Notice the emphasis.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

You are not approving maintenance.  
You are not approving the contractor.

You are deciding whether Operations can safely hand over control of part of the plant.

That is a fundamentally different decision

- ✓ **Once the workplace has been released, your responsibility shifts from deciding whether work may begin to ensuring that Operations continues to support the work safely until the workplace is formally returned.**

### 2.3 Your Mindset

Think like the owner of the plant.

Ask yourself:

- Would I allow this work if my own team were performing it?
  - Am I confident that my operators understand what is happening?
  - What could affect this work after it starts?
  - What assumptions am I making?
- ✓ Experience is valuable.  
× Assumptions are dangerous.

The longer someone has worked in an area, the greater the risk that familiarity replaces verification.

- ✓ **Good Area Authorities or Custodians remain professionally sceptical.**

### 2.4 Your Decisions During the Permit Lifecycle

During every Permit lifecycle, you make **six operational decisions**.

| Stage              | Your Decision                                            | Why It Matters                                                            |
|--------------------|----------------------------------------------------------|---------------------------------------------------------------------------|
| Planning           | Is the proposed work compatible with current operations? | Prevents unnecessary operational conflicts before planning progresses.    |
| Workplace Release  | Can Operations safely release this workplace?            | Confirms that plant conditions support safe work.                         |
| Work Execution     | Can Operations continue to support this work?            | Ensures changes are recognised before they create risk.                   |
| Operational Change | Does this change invalidate the original decision?       | Determines whether work should continue, be suspended or be reauthorised. |
| Work Completion    | Is the work genuinely complete?                          | Prevents premature reinstatement of plant.                                |
| Return to Service  | Can Operations safely recover the workplace?             | Confirms readiness for restart and restores operational accountability.   |

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

Notice that none of these decisions are administrative approvals. Each requires professional judgement about whether the workplace can safely support the work at that stage of the Permit lifecycle.

They are decisions about the condition of the workplace.

### 2.5 Your Routine

An effective Area Authority or Custodian develops consistent habits.

#### **Start of Shift**

Before work begins, understand what your workplace will look like today.

Review:

- active Permits;
- planned high-risk work;
- isolations;
- simultaneous operations;
- temporary modifications;
- abnormal operating conditions;
- weather, if relevant.

Then ask yourself: “**Which activity has the greatest potential to surprise me today?**”

Visit that workplace first.

#### **Before Releasing the Workplace**

Never release a workplace based solely on documentation.

Walk the job.

Stand where the work will take place.

Observe what the workers will see.

Confirm:

- equipment identity;
- work boundaries;
- plant status;
- isolation status;
- access and egress;
- housekeeping;
- barriers and exclusion zones;
- nearby activities.

✓ **If what you see differs from what you expected, stop.**

✓ **Understand the difference before releasing the workplace.**

#### **During the Work**

Your responsibility does not end when the Permit is issued.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

Continue to monitor:

- operational changes;
  - production activities;
  - new work commencing nearby;
  - weather changes;
  - contractor interfaces;
  - removal of barriers;
  - modifications to isolations.
  - shift handovers affecting Operations or the work party.
- ✓ The key question becomes: “**Has anything changed that would have influenced my original decision to release this workplace?**”
- ✓ If the answer is yes, reassess the work.

### **At Completion**

Before accepting the workplace back:

Confirm that:

- authorised work has been completed;
- temporary equipment has been removed;
- guards and protective devices have been restored;
- housekeeping is satisfactory;
- isolations have been managed correctly;
- plant is ready for safe operation.

Only then should operational responsibility return to Operations.

## **2.6 Field Leadership**

The most effective Area Authorities or Custodians are highly visible.

They spend more time in the workplace than in the Permit Office.

They know:

- where high-risk work is taking place;
- who is performing it;
- what Critical Controls are protecting it;
- what could cause those controls to fail.

People should expect to see the Area Authority or Custodian in the field—not only after something has gone wrong.

### **Good Practice**

Use every workplace visit as an opportunity to learn.

Instead of asking: “**Is everything okay?**”

Ask:

- “Show me the work boundaries.”

## Guidance Note - Operational Work Control Handbook \_ Permit to Work System

- “Explain the sequence of work.”
  - “Which Critical Control gives you the greatest confidence?”
  - “What would make you stop work?”
- ✓ Open questions reveal understanding.
- ✓ Closed questions often reveal only compliance.

### 2.7 Managing Operational Change

No Permit remains valid simply because time has not expired.

The validity of a Permit depends on the validity of the conditions under which it was issued.

Examples of operational change include:

- plant start-up or shutdown;
  - isolation modifications;
  - process changes;
  - simultaneous work commencing;
  - severe weather;
  - changes in supervision;
  - unexpected equipment condition.
- ✓ When these occur, ask: “**Would I still release this workplace if I were making the decision now?**”
- ✓ If the answer is **uncertain, suspend the work and reassess.**

### Red Flags

Immediately **stop and review the work if you observe:**

- work occurring outside the authorised boundaries;
- barriers or exclusion zones removed without approval;
- operators unsure of current plant status;
- additional contractors joining the work;
- conflicting instructions from different supervisors;
- modifications to isolations;
- work continuing after significant operational change.

These are indicators that operational control may have been lost.

### 2.8 Common Mistakes

The following behaviours are frequently identified during incident investigations:

- treating workplace release as an administrative approval;
- relying on memory instead of inspection;
- assuming yesterday’s plant conditions still exist;
- focusing on one Permit without considering nearby work;
- accepting the workplace back without personally verifying its condition.

Each of these behaviours weakens operational control.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● Learning from Failure

#### Scenario

During a major shutdown, the Area Authority or Custodian released a process area for pump replacement.

The workplace inspection confirmed that isolations had been completed and the area was safe.

Midway through the shift, Operations temporarily reconfigured part of the process to maintain production in another section of the plant.

Although the change did not affect the work directly, it altered the pressure conditions in adjacent pipework.

The maintenance crew continued working because the Permit remained valid.

Residual pressure was released when a flange was loosened.

One worker sustained serious chemical burns.

#### Why Did It Happen?

The investigation found:

- the original workplace inspection was satisfactory;
- the Permit had been correctly authorised;
- operational conditions changed after the workplace was released;
- no one reconsidered whether the original decision remained valid.

The Area Authority or Custodian focused on **releasing** the workplace.

They did not continue to **own** the workplace.

#### How TS24 Would Have Prevented This

The following TS24 requirements would have interrupted this event:

- Decision Gate **DG6 – Work Controlled**: requires operational control to be actively maintained throughout the execution of the work. Temporary changes to process conditions should have prompted the Area Authority or Custodian to reconsider whether the workplace could continue to support the work safely.
- **TS24 – Section 3.13.2 – Permit Suspension and Revalidation** requires work to be reviewed whenever significant operational changes occur that affect the conditions under which the Permit was authorized.
- TS24 requires assurance of workplace control throughout the work, not only at authorisation.

The lesson is straightforward:

**“The responsibility of the Area Authority or Custodian does not end when the workplace is released. It ends only when the workplace has been safely returned to Operations.”**

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 2.9 Area Authority or Custodian Pocket Card

Before releasing any workplace, ask yourself:

- Does the workplace match the plan?
- Have I personally confirmed current plant conditions?
- Have I considered interactions with other work?
- What has changed since planning?
- Can Operations safely support this work until completion?
- If conditions change, how will I know?

If you cannot answer these questions confidently: **“Do not release the workplace.”**

- ✓ Inspect.
- ✓ Question.
- ✓ Verify.
- ✓ Then decide.

### Chapter Summary

- An effective Area Authority or Custodian is not measured by the number of Permits released.
- They are measured by the quality of their operational decisions.
- The Area Authority’s or Custodian’s greatest contribution to safety is not approving work—it is recognising when not to release the workplace and recognising when changing conditions require work to stop and be reassessed. That is the essence of maintaining operational control.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Chapter 3: Permit Issuer or Permit Issuing Authority Handbook

#### Authorising Hazardous Work

**A Permit is not evidence that the work is safe. It is evidence that someone has decided the work may begin.**

That decision carries responsibility.

#### 3.1 Why This Role Matters

The Permit Issuer or Permit Issuing Authority makes one of the most important decisions in the Permit to Work process.

By authorising a Permit, the Permit Issuer or Permit Issuing Authority confirms that the work has been properly planned, the hazards are understood, the required Critical Controls have been established, and the workplace is ready for the proposed activity.

A Permit should never be issued because:

- the paperwork is complete;
- the work is routine;
- production is waiting; or
- similar work has been done before.

Every Permit shall be assessed on its own merits and against the current conditions in the workplace.

#### 3.2 Your Purpose

Your purpose is to ensure that hazardous work is authorised **only when operational control has been established**.

This requires judgement.

The Permit Issuer or Permit Issuing Authority is expected to:

- understand the work;
- understand the hazards;
- confirm that Critical Controls have been verified;
- satisfy themselves that the workplace is ready; and
- refuse authorisation whenever these conditions are not met.

The quality of a Permit depends less on how well it is written and more on the quality of the operational decisions that it records.

#### 3.3 Your Responsibilities

The Permit Issuer or Permit Issuing Authority is responsible for:

- reviewing the proposed work;
- confirming that the work scope is clearly defined;
- verifying that the risk assessment is appropriate for the work;
- confirming that the required Critical Controls have been established;
- ensuring that supporting documents are complete and current;
- confirming that the Area Authority or Custodian has released the workplace; and

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

- authorising the work only when satisfied that it can proceed safely.

The Permit Issuer or Permit Issuing Authority is not responsible for supervising the work after it begins.

That responsibility rests with the Permit Initiator and Acceptor.

### 3.4 Your Decisions

Every Permit Issuer or Permit Issuing Authority makes **five operational decisions**.

| Stage         | Decision                                                                |
|---------------|-------------------------------------------------------------------------|
| Permit Review | Do I understand exactly what work is being authorised?                  |
| Risk Review   | Have the hazards and Critical Controls been identified correctly?       |
| Verification  | Has the evidence demonstrated that the Critical Controls are effective? |
| Authorisation | Can this work safely begin?                                             |
| Revalidation  | Can this work safely continue if conditions change?                     |

- ✓ Each decision should be based on objective evidence.
- ✓ Assumptions are not evidence.

### 3.5 Before You Authorise the Permit

Before authorizing hazardous work, review the Permit as a complete package.

Do not assess each document independently.

Instead, ask whether the documents collectively provide sufficient evidence to support one operational decision.

In particular, satisfy yourself that:

- the work being authorized is clearly understood;
- the fatality scenario has been correctly identified;
- the Controls/Critical Controls are appropriate and have been verified;

The work scope should align with:

- the risk assessment;
- the isolation certificate;
- the gas test certificate, where applicable;
- the lifting plan, where applicable;
- the rescue plan, where applicable; and
- any other supporting documentation.

- ✓ If available **evidence does not support the decision** to begin work, **do not authorize** the Permit until the inconsistency has been resolved.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 3.6 Visit the Workplace

A Permit Issuer or Permit Issuing Authority should visit the workplace before authorising high-risk work.

The purpose of the visit is not to repeat the Area Authority's or Custodian's inspection.

It is to satisfy yourself that the conditions described in the Permit exist in the field.

Confirm that:

- the work location is correct;
  - the work scope is understood;
  - Critical Controls are evident;
  - work boundaries have been established;
  - the work party understands the activity to be undertaken.
- ✓ If the workplace and the Permit describe different realities, trust the workplace and resolve the inconsistency before authorization.

### 3.7 Documentation Responsibilities

The Permit Issuer or Permit Issuing Authority should review every section of the Permit before authorisation.

The review should confirm that:

- the work description is specific and unambiguous;
  - the Permit category is appropriate;
  - the risk assessment addresses the actual work;
  - Critical Controls are relevant and capable of preventing the identified fatality scenario;
  - supporting documents are referenced correctly;
  - validity period is appropriate;
  - all required authorisations have been obtained.
- ✓ Before signing the Permit, ask one final question: **"Does this Permit provide sufficient evidence for me to authorise hazardous work?"**
- ✓ If the answer is **uncertain, do not authorize** the work and sign-off on the permit until the uncertainty has been resolved.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● **Good Practice**

Good Permit Issuer or Permit Issuing Authority do not simply review documents.

They test understanding.

Instead of asking: “**Have you read the Permit?**”

Ask: “Explain the work you are about to undertake.”

Instead of asking: “**Is the gas test complete?**”

Ask: “When was it completed? What would require it to be repeated?”

✓ These questions confirm understanding rather than compliance.

### ● **Red Flags**

Do not authorise the Permit if you observe:

- copied or generic work descriptions;
- generic risk assessments;
- Critical Controls that cannot be verified;
- conflicting information between supporting documents;
- uncertainty about isolations;
- incomplete supporting documentation;
- pressure to issue the Permit without adequate review.

These conditions indicate that operational control has not yet been established.

### **3.8 Common Mistakes**

Incident investigations frequently identify the following mistakes:

- authorising Permits without visiting the workplace;
- relying on previous experience instead of current evidence;
- accepting copied risk assessments;
- focusing on signatures rather than understanding;
- assuming that routine work presents routine risks;
- treating Permit extensions as administrative activities.

Each of these mistakes weakens the Permit process.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● Learning from Failure

#### Scenario

During a maintenance shutdown, a Permit was issued for welding on a storage vessel.

The Permit referenced a gas test that had been completed earlier that morning.

Before welding commenced, Operations depressurised adjacent equipment.

The change released flammable vapours into the work area.

The original gas test remained attached to the Permit.

No repeat test was undertaken because the Permit had already been authorised.

A flash fire occurred shortly after welding began.

Two contractors sustained serious burn injuries.

#### What Went Wrong?

The Permit documentation was complete.

The original gas test was valid when it was conducted.

However, the workplace changed after verification.

The Permit Issuer or Permit Issuing Authority assumed that the original evidence remained valid throughout the work.

The decision to authorise the Permit was not revisited when conditions changed.

#### How TS24 Would Have Prevented This

This event should have been interrupted by several independent requirements within TS24.

- **Decision Gate DG2 – Risks Understood** requires the hazards associated with the proposed work to be correctly identified before authorisation. The changing process conditions should have prompted reconsideration of whether the original gas test remained representative:
- **Decision Gate DG3 – Critical Controls Verified** requires evidence that Critical Controls remain effective before work begins. Atmospheric testing should have been repeated once conditions affecting the work environment changed.
- **Decision Gate DG5 – Work Authorised** requires the Permit Issuer or Permit Issuing Authority to authorise work only when the available evidence supports the decision. Once the original assumptions were no longer valid, the existing authorisation should have been reconsidered.
- **TS24 – Section 3.13.2 – Permit Suspension and Revalidation** requires hazardous work to be reviewed whenever significant operational changes occur that affect the basis upon which the work was authorised.

Together, these requirements would have interrupted the work before welding recommenced under changed atmospheric conditions.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 3.9 Permit Issuer or Permit Issuing Authority Pocket Card

Before authorising any Permit, confirm:

- I understand the work.
  - The work scope is clear.
  - The risk assessment reflects the actual work.
  - Critical Controls have been verified.
  - Supporting documents are complete.
  - The Area Authority or Custodian has released the workplace.
  - The work party understands the work.
- 
- ✓ If there is any doubt, **do not authorise the Permit.**
  - ✓ Seek clarification.
  - ✓ Verify the evidence.
  - ✓ Then make your decision.

#### Key Message

**The Permit Issuer or permit issuing authority does not certify that the work is safe. The Permit Issuer or permit issuing authority certifies that the conditions required for safe work have been established.**

That distinction is fundamental.

A Permit is a decision supported by evidence.

The quality of that decision depends on the quality of the evidence reviewed before authorisation.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 3.10 Emergency Authorisation Permit

Almost everything in this chapter assumes **there is time** to plan, assess and verify before work is authorised. Occasionally there is not — a genuine emergency, where delay itself creates the greater risk to life, the environment or a critical asset.

TS24 allows an expedited “Emergency Permit” authorisation for this situation, restricted to persons your Business Unit designates in advance.

If you hold that designation, an emergency authorisation still requires you to:

- verify the Critical Controls you can practically verify given the emergency, and be explicit — to yourself and the Permit Initiator and Acceptor — about which ones you could not;
- limit the authorisation strictly to the duration of the emergency; and
- ensure the decision is reviewed after the event; within the timeframe your Business Unit has set.

#### **Red Flag**

An emergency permit that gets used routinely for planning failures, not emergencies, is a sign the ordinary Permit process is being bypassed — not that emergencies are common.

#### **Key Message**

Speed is sometimes the right call. Skipping verification without acknowledging what you skipped is never the right call.

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## Chapter 4: Permit Initiator and Acceptor Handbook

### Executing Hazardous Work Safely

A Permit authorises work to begin. The Permit Initiator and Acceptor ensures it is carried out safely until completion.

#### 4.1 Why This Role Matters

Permit Initiator and Acceptor is responsible for the safe execution of hazardous work.

Once work begins, operational control depends largely on the decisions made at the workplace.

No Permit can anticipate every situation that may arise during the course of a job.

Unexpected conditions, changing environments and unforeseen hazards must be recognised and managed as they occur.

✓ For this reason, the Permit Initiator and Acceptor plays a **critical role in maintaining operational control**.

#### 4.2 Your Purpose

Your purpose is to execute the authorised work safely and within the conditions specified in the Permit.

This includes:

- ensuring that the work party understands the work;
- maintaining the required Critical Controls;
- monitoring changes during execution;
- stopping work when operational control is lost; and
- returning the workplace in a safe condition on completion.

✓ The Permit gives you **authority to undertake the work**.

✓ It does not give authority to change the work.

#### 4.3 Your Responsibilities

The Permit Initiator and Acceptor is responsible for:

- understanding the authorised work;
- briefing the work party before work begins;
- ensuring that the Permit is available at the workplace;
- complying with all Permit conditions;
- maintaining Critical Controls throughout the work;
- monitoring the work for changes;
- suspending the work when Permit conditions are no longer valid;
- completing the work within the authorised scope; and
- returning the workplace to the Area Authority or Custodian on completion.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 4.4 Accepting the Permit

Before accepting the Permit, satisfy yourself that you understand:

- the work to be carried out;
- the work boundaries;
- the identified hazards;
- the Critical Controls;
- the limitations of the Permit;
- the validity period; and
- the conditions that require the work to stop.

- ✓ If any aspect of the Permit is **unclear, seek clarification** before accepting it.
- ✓ Accepting a Permit confirms that you understand the conditions under which the work has been authorised.

### 4.5 Before Work Begins

Before the first tool is used, gather the work party at the workplace.

Review:

- the work scope;
- the sequence of activities;
- the hazards;
- the Critical Controls;
- emergency arrangements;
- individual responsibilities; and
- the Stop Work expectations.

The discussion should be practical.

Reading the Permit aloud is not an effective briefing.

Every member of the work party should understand:

- what they are doing;
- why the controls are required; and
- when they are expected to stop work.

### 4.6 While the Work is in Progress

Maintain close supervision of the work.

Pay particular attention to:

- changes in plant conditions;
- changing weather;
- removal of barriers;
- modification of isolations;
- new work commencing nearby;
- changes in the work party;
- changes in shift personnel or supervisory responsibility;
- unexpected equipment condition.

- ✓ **Never assume** that conditions remain the same simply because the Permit is still valid.
- ✓ The workplace—not the paperwork—determines whether work can continue safely.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 4.7 Managing Change

Not every change requires a new Permit.

However, every significant change requires a decision.

Examples include:

- the work expanding beyond the original scope;
- a different method of work;
- replacement of key personnel;
- changes to isolations;
- new hazards;
- simultaneous work affecting the activity.

**Where significant changes occur:**

- stop the work;
- inform the Permit Issuer or Permit Issuing Authority;
- review the risk assessment;
- re-establish Critical Controls; and
- recommence only after the necessary approvals have been obtained.

✓ Continuing work without reassessment defeats the purpose of the Permit.

### 4.8 Documentation Responsibilities

The Permit **shall remain** available **at the workplace throughout the work**.

The Permit Initiator and Acceptor should ensure that:

- the current Permit is displayed or readily available;
- supporting documents remain with the Permit where required;
- any Permit suspension or revalidation is recorded;
- changes are documented in accordance with the PTW procedure;
- the Permit is closed only after the work has been completed and the workplace has been restored.

✓ Do not make unauthorised amendments to the Permit.

✓ If the Permit no longer reflects the work being undertaken, stop and seek guidance from the Permit Issuer or Permit Issuing Authority.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● **Good Practice**

Good Permit Initiator and Acceptor's regularly pause during the work and ask:

- Has anything changed?
- Are all Critical Controls still effective?
- Is everyone still working within the authorised scope?
- Would we still issue this Permit if we were starting the job now?

These simple questions help identify changing conditions before they develop into incidents.

### ● **Red Flags**

Stop work immediately if:

- the work extends beyond the authorised scope;
- a Critical Control is no longer effective;
- plant conditions change unexpectedly;
- barriers or isolations are removed without approval;
- new hazards are identified;
- the work party is uncertain about the next activity;
- the Permit expires before the work is complete.

✓ When in doubt, stop.

✓ Seek clarification before continuing.

## 4.9 Common Mistakes

Investigations frequently identify the following behaviours:

- commencing work before the work party has been briefed;
- allowing the work to expand beyond the authorised scope;
- assuming that changes are insignificant;
- continuing work after Permit conditions have changed;
- removing barriers for convenience;
- treating Permit extensions as routine.

Each of these behaviours increases the likelihood of losing operational control.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● Learning from Failure

#### Scenario

A maintenance crew was authorised to replace a section of pipework during a shutdown.

During the work, corrosion was found extending beyond the planned repair.

The supervisor instructed the crew to remove an additional section of pipe.

The new work required removal of supports that were not included in the original risk assessment.

No review of the Permit was undertaken because the repair was considered a minor extension of the original job.

During cutting, the unsupported pipe shifted unexpectedly and struck a worker, causing serious injuries.

#### What Went Wrong?

The original Permit covered the planned repair.

It did not cover the additional work.

The work scope changed.

The risk assessment did not.

Operational control was lost when the work continued without reassessment.

#### How TS24 Would Have Prevented This

TS24 would have interrupted this event through several independent requirements:

- Decision Gate **DG2 – Risks Understood**, because the additional work introduced hazards that were not considered in the original assessment.
- Decision Gate **DG5 – Work Authorised**, because the revised scope required a conscious decision on whether the existing authorisation remained appropriate.
- Decision Gate **DG6 – Work Controlled**, because operational control must be maintained as work evolves, not only when it begins.
- **TS24 – Section – 3.13.2 – Permit Suspension and Revalidation**, because the work no longer reflected the authorised scope and required formal reassessment before continuing.

The correct response would have been to stop the work, review the revised scope and obtain authorisation before proceeding.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 4.10 Permit Initiator and Acceptor Pocket Card

Before starting work:

- Everyone understands the job.
- Everyone understands the hazards.
- Critical Controls are in place.
- The Permit is available at the workplace.

During the work:

- Monitor for change.
- Maintain Critical Controls.
- Work within the authorised scope.
- Stop if conditions change.

At completion:

- Work completed.
- Workplace restored.
- Temporary equipment removed.
- Permit returned for closure.

### Key Message

**The safest work is not the work that finishes on time. It is the work that stops when conditions change.**

The Permit establishes the conditions under which hazardous work may begin.

The Permit Initiator and Acceptor is responsible for ensuring that those conditions remain valid until the work is complete.

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## Chapter 5: Work Party Handbook

### Working Within the Permit

The Permit tells you what work has been authorised. It is your responsibility to ensure that the work never goes beyond those limits.

#### 5.1 Why Your Role Matters

Every person involved in hazardous work contributes to maintaining operational control.

While the Permit Issuer or Permit Issuing Authority authorises the work and the Permit Initiator and Acceptor supervises it, each member of the work party is responsible for carrying out the work safely and in accordance with the Permit.

The people performing the work are usually the first to recognise when something changes.

For this reason, every worker has an important role in identifying changes, reporting concerns and stopping work when required.

✓ **The expectations in this chapter apply equally to employees and contractors.**

#### 5.2 Your Purpose

Your purpose is to carry out the authorised work safely and within the conditions defined in the Permit.

This requires you to:

- understand the work before starting;
- comply with the Permit conditions;
- follow the agreed method of work;
- protect the Critical Controls established for the task;
- report any change that may affect safety; and
- stop work if operational control is lost.

✓ Working safely is **not limited to protecting yourself**.

✓ It also includes protecting your workmates, contractors, visitors and anyone else who may be affected by the work.

#### 5.3 Before You Start Work

Before starting, make sure you understand:

- what work has been authorised;
- where the work may be carried out;
- the hazards associated with the work;
- the Critical Controls protecting the work;
- the emergency arrangements;
- the conditions that require work to stop.

✓ If you do not understand any part of the work, ask.

✓ **Never begin** hazardous work based **on assumptions**.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 5.4 During the Work

Carry out only the work described in the Permit.

Remain alert for changes in:

- plant conditions;
  - weather;
  - surrounding activities;
  - equipment condition;
  - work boundaries;
  - effectiveness of Critical Controls.
- ✓ Immediately **report any change** to the Permit Initiator and Acceptor.
- ✓ **Do not assume** that someone else has already noticed it.

### 5.5 When to Stop Work

Stopping work is a normal part of maintaining operational control.

Stop work if:

- the work changes from the authorised scope;
- a Critical Control is no longer effective;
- the workplace changes significantly;
- barriers or isolations are disturbed;
- you are instructed to perform work not covered by the Permit;
- you are unsure how to proceed safely.

Stopping work allows the situation to be reviewed before work continues.

It is not a failure.

It is good operational practice.

- ✓ **Note: Stopping work does not mean solving the problem yourself.**

**Once work has been stopped, immediately inform the Permit Initiator and Acceptor or Supervisor, explain what has changed or caused concern, and wait for further instructions.**

**Work should only recommence after the necessary review has been completed and the Permit Initiator and Acceptor confirms that it is safe to proceed.**

### 5.6 Documentation Responsibilities

Before starting work:

- confirm that the current Permit is available at the workplace;
- ensure you understand the Permit conditions explained during the toolbox talk;
- sign any attendance record or briefing register required by the Business Unit.

Do not make changes to the Permit yourself.

- ✓ If the Permit no longer reflects the work being carried out, **inform** the Permit Initiator and Acceptor immediately.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● **Good Practice**

Good work parties:

- ask questions when unsure;
- challenge changes to the work scope;
- protect barriers and isolations;
- keep the workplace orderly;
- communicate openly with the Permit Initiator and Acceptor;
- stop work early rather than after an incident.

✓ These behaviours strengthen operational control.

### ● **Red Flags**

Stop and seek guidance if you observe:

- work extending beyond the Permit boundaries;
- new hazards not discussed during the briefing;
- damaged or removed barriers;
- ineffective Critical Controls;
- conflicting instructions from different supervisors;
- work continuing after the Permit has expired.

✓ **Never assume** that these issues have already been addressed.

## 5.7 Common Mistakes

The following behaviours frequently contribute to serious incidents:

- starting work before the toolbox talk;
- assuming that routine work is low risk;
- continuing after conditions have changed;
- accepting verbal instructions that conflict with the Permit;
- failing to report damaged Critical Controls;
- believing that someone else will raise the concern.

✓ Operational control depends **on timely communication**.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● Learning from Failure

#### Scenario

A contractor was authorised to remove insulation from a section of piping.

While carrying out the work, another supervisor requested that the insulation also be removed from an adjacent line.

The second line was not included in the Permit.

The work party assumed that the additional work had already been approved because the request came from a supervisor.

The adjacent line contained hot process fluid.

When the insulation was removed, a worker came into contact with an unprotected hot surface and sustained serious burns.

#### What Went Wrong?

The additional work was outside the authorised scope.

The work party accepted a verbal instruction without confirming that the Permit had been amended.

The Permit conditions no longer reflected the work being undertaken.

#### How TS24 Would Have Prevented This

This event should have been interrupted by several independent requirements within TS24.

- Decision Gate **DG2 – Risks Understood** requires the hazards associated with the authorised work to be understood before work begins. The additional work introduced hazards that had not been assessed.
- Decision Gate **DG5 – Work Authorised** requires work to remain within the authorised scope. Once the work expanded beyond that scope, the original operational decision should have been reconsidered.
- Decision Gate **DG6 – Work Controlled** requires operational control to be maintained throughout execution. Continuing with additional work without review meant the original operational decision was no longer being actively maintained.
- **TS24 – Section – 3.13.2 – Permit Suspension and Revalidation** requires work to be paused and reassessed whenever significant changes affect the validity of the original Permit.

Together, these requirements would have interrupted the work before the additional pipe section was removed and ensured that the revised work was properly assessed and authorised.

The correct response would have been to stop work and refer the request to the Permit Initiator and Acceptor and Permit Issuer or Permit Issuing Authority.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 5.8 Work Party Pocket Card

Before starting work:

- I understand the work.
- I understand the hazards.
- I know the Critical Controls.
- I know the work boundaries.

During the work:

- Follow the Permit.
- Protect the Critical Controls.
- Report changes immediately.
- Stop work if unsure.

✓ Remember:

**Never extend the work beyond the Permit. If the work changes, the Permit must change first.**

### Key Message

**The safest work party is not the one that works the fastest. It is the one that recognises when the conditions for safe work no longer exist.**

The Permit provides the authority to undertake hazardous work.

The work party is responsible for ensuring that the work remains within the limits of that authority until the task is complete.

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## Chapter 6: Business Leadership Handbook

### Leading Operational Decision Quality

Every serious incident is preceded by a series of operational decisions. Leadership determines whether those decisions improve—or quietly deteriorate—over time.

#### 6.1 Why Leadership Matters

Most organisations do not suffer serious incidents because people deliberately ignore procedures.

They suffer serious incidents because decisions that once felt uncomfortable gradually become accepted as normal.

A Permit is issued without visiting the workplace because “it has always been done that way.”

Additional work is undertaken because “it is only a small change.”

Critical Controls are assumed because “they were checked earlier.”

Production continues because “we cannot afford another delay.”

None of these decisions appears unreasonable in isolation.

The danger lies in their accumulation.

✓ **Leadership exists to recognise this gradual erosion before it results in a fatality.**

Your role is not to inspect individual decisions.

Your role is to identify when the organisation is beginning to normalise poor ones.

#### 6.2 Your Purpose

As a Business Leader, you do not own the Permit.

You own the environment in which operational decisions are made.

That environment includes:

- priorities;
- planning;
- supervision;
- contractor interfaces;
- workloads;
- standards;
- behaviours that are recognised or tolerated.

When these conditions are healthy, good operational decisions become easier.

When they are weak, even competent people begin making poor decisions.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

- ✓ Leadership therefore improves Operational Work Control **by improving organisational conditions**—not by relying solely on better people, better procedures or better training.

The following sections are meant as a **guide on how business leaders can influence and review the operational work environment**.

### 6.3 Before You Start the Review

Most leadership reviews fail before the first question is asked.

The leader wants assurance.

The supervisor expects judgement.

The contractor expects blame.

The discussion quickly becomes a defence of actions rather than an exploration of decisions.

Learning stops.

Before beginning the review, make your intent explicit.

For example:

**“We are not reviewing this job to decide whether someone performed well or poorly. We are reviewing it to understand how decisions were made and whether our system helped people make the right decisions. If we discover weaknesses, we will improve the system before we judge the individual.”**

Once this expectation has been established, the leader must consistently behave in a manner that reinforces it. If the discussion becomes an exercise in assigning blame or defending decisions, learning will quickly stop regardless of how well the review was introduced.

This does not mean that accountability disappears.

It means that learning comes first.

- ✓ Accountability becomes meaningful only after the organisation has understood the conditions under which the decision was made.

### 6.4 Conducting the Leadership Review

Most leadership reviews begin with presentations, dashboards and performance indicators.

These provide valuable information about what has happened across the Business.

However, they rarely show how operational decisions were actually made.

By the time information reaches a leadership meeting, it has usually been summarised, interpreted and filtered through several levels of the organisation.

The discussion therefore focuses on conclusions rather than decisions.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

This review begins differently.

Instead of reviewing many activities superficially, it examines one recently completed hazardous job in detail.

Choose an ordinary job - not an incident, not the largest shutdown and not the most complicated Permit.

The objective is to understand how hazardous work is normally planned, authorised, supervised and completed.

Do not select your best example.

Routine work reveals the organisation's everyday capability.

Serious incidents are uncommon. Routine operational decisions occur thousands of times every day.

If those routine decisions are consistently sound, serious incidents become much less likely.

The Permit is simply the starting point for the conversation.

The real subject of the review is the chain of operational decisions that produced the work.

Those decisions reflect far more than Permit quality.

They reveal how well the organisation:

- plans hazardous work;
- prepares engineering information;
- coordinates Operations and contractors;
- allocates supervision;
- manages competing priorities;
- verifies Critical Controls; and
- responds when conditions change.

One Permit therefore provides a practical window into how the organisation normally functions.

- ✓ The purpose of the review is not to decide whether the Permit was good or bad.
- ✓ It is to understand whether the organisation consistently helps competent people make good operational decisions

### 6.5 Looking Beyond the First Answer

Begin by asking the people who planned, authorised and supervised the work to explain the job exactly as it happened.

Avoid asking them to present slides or prepared summaries.

Instead, ask them simply to tell the story of the work from beginning to end.

Allow them to speak without interruption.

The first explanation is often the most important because it reveals what people themselves considered significant.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

Only after the sequence of work is understood should the leader begin asking questions.

Start with **open questions**.

For example:

- Walk me through the job from the beginning.
- Which part of the work required the greatest judgement?
- What became more difficult than you expected?
- At what point did you have to stop and think?
- If you were undertaking exactly the same job tomorrow, what would you do differently?

The purpose of these questions is not to identify mistakes.

It is to understand how operational decisions were made.

As the discussion develops, the first answer will often describe the immediate problem rather than its underlying cause.

For example: “We need better training.”

Do not reject the answer.

But do not stop there either.

Continue exploring.

Ask:

- Which part of the work was difficult?
- Why was it difficult?
- What information was unavailable?
- What made the right decision difficult to make?
- Would better training alone prevent the same situation during the next similar job?

Similarly,

- if someone says: “The contractor didn’t follow the procedure.”

Continue asking:

- Why was the contractor able to make that decision?
- Were responsibilities clear?
- Did both organisations understand who owned changes to the work?
- Would another competent contractor working under the same conditions face the same difficulty?

The objective is not to prove that the first answer is wrong.

It is to determine whether it fully explains the issue.

Many operational problems appear to involve individuals.

## Guidance Note - Operational Work Control Handbook \_ Permit to Work System

With careful questioning they often reveal planning weaknesses, unclear responsibilities, competing priorities or operating arrangements that make poor decisions more likely.

Do not stop asking questions simply because someone has identified an improvement.

Continue until the discussion reaches something that leadership itself can influence.

The discussion should progressively move through **three levels**.

| Initial Answer                   | Continue Exploring                                | Leadership Insight                                                                                 |
|----------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------|
| "We need more training."         | What made the work difficult to understand?       | Is planning, engineering information or supervision making good decisions unnecessarily difficult? |
| "The contractor made a mistake." | Why was that mistake possible?                    | Does the operating model create ambiguity at the Vedanta-contractor interface?                     |
| "The procedure wasn't followed." | Why did following the procedure become difficult? | Are production pressures, workload or work sequencing encouraging procedural deviation?            |
| "We should remind people."       | Why do people need repeated reminders?            | What organisational condition is making the desired behaviour difficult to sustain?                |

Do not expect every review to identify major organisational weaknesses.

Many reviews will confirm that good operational decisions were made because planning was thorough, responsibilities were clear and supervisors were well supported.

Understanding why work succeeds is just as valuable as understanding why it fails.

The review is complete when leadership leaves with one or more improvements that are within its own authority to make before the next comparable hazardous job is undertaken.

The purpose of the review is not to improve one Permit.

It is to improve the conditions under which the next operational decision will be made.

✓ If they explain the job as they experienced it, **you will learn how your organisation actually works.**

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 6.6 The Six Conversations

The purpose of these conversations is not to verify compliance.

It is to understand how operational decisions were made.

Each conversation should move from facts, to reasoning, to organisational conditions.

Do not stop at the first answer.

#### **Conversation 1 – Why was this work necessary?**

Start with the work itself.

Help the team reconstruct the context.

Ask:

- Why was this work undertaken?
- Why now?
- What alternatives were considered?
- What constraints were influencing the plan?

**You are listening for:** “Whether the work was driven by good planning or by operational pressure.”

If the discussion quickly moves to schedule, cost or production, do not assume that these are problems.

Instead ask: **“How did those pressures influence the decisions that followed?”**

- ✓ Leadership should **distinguish between pressure that is managed and pressure that is shaping unsafe decisions.**

#### **Conversation 2 – What could have gone seriously wrong?**

Avoid asking for a list of hazards.

Instead ask: **“What was the one event/decision that could have resulted in a serious accident or fatality?”**

Then ask each participant separately.

If they describe different fatality scenarios, stop.

Do not continue to the next question.

The problem is no longer the Permit.

The problem is that the organisation never established a shared understanding of the work.

Do not ask for another risk assessment.

Ask how that misunderstanding developed.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Conversation 3 – Which decision mattered most?

Every successful job contains one or two decisions that prevented failure.

Find them.

Then ask: **“What made that decision seem like the right decision at that moment?”**

This question matters more than whether the decision was ultimately correct.

People rarely choose what they believe to be an unsafe option.

Understanding why a decision appeared reasonable reveals far more about the organisation than judging the decision afterwards.

### Conversation 4 – What evidence gave you confidence?

Ask people to explain how they knew it was safe to proceed.

Be careful here.

Many answers will sound convincing.

Distinguish between:

- evidence that was observed; and
- assumptions that were inherited.

If someone says: **“The supervisor had checked it.”**

Ask: **“If a different supervisor had been here that day, would the decision have been the same?”**

- ✓ If the answer is **no**, the organisation is **depending on individuals rather than systems**.
- ✓ That is a **leadership issue**.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Conversation 5 – What changed?

Every hazardous job changes.

The question is whether the organisation recognised the change before it recognised the consequence.

Ask:

- What changed?
- Who recognised it?
- What happened next?
- At what point did the original plan no longer fit the work?

Do not become concerned if the work changed.

Become concerned if people cannot explain how they recognised the change or why they continued.

### Conversation 6 – What should we improve?

Do not ask: “**What training do we need?**”

Instead ask: “**If this same job was repeated next week, what could we change within this Business to make the right decision easier?**”

Keep asking until the discussion reaches something that can genuinely be influenced.

If every proposed action depends upon Corporate, Procurement, HR, L&D, Digital or the contractor improving first, continue asking.

Every review should identify at least one improvement that lies within the Business Leader’s own span of control.

✓ If it **does not**, the review has produced **insight but not improvement**.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 6.7 Beware of Leadership Traps

The greatest threat to an effective review is often the leader—not the team.

Recognise the **following traps**.

#### **Trap 1 – Solving Too Early**

The moment you hear “training”, “procedure” or “awareness”, pause.

Ask yourself: **“If no additional training were possible, how else could we reduce the likelihood of this happening again?”**

✓ If the discussion changes, the original action was probably incomplete.

#### **Trap 2 – Nothing Is Within My Control**

Leaders sometimes conclude that the solution belongs to another function:

- Procurement.
- HR.
- Corporate.
- The contractor.
- Digital.

Those functions may indeed have a role.

However, waiting for another system to improve rarely changes tomorrow’s job.

Always ask: **“What can we change within this operation before the next similar job?”**

✓ That question restores ownership.

#### **Trap 3 – Looking for Someone to Blame**

Once people believe the purpose of the review is to allocate responsibility, they stop describing reality.

Instead of asking: **“Why did you do that?”**

Ask: **“Walk me through what you were seeing at that moment.”**

- ✓ Stories reveal reasoning.
- ✓ Defensiveness hides it.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Trap 4 – Accepting the Comfortable Answer

Sometimes the conversation begins to expose uncomfortable truths:

- workloads are unrealistic;
- planning is poor;
- contractor interfaces are unclear;
- production pressure influences decisions.

This is often where reviews stop.

Not because the learning is complete.

Because the implications have become uncomfortable.

Resist that temptation.

✓ Leadership adds value precisely by confronting the issues that are hardest to acknowledge.

### **6.8 Choosing Better Corrective Actions**

The quality of a corrective action depends on whether it changes future operational decisions.

Before approving an action, ask four questions:

- **Can this be implemented before the next similar job?**
- **Does it reduce dependence on another weak system?**
- **Will it change how decisions are made in the field?**
- **Will I be able to observe the improvement during a site visit?**

Actions that answer “yes” to all four questions are more likely to produce sustainable improvement.

Where possible, favour actions that simplify work, strengthen verification, clarify interfaces and improve planning over those that simply create more documentation or repeat existing training.

After discussing the event, conclude with one final question.

**“If the same people performed the same work tomorrow under the same organisational conditions, would we expect a different outcome?”**

✓ If the answer is **no**, the corrective actions **are addressing symptoms rather than causes**.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● Learning from Failure

#### **Scenario**

A concentrator outsourced maintenance to an end-to-end service partner.

Vedanta retained the Area Authority or Custodian.

The contractor provided the Permit Initiator and Acceptor and work party.

Competency records were maintained by the contractor.

Planning was undertaken jointly.

Permit approval remained with Vedanta.

During a shutdown, additional work was identified after dismantling the equipment.

The contractor supervisor believed the work was similar and instructed the team to continue.

The Vedanta representative assumed the contractor had reassessed the work.

The contractor assumed Vedanta had accepted the change.

Neither happened.

A worker was seriously injured.

#### **The Immediate Corrective Actions**

**Each of these actions was reasonable. None addressed the organisational condition that made the failure likely to recur.**

The investigation recommended:

- refresher training;
- revision of the PTW procedure;
- contractor awareness programme.

All three actions were completed.

Six months later, a similar event occurred elsewhere.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### What Leadership Missed

The investigation focused on people.

It did not examine the organisational conditions.

Specifically:

- responsibilities at the Vedanta–contractor interface were unclear;
- neither organisation owned changes to work scope;
- reassessment depended upon two independent management systems acting together;
- the operating model made poor decisions more likely.

### What Leadership Should Have Done

Rather than relying solely on improvements to contractor training or procedure compliance, leadership should have strengthened the operational interface by:

- defining a single point of accountability for changes to work scope;
- requiring joint reassessment before additional work commenced;
- introducing mandatory operational hold points for scope changes;
- verifying interface effectiveness during field leadership visits.

The objective was not to create better paperwork.

It was to redesign the work so that poor decisions became harder to make.

### Leader's Reflection

At the end of every review, ask yourself four questions.

- Did I understand the decisions, or did I only review the Permit?
- Did I leave with one improvement that is within my control?
- Did this discussion make it easier for people to speak openly next time?
- Have I changed the conditions under which the next decision will be made?

If the answer to any of these is no, the review is incomplete.

### **Key Message**

**Leadership does not strengthen Operational Work Control by asking harder questions. Leadership strengthens Operational Work Control by creating conversations that uncover reality, confronting the organisational conditions that shape decisions, and making improvements that are within its own control before the next hazardous job begins.**

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## Chapter 7: HSE Function Handbook

### Stewardship, Assurance and Continual Improvement

The HSE Function should influence the quality of the PTW system without becoming responsible for operating it.

#### 7.1 Why This Role Matters

The Permit to Work system exists to help Operations manage hazardous work.

Operations plans the work.

Operations release the workplace.

Operations authorise the work.

Operations supervises the work.

Operations accept the workplace back.

***The HSE Function performs none of these activities.***

Its role is different.

The HSE Function provides the independent oversight needed to ensure that the system remains effective, continues to improve and consistently supports sound operational decisions.

When these responsibilities become blurred, two undesirable outcomes are common.

If HSE becomes responsible for operating the PTW system, Operations gradually disengages.

If HSE becomes detached from the PTW system, weaknesses remain undetected until an incident occurs.

- ✓ The objective is therefore neither ownership nor distance.
- ✓ It is effective stewardship.

#### 7.2 Your Purpose

The purpose of the HSE Function is to help the Business answer three questions.

- Is the PTW system being applied as intended?
- Is it improving the quality of operational decisions?
- Is it reducing the likelihood of fatal and high-consequence events?

Answering these questions requires independence, technical credibility and an understanding of how work is actually performed.

The HSE Function should therefore spend as much time observing work in the field as reviewing documentation.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 7.3 Your Responsibilities

The HSE Function is responsible for:

- maintaining the integrity of the PTW standard;
- monitoring implementation across the Business;
- independently assessing the quality of Operational Work Control;
- identifying systemic weaknesses;
- facilitating organisational learning;
- advising leadership on improvements; and
- providing assurance to senior management.

The HSE Function should avoid becoming the administrative owner of the PTW process.

Where HSE routinely prepares permits, conducts operational verifications on behalf of supervisors or becomes the default decision-maker, the effectiveness of the system begins to decline.

### 7.4 What Good Assurance Looks Like

Good assurance is not the same as good auditing.

Auditing asks: **“Was the requirement met?”**

Assurance asks: **“Can I rely on this system to prevent a serious incident?”**

That distinction changes the focus of every field visit.

Observe:

- how work is planned;
- how decisions are discussed;
- whether Critical Controls are understood;
- how changes are managed;
- how supervisors challenge uncertainty.

**Do not begin with the Permit.**

Begin with the work.

Then determine whether the Permit accurately reflects what you have observed.

This sequence is deliberate.

If the review begins with the Permit, there is a natural tendency to judge whether people complied with the documentation.

If the review begins with the work, the discussion instead focuses on how operational decisions were made.

The Permit can then be assessed as evidence of those decisions rather than as an administrative document.

✓ This approach helps distinguish weaknesses in operational capability from weaknesses in documentation.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 7.5 Looking for Patterns

Individual Permit deficiencies are rarely the most valuable findings.

- The HSE Function should look for recurring patterns;
- the same misunderstanding across multiple sites;
- repeated weaknesses in Critical Control verification;
- common contractor interface issues;
- repeated difficulties during shutdowns;
- recurring quality issues in risk assessments.

Patterns indicate organisational weaknesses.

Isolated findings often indicate local issues.

Your value lies in recognising the difference.

Patterns should not simply be reported.

They should be organised into themes that leadership can influence.

**For example**, repeated weaknesses in Critical Control verification across several operations may indicate inconsistent supervision, unrealistic workloads, weaknesses in competency, or unclear operational expectations.

- ✓ The role of the HSE Function is not to decide which organisational change should be made.
- ✓ Its role is to present clear evidence that enables leadership to make that decision.

### 7.6 Supporting Leadership

One of the most important contributions of the HSE Function is helping leadership ask better questions.

#### **Avoid presenting:**

- numbers of permits;
- audit scores;
- compliance percentages.

#### **Instead explain:**

- what patterns are emerging;
  - why they matter;
  - what organisational conditions may be driving them;
  - which improvements are likely to produce the greatest operational benefit.
- ✓ Good assurance informs decisions.
  - ✓ It does not simply report observations.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 7.7 Learning Without Owning

After incidents, audits or significant observations, resist the temptation to immediately recommend:

- refresher training;
- revised procedures;
- additional audits.

Instead help Operations understand:

- why the decisions made sense at the time;
- what organisational conditions influenced those decisions;
- what improvements are within the Business's own control.

The HSE Function should improve organisational learning.

It should not become the organisation's problem solver.

- ✓ Solutions developed jointly with Operations are more likely to be implemented than solutions handed down by HSE.

#### ● **Good Practice**

High-performing HSE teams:

- spend time where hazardous work is taking place;
- understand operational realities;
- identify recurring patterns rather than isolated errors;
- challenge assumptions respectfully;
- strengthen leadership conversations;
- maintain independence while remaining operationally relevant.

#### ● **Warning Signs**

The PTW system may be drifting if:

- Operations ask HSE to approve permits.
- HSE routinely completes Permit documentation.
- Leaders rely solely on HSE reports to understand PTW performance.
- Audit findings are repeatedly closed without changing work practices.
- HSE spends significantly more time reviewing paperwork than observing work.

These are indicators that ownership and stewardship are becoming confused.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● Learning from Failure

#### Scenario

Following several Permit-related incidents, a Business Unit directed the HSE Department to review and countersign all high-risk permits before work commenced.

Initially, Permit quality appeared to improve.

Documentation became more complete and audit findings reduced.

Within a few months, supervisors stopped challenging Permit quality because they assumed HSE would identify any problems.

Area Authorities or Custodian's became less rigorous in workplace inspections.

Permit Issuer's or Permit Issuing Authorities relied increasingly on HSE comments before making decisions.

The Permit system became administratively stronger but operationally weaker.

A subsequent investigation found that Critical Controls had not been effectively verified in the field despite all documentation being complete.

#### What Went Wrong?

The Business had transferred responsibility without intending to.

HSE became another approval stage.

Operations gradually disengaged.

The quality of paperwork improved.

The quality of operational decisions did not.

#### What Should Have Happened?

Rather than recommending additional permit reviews or stronger administrative checks, the HSE Function should have examined why Operations had become dependent upon HSE before making operational decisions.

Restoring clear accountability within Operations would have strengthened Operational Work Control far more effectively than introducing another approval stage.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 7.8 HSE Professional Pocket Card

When reviewing Operational Work Control, ask:

- Am I evaluating the work or merely the paperwork?
- Is this an isolated finding or part of a wider pattern?
- Have I identified an organisational issue or only an individual error?
- Am I strengthening Operations—or replacing it?
- Will my recommendation improve operational decision-making or merely improve compliance?

### Key Message

**The HSE Function is most effective when it strengthens the PTW system without becoming responsible for operating it.**

Good HSE professionals provide assurance, reveal patterns, support learning and influence leadership. They preserve the integrity of the system by ensuring that responsibility for hazardous work remains where it belongs — with Operations.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### PART 3: USING THE PERMIT

#### Chapter 8: Understanding the Permit

##### The Permit as a Record of Operational Decisions

A Permit is not a collection of signatures. It is the documented evidence that the conditions required for hazardous work have been established, verified and accepted.

##### 8.1 Why the Permit Exists

The Permit to Work is one of the most visible elements of Operational Work Control.

It is also one of the most misunderstood.

Many people view the Permit as:

- an approval;
- an authorisation;
- a checklist;
- an administrative requirement.

It may be all of these.

***But it is something more important.***

✓ The Permit **records** the decisions **that allow hazardous work** to proceed under defined conditions.

Those decisions should already have been made before the Permit is signed.

The Permit documents them.

It does not replace them.

##### 8.2 What a Good Permit Looks Like

A good Permit tells a complete and consistent story.

A person who was not involved in planning the work should be able to understand:

- what work is being done;
- where it will take place;
- what could go seriously wrong;
- how those risks will be controlled;
- who is responsible for each stage of the work; and
- under what conditions the work must stop.

✓ If the Permit cannot answer these questions clearly, it is incomplete, even if every box has been filled.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 8.3 Reading the Permit

Do not read the Permit from top to bottom.

Read it as a sequence of decisions.

#### **Decision 1 — What work is being authorised?**

The work description should answer:

- exactly what will be done;
- exactly where it will be done;
- what equipment is involved;
- what is outside the authorised scope.

If the scope is vague, every subsequent section becomes unreliable.

#### **Decision 2 — What could cause a fatal or life-altering event?**

The risk assessment should identify the credible fatality scenario.

Avoid generic hazard lists.

The Permit should make it immediately clear what event the organisation is trying to prevent.

#### **Decision 3 — What prevents that event?**

The Permit should identify the Controls/Critical Controls.

These controls should be:

- specific;
- relevant;
- capable of verification.

Avoid controls that rely solely on:

- “be careful”;
- “follow procedure”;
- “wear PPE.”

These may support safe work but rarely prevent fatal events on their own.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **Decision 4 — Is the workplace ready?**

Supporting documents provide evidence.

Examples include:

- isolation certificates;
- gas test records;
- lifting plans;
- excavation clearances;
- confined space certificates.

These documents should support the operational decision.

**They should never become a substitute for field verification.**

### **Decision 5 — Can work begin?**

The signatures do not make the work safe.

They confirm that each role accepts its responsibilities and that the conditions described in the Permit have been established.

Each signature represents a different operational decision.

Before accepting those signatures, ask one final question: **“Does the evidence described throughout the Permit justify those decisions?”**

**A signature confirms a decision already made. It should never replace the need for judgement.**

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 8.4 Testing Consistency

#### 8.4.1 The Story Test

One of the simplest ways to assess Permit quality is to ask: **“Does every section of the Permit tell the same story?”**

Consider the following example.

- The work description states: **“Replace valve.”**
- The risk assessment discusses: **“Hot work.”**
- The gas test references: **“Vessel entry.”**
- The isolation certificate identifies: **“Pump maintenance.”**

**The Permit may be complete.**

**The story is not.**

Whenever different sections describe different work, stop.

- ✓ Resolve the inconsistency before work begins.

#### 8.4.2 The Three Tests

Every Permit should pass three simple tests.

- **The Clarity Test**  
Could someone unfamiliar with the job understand exactly what has been authorised?
- **The Consistency Test**  
Do all supporting documents describe the same work?
- **The Evidence Test**  
Does the Permit demonstrate that Critical Controls have been established—or merely assume that they exist?

- ✓ A Permit that fails any of these tests should not be authorised.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 8.5 Documentation Quality

Good documentation is:

- specific;
- concise;
- factual;
- current.

Poor documentation often contains:

- copied text;
- generic risk assessments;
- conflicting information;
- incomplete work descriptions;
- outdated supporting documents.

- ✓ Good documentation improves operational decisions.
- ✓ Poor documentation hides weak ones.

#### ● **Good Practice**

Before signing a Permit, imagine that another supervisor will continue the work tomorrow.

Ask yourself: **“Would this Permit allow them to understand exactly what has been authorised and why?”**

If not, improve the Permit before work begins.

#### ● **Warning Signs**

Review the Permit carefully if you notice:

- work descriptions copied from previous jobs;
- generic hazards repeated across different permits;
- Critical Controls that cannot be verified in the field;
- supporting documents prepared on different dates without explanation;
- signatures completed before workplace verification.

These are indicators that documentation may no longer reflect operational reality.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● Learning from Failure

#### Scenario

A Permit was issued for replacement of a motor coupling.

The work description was copied from a previous maintenance activity.

The actual work involved dismantling adjacent guards and disconnecting instrumentation that had not been considered during planning.

Because the Permit described only the original task, neither the risk assessment nor the isolation certificate reflected the additional work.

The team completed the work safely, but an internal review identified multiple uncontrolled hazards that had gone unnoticed.

#### What Went Wrong?

No individual document was obviously incorrect.

The problem was that the Permit no longer described the work actually being undertaken.

Documentation had become disconnected from operational reality.

#### What Should Have Happened?

The Permit should have been updated to describe the work as it was actually going to be performed.

Revising the work description should then have prompted a review of the remainder of the Integrated Work Package, including:

- whether the risk assessment still reflected the revised scope;
- whether additional isolations or supporting certificates were required;
- whether the Critical Controls remained appropriate; and;
- whether the existing authorisation still reflected the work to be undertaken.

The objective was not simply to improve the wording of the Permit.

It was to ensure that the operational decisions recorded within the Permit continued to match the work taking place in the field and that it did not preserve yesterday's assumptions.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 8.6 Permit Quality Pocket Card

Before authorising or accepting a Permit, confirm:

- The work description is specific.
- The fatality/serious injury scenario is clear.
- Critical Controls are appropriate.
- Supporting documents tell the same story.
- The workplace matches the Permit.
- Every signature represents a completed decision—not an administrative step.

#### Key Message

**A Permit should describe the work as it will actually be performed—not as it was originally imagined.**

When the Permit accurately reflects the work, it becomes a reliable record of operational decisions.

When it does not, it becomes little more than an administrative document.

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## Chapter 9: The Integrated Work Package

### Managing One Job Through Multiple Permits

**People perform one job. They should never have to manage five independent permits.**

The objective of Operational Work Control is to create **one shared understanding of the work**, regardless of how many permits or supporting documents are required.

#### 9.1 Why This Chapter Matters

Many serious incidents occur even though every required Permit has been issued.

Investigations often conclude that:

- the Hot Work Permit was correct;
- the Confined Space Permit was correct;
- the Isolation Certificate was correct;
- the Gas Test Certificate was correct.

Each document was technically accurate.

The work still failed.

Why?

Because nobody ensured that all of these documents worked together as a single operational package.

✓ Operational Work Control fails when documents are managed individually instead of collectively.

#### 9.2 Think About the Job, Not the Permits

The Permit to Work system should always begin with the job.

Never with the paperwork.

Every hazardous job should be viewed as **one Integrated Work Package**.

The permits, certificates and supporting documents exist only to support that work.

They should never become independent processes.

The work package should answer **five questions**.

- What work is being undertaken?
- What could cause a fatal or life-altering event?
- What Critical Controls prevent that event?
- What evidence confirms those controls are effective?
- Who is responsible for maintaining those controls throughout the work?

Every Permit should reinforce the same answers.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

Any time multiple permits exist for the same scope and boundary of work, an Integrated Work Package should be created.

Every additional Permit, certificate or supporting document increases the possibility that different people will begin making different assumptions about the same work.

The purpose of an Integrated Work Package is therefore not to combine documents. It is to ensure that everyone continues to make decisions based on one shared understanding of the job.

- ✓ If different documents begin describing different work, different hazards or different conditions, Operational Work Control has already begun to weaken.

### 9.3 Anatomy of an Integrated Work Package

An Integrated Work Package consists of **four layers**.

Each layer supports the next.

#### Integrated Work Package

- **Layer 1**  
Work Scope  
Method Statement  
Risk Assessment
- **Layer 2**  
Primary Permit to Work
- **Layer 3**  
Specialist Permits
  - Confined Space
  - Excavation
  - Electrical
  - Working at Height
  - Critical Lifting
- **Layer 4**  
Supporting Documents
  - Isolation Certificate
  - Gas Test
  - Lifting Plan
  - Rescue Plan
  - Drawings
  - SIMOPS Plan
  - Temporary Works

Notice something important.

There is only **one work**.  
Everything else supports it.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

- ✓ If any document within the Integrated Work Package changes, the effect of that change on every other layer should be consciously considered before work continues.

### 9.4 One Job, One Story

Every document within the Integrated Work Package should tell the same story.

The work scope should align with:

- the Permit;
- the risk assessment;
- the isolation plan;
- the lifting plan;
- the rescue arrangements;
- the toolbox talk.

If two documents describe different work, stop.

Do not begin correcting documents individually.

- ✓ First re-establish a shared understanding of the job, then update the Integrated Work Package so that every document once again supports the same operational decision.

### 9.5 Who Integrates the Package?

Integration is an operational responsibility.

It should never happen by accident.

The responsibilities are different for each role.

| Role                                      | Integration Responsibility                                                                                |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Area Authority or Custodian               | Ensures that the workplace can safely support the complete work package.                                  |
| Permit Issuer or Permit Issuing Authority | Ensures that the permits, risk assessment and supporting documents form one coherent operational package. |
| Permit Initiator and Acceptor             | Ensures that the work is executed exactly as described within the integrated package.                     |
| Work Party                                | Understands one integrated job—not multiple independent permits.                                          |

- ✓ Everyone has a role.
- ✓ Nobody owns the entire package alone.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 9.6 Integrating Multiple Permits

Multiple permits should never result in multiple sets of instructions.

Before work begins, confirm that:

- all permits describe the same work scope;
- work boundaries are identical;
- responsibilities are clearly defined;
- supporting documents are consistent;
- Permit validity periods are compatible;
- no Permit condition conflicts with another.

The objective is not to issue more permits.

✓ The objective is to ensure that every Permit supports the same operational decision.

#### 9.6.1 Special Operating Conditions

When the site is undertaking activities that materially increase the complexity or interaction of work – such as major projects, shutdowns, major construction or commissioning/decommissioning – the business shall **establish additional arrangements to maintain effective Operational Work Control**.

At such times, for the duration when these special operating conditions apply, the site should consider establishing:

- A **dedicated PTW coordination function** to establish clear ownership of the overall Permit environment;
- An **integrated work plan** to ensure that Operational Control via the Permit system is maintained in the context of everything else happening around it;
- **Higher frequency of coordination** to account for dynamic site conditions;
- **Stronger change control** to recognize when the basis of an authorization has changed;
- **Formal shift handover** because responsibilities can cross/overlap between operations, projects, contractors and different shift teams;
- **Explicit escalation matrix** for resolving conflict and re-establish safe operating controls.

### 9.7 Permit Precedence

When multiple permits apply, uncertainty must never exist regarding which condition takes precedence.

The following principles apply.

- **Principle 1**  
The most restrictive condition always prevails.
- **Principle 2**  
If any Permit or supporting document becomes invalid, the impact on the entire Integrated Work Package shall be assessed before work continues.
- **Principle 3**  
A change affecting one Permit shall trigger a review of all related permits and supporting documents.
- **Principle 4**  
Work shall recommence only after the Integrated Work Package has been confirmed to remain valid.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 9.8 One Briefing, One Understanding

The work party should not receive separate briefings for each Permit.

Instead, conduct one integrated pre-job briefing.

The briefing should explain:

- the work;
- the sequence;
- the fatality/serious injury scenario;
- Controls/Critical Controls;
- interfaces between permits;
- conditions that require work to stop.

- ✓ Workers should leave the discussion with one understanding of the job.
- ✓ Not five separate administrative instructions.

### 9.9 Managing Change

Changes rarely affect only one Permit.

Examples include:

- additional work;
- revised isolations;
- different equipment;
- weather;
- new contractors;
- delayed activities.

- ✓ Whenever significant change occurs, ask: “**Does this change affect only one Permit, or does it affect the entire Integrated Work Package?**”
- ✓ The answer determines the scope of reassessment.

### 9.10 Integration Review

Before hazardous work begins, the Area Authority or Custodian, Permit Issuer or Permit Issuing Authority and Permit Initiator and Acceptor should jointly confirm that the Integrated Work Package remains coherent.

The review should answer **six questions**.

- Does every document describe the same work?
- Is there one agreed work sequence?
- Are the controls/Critical Controls consistent across all permits?
- Does any Permit contain conditions that conflict with another?
- If one Permit changes, do we understand which others require review?
- Has the work party received one integrated briefing?

- ✓ If any answer is uncertain, resolve the issue before work begins.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 9.11 Managing SIMOPS

Section 9.2 asked you to think about the job, not the Permits. SIMOPS — two or more activities happening at the same time with the potential to interact — is where that habit matters most, because the risk that matters is often not in either activity on its own.

A crane lift next to an occupied confined space is not “a lift” plus “a confined space entry.” It is a scenario where a dropped load, a loss of ventilation, or a shared evacuation route can turn two well-controlled jobs into one poorly controlled one.

Where you identify a SIMOPS situation, the Integrated Work Package shall:

- name every activity and Permit involved and how they could interact;
- assess the combined risk — not each activity's risk assessment read side by side, but what changes when both are happening at once;
- assign one person as the single point of coordination for the interface, with the authority to pause either activity; and
- state, in advance, the conditions under which one or more of the activities will be suspended because the interaction can no longer be safely managed.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● **Red Flag**

Two supervisors, each confident that their own job is under control, neither of whom is asked what happens if the other job goes wrong at the same time.

### ● **Good Practice**

A shutdown maintenance activity required:

- Isolation
- Confined Space Entry
- Hot Work
- Critical Lifting

Rather than treating these as four independent permits, the supervisor assembled one Integrated Work Package.

The work party attended one briefing.

The Area Authority or Custodian reviewed one work sequence.

The Permit Issuer or Permit Issuing Authority verified one risk assessment.

During execution, additional welding became necessary.

The team paused, reviewed the impact on the entire work package and updated the affected permits before recommencing.

The work finished safely.

Not because additional paperwork existed.

✓ Because everyone managed one job.

### ● **Warning Signs**

Review the Integrated Work Package immediately if:

- different permits describe different work;
- supporting documents reference different equipment;
- multiple supervisors provide conflicting instructions;
- Permit validity periods differ without explanation;
- workers are unsure which Permit applies;
- separate toolbox talks are being conducted for the same job.

These are indicators that paperwork has become fragmented and operational understanding may no longer be shared.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● Learning from Failure

#### Scenario

During a smelter shutdown, a contractor was replacing refractory inside a furnace.

The work package included:

- Confined Space Entry
- Isolation
- Hot Work
- Critical Lifting

Midway through the job, damaged steelwork was discovered.

The supervisor authorised additional cutting and lifting.

The Hot Work Permit was amended.

The lifting plan was updated.

The Isolation Certificate remained unchanged because the electrical isolation was still valid.

However, the revised lifting sequence required temporary removal of a mechanical restraint that had been identified in the original isolation plan.

Neither the Area Authority or Custodian nor the Permit Issuer or Permit Issuing Authority recognised the interaction.

During lifting, the restrained section shifted unexpectedly, causing a dropped load and serious injury.

#### What Went Wrong?

Every individual document had been updated correctly.

The Integrated Work Package had not.

Each change was reviewed in isolation.

Nobody reviewed how the changes affected the work package as a whole.

Operational control was lost at the interface between permits.

#### What Should Have Happened?

The additional work should not have triggered a review of the Hot Work Permit alone.

It should have triggered a review of the **Integrated Work Package**.

The first question should have been: “**Does this change affect any other part of the work?**”

Only after answering that question should individual documents have been reviewed.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

In this case, the revised lifting sequence affected the assumptions contained within the isolation strategy, the work sequence and the overall risk assessment.

Updating one document without considering the others allowed each document to remain technically correct while the Integrated Work Package became operationally inconsistent.

Before work resumed, the team should have confirmed that every document continued to describe the same work, the same sequence and the same operational boundaries.

The work package—not the individual Permit—should have been revalidated before work resumed.

### 9.12 Integrated Work Package Checklist

Before work begins, confirm:

- One work scope.
- One agreed work sequence.
- One fatality scenario.
- One integrated risk assessment.
- Compatible Permit conditions.
- Supporting documents aligned.
- One pre-job briefing.
- One operational understanding.

### Key Message

**Operational Work Control is achieved when everyone manages one job—not when everyone manages their own permit.**

The Permit to Work system succeeds when multiple documents support one coherent operational decision.

It begins to fail when each document is treated as a separate process with its own assumptions, boundaries and owners.

Everyone has a role.

Nobody owns the entire package alone.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### PART 4: TECHNICAL GUIDANCE

#### Chapter 10: What Good Looks Like

##### Assessing the Quality of Operational Work Control

A good Permit is more than a completed form. It demonstrates that the work has been understood, the hazards have been considered, Critical Controls have been established, and everyone involved shares the same operational understanding.

##### 10.1 Why Permit Quality Matters

A Permit may be fully completed and still be poor.

Conversely, a Permit that contains minor administrative omissions may still reflect excellent operational thinking.

Permit quality is therefore not measured by the number of completed fields.

It is measured by whether the Permit demonstrates that the right operational decisions have been made.

A high-quality Permit should enable another competent person to understand:

- the work;
- the fatality scenario;
- the Critical Controls;
- the work boundaries; and
- the conditions under which work must stop.

without needing further explanation.

- ✓ Chapter 8 explains how to read and interpret a Permit. This chapter builds on that approach by showing what good and poor Permit quality actually look like in practice. The examples that follow are intended to help people recognise quality, not simply check whether information has been entered.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 10.2 The Four Tests of a Good Permit

Before authorising any Permit, apply four simple tests.

These tests bring together the principles described in Chapter 8 and provide a practical way of recognising Permit quality.

#### **Test 1 – The Story Test**

##### **Question**

- **Do all parts of the Permit tell the same story?**

Compare:

- Work Scope
- Risk Assessment
- Critical Controls
- Supporting Certificates
- Isolation Plan
- Drawings
- Toolbox Talk

Everything should describe the same work.

✓ If different documents tell different stories, operational control has already begun to weaken.

#### **Test 2 – The Understanding Test**

Can someone not involved in planning the work explain:

- What has been authorised?
- What could cause serious harm?
- which Critical Controls prevent it? And
- When should work stop?

If they cannot answer confidently, the Permit has failed.

✓ A Permit should communicate understanding—not merely information.

#### **Test 3 – The Evidence Test**

Can the Critical Controls be demonstrated through objective evidence rather than assumed to exist?

#### **Test 4 – The Field Test**

Take the Permit to the workplace.

Ask: **“Does the workplace match what the Permit says has been authorised?”**

If any answer is uncertain, the Permit should be reviewed before work begins.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 10.3 Reading Between the Lines

Permit quality is easier to recognise when poor and good practice are placed side by side. The following examples illustrate the difference.

#### Example 1 – Work Scope

##### Poor

Mechanical maintenance on pump.

Questions immediately arise.

- Which pump?
- What maintenance?
- What equipment will be disturbed?
- Where does the work begin and end?

The work has not been clearly defined.

##### Good

Replace mechanical seal on Slurry Pump P-204 following mechanical and electrical isolation under Isolation Certificate IC-017. Remove coupling guard, replace seal, realign shaft and reinstate guarding.

Immediately the reader understands:

- exactly what work will occur;
- where it will occur;
- which equipment is involved;
- where the work finishes.

**Why this matters:** “Well-defined work scopes reduce assumptions and prevent uncontrolled expansion of work.”

#### Example 2 – Hazard Identification

##### Poor

**Hazards:**

- Slip
- Trip
- Fall
- Pinch Point
- Dust
- Manual Handling

These hazards appear on almost every Permit.

Nothing distinguishes this job from any other.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

 Good

### Credible Fatality Scenario

Sudden release of stored pressure during dismantling could cause fatal impact injuries.

Supporting hazards:

- Residual pressure
- Suspended load
- Stored mechanical energy

**Why this matters:** “Good hazard identification directs attention to the event that could change lives forever rather than treating all hazards as equally important.

### Example 3 – Critical Controls

 Poor

- Wear PPE.
- Follow SOP.
- Be careful.

These are expectations.

They are not Critical Controls.

 Good

- Isolation verified using IC-017.
- Zero-energy test completed before dismantling.
- Exclusion zone established and inspected.
- Lifting plan LP-004 implemented.
- Independent gas test completed immediately before entry.

**Why this matters:** “Good Critical Controls are specific, observable and capable of verification.”

### Example 4 – Work Boundaries

 Poor

Pump House

 Good

Slurry Pump P-204 located in Pump House 2 between Isolation Valves MV-17 and MV-19.

**Why this matters:** “Clear work boundaries prevent adjacent equipment or activities from becoming unintentionally involved.”

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 10.4 Characteristics of High-Quality Permits

Use this table as a quick reference when reviewing Permit quality. The objective is not to make the Permit more detailed. It is to make the operational decision easier to understand.

| Aspect               | Poor Practice             | Good Practice                                   |
|----------------------|---------------------------|-------------------------------------------------|
| Work Scope           | Generic                   | Specific and clearly bounded                    |
| Hazard Assessment    | Generic hazard list       | Clear fatality scenario with supporting hazards |
| Critical Controls    | Administrative            | Specific, observable and verifiable             |
| Supporting Documents | Inconsistent              | All documents support one work package          |
| Language             | Ambiguous                 | Clear and concise                               |
| Work Boundaries      | Unclear                   | Easily identifiable in the field                |
| Ownership            | Different interpretations | One shared operational understanding            |

The goal is to make the work easier to understand—not the paperwork more complicated.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 10.5 Recognising Permit Quality Patterns

Permit quality usually reflects recurring organisational behaviours.

Learning to recognise these patterns help identify opportunities for improvement.

#### Pattern 1 – The Copy-Paste Permit

##### Characteristics

- Previous Permit reused.
- Risk assessment copied.
- Critical Controls unchanged.
- The Permit reflects yesterday's work rather than today's.

##### What Good Looks Like

- Every Permit is written specifically for the planned activity.
- Today's work is described using today's conditions.

**Why this matters:** "Copied thinking eventually creates uncontrolled work."

#### Pattern 2 – The Compliance Permit

##### Characteristics

- Every field completed.
- Every signature present.
- Nobody can explain the work.

##### What Good Looks Like

Every participant can explain:

- the work;
- the fatality scenario;
- the Critical Controls;
- when work must stop.

**Why this matters:** "Understanding protects people. Documentation merely records that understanding."

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Pattern 3 – The Overloaded Permit

#### Characteristics

- Thirty hazards.
- Thirty controls.
- No priorities.
- Critical Controls disappear within administrative detail.

#### What Good Looks Like

- One clearly defined fatality scenario.
- A small number of Critical Controls directly preventing that scenario.
- Supporting hazards managed separately.

**Why this matters:** “People remember priorities. They rarely remember long lists.”

### Pattern 4 – The Hero Permit

#### Characteristics

- The Permit depends entirely on one experienced supervisor.
- If someone else takes over, operational understanding disappears.

#### What Good Looks Like

- Another competent supervisor can understand the authorised work, the work sequence, the fatality scenario, and the conditions requiring work to stop without relying on the previous supervisor’s memory.

**Why this matters:** “Strong systems do not depend upon individual memory.”

### Pattern 5 – The Living Fossil

#### Characteristics

- The Permit was accurate when issued.
- The work evolved.
- The Permit did not.

#### What Good Looks Like

- Whenever the work changes, the Integrated Work Package is reviewed and updated so that documentation continues to reflect operational reality.

**Why this matters:** “Operational decisions must evolve with the work. Otherwise, the Permit becomes a record of yesterday’s assumptions.”

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 10.6 The Five-Minute Quality Review

Before authorising any Permit, ask:

- Does every document tell one consistent story?
- Can everyone explain the fatality scenario?
- Are the Critical Controls visible and verifiable?
- Does the workplace match the documentation?
- If another supervisor took over now, would they understand exactly what has been authorised?

If any answer is uncertain, do not correct the Permit simply to make the documentation appear complete. Resolve the underlying uncertainty before work begins.

#### **Good Practice**

A Permit Issuer or Permit Issuing Authority receives a Permit that is technically complete but notices that the work description states “replace valve,” while the lifting plan refers to a pump change-out.

Rather than correcting the wording and issuing the Permit, the Permit Issuer or Permit Issuing Authority pauses the process and asks the supervisor to explain the work sequence.

The discussion reveals that the scope has expanded but the supporting documents have not been updated.

The work package is revised before authorisation.

Why this is good: The Permit Issuer or Permit Issuing Authority verified operational understanding rather than simply correcting paperwork.

#### **Warning Signs**

Pause and review the Permit if you observe:

- different documents describing different work;
- copied hazard assessments;
- generic Critical Controls;
- conflicting work boundaries;
- signatures completed before field verification;
- workers relying on verbal instructions rather than the Permit.

These are early signs that the Permit may no longer reflect the work.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● *Learning from Failure*

#### Scenario

Two adjacent permits were issued during a concentrator shutdown.

One covered replacement of a slurry valve.

The other covered modification of adjacent pipework.

Each Permit was individually complete.

However, the valve replacement Permit referred to temporary supports remaining in place, while the pipework Permit required those supports to be removed.

Neither Permit Issuer/Permit Issuing Authority recognised the inconsistency because each reviewed only their own documentation.

During dismantling, the unsupported pipe shifted unexpectedly, causing serious injuries to a contractor.

#### What Went Wrong?

The issue was not incomplete paperwork.

It was poor operational integration.

Neither Permit failed individually.

Together they described two different realities, **and nobody tested whether the two Permits could safely coexist.**

#### How Good Permit Review Would Have Prevented This

Applying:

- the Story Test;
- the Understanding Test; and
- the Field Test

would have exposed the inconsistency before work commenced.

The Permits would have been integrated into a single coherent work package.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 10.7 Field Card – The Five-Minute Quality Check

Before signing, ask:

- Does every document tell one story?
- Can everyone explain the fatality scenario?
- Are Critical Controls observable?
- Does the workplace match the Permit?
- Could another competent supervisor safely take over this work?

If not, improve the Integrated Work Package before authorising work.

#### Key Message

**The best Permits are those that make safe work easy to understand.**

Permit quality is not determined by the completeness of documentation. It is determined by the clarity with which the Permit communicates the operational decisions, work boundaries, fatality scenarios and Critical Controls that enable people to carry out hazardous work safely.

Note that every improvement makes the work easier to understand—not the paperwork more complicated.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Chapter 11: Verifying Critical Controls

#### From Assumption to Evidence

A Critical Control only protects people when it exists, is effective, and remains effective throughout the work. The purpose of verification is to replace assumption with evidence.

#### 11.1 Why Verification Matters

The critical question in Operational Work Control is simple:

**“How do we know the Critical Controls are actually in place and effective?”**

This question should be asked before work begins and throughout execution—not only after something has gone wrong.

Too often the answer is:

- We assumed.
- We were told.
- The Permit said so.
- It was checked earlier.
- That’s how we always do it.

None of these answers provides evidence.

Operational Work Control depends not only on selecting the correct Critical Controls but on verifying that they remain effective throughout the work.

✓ Verification is therefore an operational activity, not an administrative one.

#### 11.2 What is Verification?

Verification is the process of obtaining objective evidence that a Critical Control:

- has been established;
- is appropriate for the work;
- is functioning as intended; and
- remains effective until the work is complete.

Verification is different from inspection.

Inspection asks: **“Is something present?”**

✓ Verification asks: **“Does this control reduce the risk we are trying to prevent?”**

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 11.3 The Five Levels of Verification

Not all verification provides the same level of confidence.

The strongest verification combines documentation, observation and functional confirmation.

| Level   | Verification Method                   | Confidence |
|---------|---------------------------------------|------------|
| Level 1 | Documentation reviewed                | Low        |
| Level 2 | Control visually confirmed            | Moderate   |
| Level 3 | Control functionally tested           | High       |
| Level 4 | Independent verification completed    | Very High  |
| Level 5 | Control monitored throughout the work | Highest    |

#### Example:

- An Isolation Certificate confirms that an isolation has been applied. This is Level 1.
- Personally, confirming the lock and tag in the field is Level 2.
- Conducting a zero-energy test is Level 3.
- Having the verification witnessed by another competent person is Level 4.
- Reconfirming the isolation after a significant work interruption or change is Level 5.

Good Operational Work Control aims to **use a level of verification that provides sufficient confidence that the Critical Control is effective for the work and remains effective as conditions change. Higher levels of verification should be used where the consequences of control failure or the conditions of the work justify them.**

### 11.4 The Verification Mindset

Before accepting any Critical Control, ask **four questions**.

- Question 1  
**What exactly am I trying to prevent?**  
  
Never verify a control without understanding the fatality scenario.
- Question 2  
**What would I need to see, test or observe to know that this control is effective?**  
  
Look for objective evidence—not assumptions or verbal confirmation.
- Question 3  
**What could cause this control to fail during the work?**  
  
Remember that work conditions change.  
  
Controls that are effective at the start of the job may become ineffective later.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

- Question 4  
**How will I know if that happens?**

Verification is not a one-time event.

Some controls require continuous monitoring.

### 11.5 Dynamic Verification

Many Critical Controls require repeated verification.

Verification should occur:

- Before work starts
- After any significant change
- Following any work suspension
- After Permit revalidation
- Before work recommences

Examples include:

- atmospheric testing after ventilation changes;
- confirming isolations after maintenance on adjacent equipment;
- checking exclusion zones after lifting activities are interrupted.

Not every change requires every Critical Control to be reverified. The verification should be proportionate to the change and focused on the Critical Controls that may have been affected. Where the change could affect several controls or the basis of the original work authorisation, the relevant Decision Gate(s) and the Integrated Work Package should also be reviewed.

- ✓ Verification should always match the changing conditions of the work

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 11.6 Critical Control Verification Guides

#### Critical Control 1: Isolation of Hazardous Energy

**Purpose:** Prevent the unintended release of hazardous electrical, mechanical, hydraulic, pneumatic, thermal, chemical or gravitational energy.

#### **Critical Control Requirements**

- Isolation matches the approved isolation plan.
- Equipment identity has been physically confirmed.
- Every isolation point is locked and tagged.
- Lock numbers match the Isolation Certificate.
- Zero-energy verification has been completed.
- Isolation boundary is clearly understood by everyone.

#### **✗ Poor Practice**

- Isolation assumed because Permit is signed.
- Wrong equipment isolated.
- Lock fitted but not tested.
- Shared locks with unclear ownership.
- Workers unsure what remains energised.
- Isolation certificate completed remotely.

#### **Good Practice**

A Permit Issuer or Permit Issuing Authority accompanies the Area Authority or Custodian to the field.

Both physically identify Pump P-204.

Isolation valves MV-17 and MV-19 are locked.

Electrical MCC breaker is locked.

Zero-energy is demonstrated by attempting a controlled start.

The Permit Initiator and Acceptor witnesses the verification.

Only then is work authorised.

#### **✗ Poor Practice**

The Isolation Certificate was completed during the morning planning meeting.

The Permit Issuer or Permit Issuing Authority assumes Operations has completed isolation.

Nobody visits the field.

The crew later discovers the adjacent standby pump remains energised.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### What Evidence Should Exist?

- Isolation Certificate
- Physical locks
- Lock numbers
- Equipment identification
- Zero-energy test
- Field verification

### Leadership Questions

Show me:

- the isolation.
- how you proved zero energy.
- what would tell you this isolation has failed.

### Stop Work If

- Equipment identity cannot be confirmed.
- Lock numbers differ.
- Zero-energy not demonstrated.
- Isolation boundaries unclear.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **Critical Control 2: Confined Space Entry**

**Purpose:** Prevent fatal exposure to atmospheric, engulfment or entrapment hazards.

#### **Critical Control Requirements**

- Atmosphere tested immediately before entry.
- Continuous monitoring where required.
- Mechanical isolation complete.
- Rescue equipment immediately available.
- Rescue team briefed.
- Entrants understand evacuation triggers.

#### **✗ Poor Practice**

- Gas test conducted several hours earlier.
- Rescue equipment stored elsewhere.
- Ventilation assumed effective.
- Entry register incomplete.
- Entrants unaware of rescue arrangements.

#### **Good Practice**

Before entry, oxygen, LEL and toxic gases are tested at multiple levels of the vessel.

Ventilation remains operational.

A standby person maintains continuous communication.

Rescue tripod is erected before entry.

Atmospheric monitoring continues throughout the task.

#### **✗ Poor Practice**

The morning gas test is attached to the Permit.

Ventilation is stopped temporarily.

Nobody repeats atmospheric testing because the certificate remains valid.

#### **Evidence**

- Current gas test
- Rescue equipment
- Standby person
- Communication
- Ventilation

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## Leadership Questions

What has changed since this gas test?

If ventilation stopped now, what would happen?

## Stop Work If

- Gas testing overdue.
- Ventilation interrupted.
- Rescue unavailable.
- Conditions change.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Critical Control 3: Working at Height

#### **Good Practice**

- Approved anchor point.
- 100% tie-off maintained.
- Platform inspected.
- Dropped object controls established.
- Rescue arrangements planned.

#### **✗ Poor Practice**

- Harness worn but never attached.
- Improvised anchor.
- Platform modified in field.
- Rescue plan consists of calling ambulance.
- Tools unsecured.

#### **Evidence**

- Anchor certification
- Harness inspection
- Tie-off
- Platform inspection
- Rescue equipment

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Critical Control 4: Critical Lifting

#### **Good Practice**

- Lift plan available.
- Load verified.
- Ground bearing confirmed.
- Exclusion zone maintained.
- One appointed lift supervisor.
- Clear communications.

#### **✗ Poor Practice**

- Estimated load.
- Two people directing crane.
- Tag lines omitted.
- Workers standing beneath suspended load.
- Ground conditions assumed.

#### **Evidence**

- Lift plan
- Crane inspection
- Load calculation
- Ground assessment
- Exclusion zone

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Critical Control 5: Excavation

#### **Good Practice**

- Underground services identified.
- Excavation permit approved.
- Edge protection installed.
- Atmosphere tested where necessary.
- Daily inspection completed.

#### **✗ Poor Practice**

- Excavation begins before service drawings reviewed.
- Spoil placed at excavation edge.
- No barricades.
- No inspection after rain.
- Contractor assumes utilities have been isolated.

#### **Evidence**

- Utility clearance
- Daily inspection
- Barricades
- Access/egress
- Ground stability

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Critical Control 6: Electrical Work

#### **Good Practice**

- Electrical isolation verified.
- Absence of voltage proven using approved test instrument.
- Appropriate PPE selected.
- Test instrument proven before and after use.
- Approach boundaries established.

#### **✗ Poor Practice**

- Breaker opened but not locked.
- Voltage tester not proved.
- Wrong PPE.
- Live work justified because “it will only take a minute.”

#### **Evidence**

- LOTO
- Test-for-dead
- PPE
- Electrical Permit
- Equipment identification

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Critical Control 7: Mobile Equipment & Pedestrian Interface

#### **Good Practice**

- Pedestrian routes segregated.
- Spotter appointed.
- Positive communication established.
- Blind spots controlled.
- Vehicle immobilised before work begins.

#### **✗ Poor Practice**

- Workers walking through active haul routes.
- Assuming operator has seen them.
- No exclusion zone.
- Spotter distracted.
- Vehicle left running during maintenance.

#### **Evidence**

- Traffic management plan
- Barricades
- Spotter
- Communication
- Equipment immobilisation

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## 11.7 Common Verification Mistakes

| I saw...          | Therefore, I assumed... | What I should have verified instead                        |
|-------------------|-------------------------|------------------------------------------------------------|
| A lock            | Equipment was isolated  | Correct equipment, correct boundary and zero-energy        |
| A gas test        | Atmosphere was safe     | That it remained safe after conditions changed             |
| A harness         | Worker was protected    | Continuous attachment to an approved anchor                |
| A crane           | Lift was controlled     | Load, ground conditions, exclusion zone and communications |
| Fire extinguisher | Hot work was protected  | Fire watch, combustibles and post-work monitoring          |
| Barricades        | Area was secure         | Whether people could still enter the work zone             |

## 11.8 Verification During Leadership Visits

Business Leaders should avoid asking: **“Have the Critical Controls been verified?”**

Instead ask:

- Show me how you verified this control.
- What evidence gives you confidence that it remains effective?
- What would tell you this control has failed?
- What would happen next?

These questions are intended to test the quality of operational understanding, not to turn the leader into the person responsible for verifying the control.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● **Good Practice**

A supervisor reviewing a confined space Permit notices that the gas test is valid.

Instead of accepting the certificate, they ask: **“What has changed since the test was completed?”**

The entrant explains that temporary ventilation was stopped to reposition ducting.

The supervisor pauses the work.

A repeat gas test identifies reduced oxygen concentration.

Work resumes only after ventilation is restored.

### **Why this is good**

The supervisor recognised that verification is dynamic, not static.

The decision was based on current evidence rather than historical documentation.

### ● **Warning Signs**

Pause work if:

- Critical Controls cannot be demonstrated.
- Verification relies solely on documentation.
- Workers cannot explain why a control is necessary.
- Field conditions differ from those described in the Permit.
- Significant changes have occurred without repeat verification.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● *Learning from Failure*

#### Scenario

A maintenance crew entered a vessel under a valid Confined Space Permit.

The vessel had been isolated, gas tested and ventilated before entry.

During the work, temporary ventilation was switched off to allow repositioning of equipment.

No repeat atmospheric test was conducted because the original gas test remained attached to the Permit.

Within minutes, oxygen concentration inside the vessel fell below safe levels.

One worker collapsed.

The rescue team responded quickly, preventing a fatality.

#### What Went Wrong?

Every required document was present.

Every Critical Control had been established.

The failure occurred because verification stopped after the work began.

The team relied on historical evidence rather than confirming that the controls remained effective.

#### What Should Have Happened?

The interruption to ventilation should have triggered **Dynamic Verification**.

The team should have recognised that the condition supporting the original atmospheric verification had changed.

The atmosphere should have been retested before work resumed.

Operational Work Control depends on continuously validating Critical Controls—not simply documenting them before work starts.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 11.9 Field Card – Critical Control Verification

Before accepting any Critical Control, ask:

- What am I trying to prevent?
- What evidence proves this control is effective?
- What could cause it to fail?
- How will I know if that happens?
- When should it be verified again?

If the answer to any question is uncertain, obtain more evidence before proceeding.

#### Key Message

**Critical Controls protect people only when they are continuously supported by evidence.**

Verification is not about confirming that a control once existed. It is about maintaining confidence that the control remains effective throughout the work. Strong Operational Work Control replaces assumptions with evidence, static checks with dynamic verification, and compliance with informed operational judgement.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Chapter 12: Managing Change During Work

#### Maintaining Operational Control When Conditions Change

Every Permit reflects a decision made using the information available at that point in time. When the work changes, the decision may also need to change.

##### 12.1 Why This Chapter Matters

No Permit can anticipate every circumstance that will arise during hazardous work.

Unexpected conditions are common.

Examples include:

- hidden defects;
- unexpected process conditions;
- changes in weather;
- revised work methods;
- equipment failure;
- additional work;
- changes in personnel.

These changes do not necessarily make the work unsafe.

However, they may invalidate the assumptions on which the original Permit was authorised.

The presence of change is therefore not, by itself, the reason to stop work. The reason to stop is that the change may have altered the conditions, controls or assumptions that supported the original operational decision.

The purpose of this chapter is to help work teams recognise when a change requires the work to pause, be reassessed or be reauthorised.

The objective is not to stop work unnecessarily.

✓ The objective is to ensure that operational decisions continue to reflect the work actually being performed.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 12.2 Not Every Change Requires a New Permit

One of the most common misconceptions is that every change requires a new Permit.

This is neither practical nor necessary.

The important question is not: **“Has something changed?”**

The important question is: **“Has the basis<sup>1</sup> on which the work was authorised changed?”**

If the answer is no, the work may continue.

If the answer is yes, the work should pause until the implications have been understood.

✓ Professional judgement is required.

### 12.3 A Simple Test

Whenever something changes, ask **three questions**.

#### Question 1

**Does this change affect what we are trying to do?**

Examples include:

- additional work;
- different equipment;
- revised work sequence;
- different work location.

If yes, reconsider whether the original authorisation remains appropriate.

#### Question 2

**Does this change affect how we are doing the work?**

Examples include:

- different tools;
- alternative lifting arrangements;
- revised access;
- temporary repairs.

If yes, consider whether additional controls or approvals are required.

---

<sup>1</sup> The basis includes the authorised work scope, method, workplace conditions, Critical Controls and other assumptions that were necessary for the work to be safely authorised.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Question 3

**Does this change affect the conditions under which the work was authorised?**

Examples include:

- weather;
- lighting;
- process conditions;
- nearby work activities;
- availability of key personnel.

If yes, determine whether work can safely continue.

A “yes” answer does not automatically mean that the Permit must be cancelled or replaced. It means the original operational decision must be consciously reconsidered. The outcome may be to continue as authorised, amend the work or supporting controls, revalidate the Permit, or stop and reauthorise the work.

✓ These three questions are intended to support judgement—not replace it.

### **12.4 Examples of Good Operational Judgement**

The following examples illustrate how experienced teams respond when work changes.

#### **Example 1 – Additional Scope Identified**

##### **Situation**

During replacement of a process line, severe corrosion is found beyond the planned repair.

##### **Poor Response**

The supervisor instructs the crew to continue because: **“The pipe is already exposed.”**

No further discussion takes place.

##### **Better Response**

The work is paused.

The Area Authority or Custodian, Permit Issuer or Permit Issuing Authority and Permit Initiator and Acceptor review whether:

- the revised scope affects the work sequence;
- additional equipment is required;
- existing authorisation remains appropriate.

The Permit Package is updated before work resumes.

##### **Why This Matters**

The issue was not the additional corrosion.

The issue was that the work had become different from the work originally authorised.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **Example 2 – Unexpected Equipment Failure**

#### **Situation**

The planned lifting equipment becomes unavailable.

A smaller crane is proposed.

#### **Poor Response**

The lift proceeds because the load “**looks manageable.**”

#### **Better Response**

The lift is suspended.

The revised lifting arrangement is reviewed against the approved lifting plan before recommencing.

#### **Why This Matters**

Operational decisions should be based on engineering information—not visual judgement.

### **Example 3 – Supervisor Change**

#### **Situation**

The Permit Issuer or Permit Issuing Authority leaves site due to illness.

#### **Poor Response**

The incoming supervisor signs the Permit and work continues immediately.

#### **Better Response**

A structured handover is completed at the workplace.

The incoming supervisor confirms:

- work status;
- current conditions;
- outstanding activities;
- any changes since work commenced.

Only then does work continue.

#### **Why This Matters**

Operational understanding should be transferred—not assumed.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Example 4 – Changing Weather

#### **Situation**

High winds develop during structural steel erection.

#### **Poor Response**

Continue because the lift is almost complete.

#### **Better Response**

Suspend lifting.

Compare actual conditions with the approved lifting criteria.

Resume only when those conditions are restored.

#### **Why This Matters**

The safest decision is not always the quickest decision.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 12.5 Knowing When to Pause

Experienced supervisors recognise that pausing work is a management tool—not a sign of failure.

Work should normally pause when:

- the work no longer matches the authorised scope;
- people no longer understand the plan;
- significant uncertainty exists;
- conflicting instructions are received;
- conditions cannot be confidently explained.

✓ Pausing allows operational understanding to catch up with operational reality.

### 12.6 Temporary Energization

Temporary energization is a deliberate change in the energy state of equipment while work remains incomplete. It shall never be treated as simply continuing the existing Permit.

Where temporary energization is required for testing, commissioning, fault finding, or another defined purpose, the work team should confirm:

- why energization is required and what is to be tested;
- which equipment and boundaries will become energized;
- which isolation's must be removed, changed, or reinstated;
- who has operational control during the energization;
- which personnel and work activities must be withdrawn;
- what exclusion zones and precautions are required;
- what Permits or supporting documents are affected; and
- what conditions must be satisfied before work can recommence.

Before energization, affected work should be suspended and the change reviewed by the relevant operational and work authorities.

After testing or commissioning is complete, the equipment should be returned to the required isolated condition and the effectiveness of the relevant Critical Control reconfirmed before hazardous work resumes.

✓ The key question is not whether the Permit has expired. It is whether the conditions under which the work was authorised still exist.

### 12.7 Shift Change-over

Where the shift change identifies a change affecting operational control, the work shall be paused and the change managed in accordance with this chapter.

A routine shift change does not automatically require a new Permit. It requires a controlled transfer of operational understanding and responsibility.

Before work continues, the incoming responsible person shall confirm that, the basis on which the work was authorised, remains valid. The handover process should include the following information:

- what would require the work to stop.
- what has changed; and
- which Critical Controls are currently in place;

## Guidance Note - Operational Work Control Handbook \_

### Permit to Work System

- what remains to be done;
- what has already occurred;
- what work is being done;

Where practicable, the outgoing and incoming responsible persons should jointly review the worksite rather than relying only on documents or verbal handover.

Before the outgoing shift leaves, confirm:

- any conditions requiring work to stop or be escalated.
- incomplete work and temporary conditions; and
- changes that occurred during the previous shift;
- outstanding hazards, restrictions and conditions;
- status of Critical Controls and isolations;
- authorised scope and work boundaries;
- current status of the work;

The objective of the handover is to ensure that the incoming responsible persons have the same current understanding of the work, its controls and its conditions as the outgoing team.

✓ A shift change is a transfer of operational responsibility. It is not simply a change of personnel.

#### 12.8 Leadership During Change

When leaders visit work that has been paused, their response influences future behaviour.

Avoid asking: **“Why has the work stopped?”**

This question may unintentionally encourage work to continue next time.

Instead ask:

- What changed?
- How did you recognise it?
- What options did you consider?
- What information do you need before deciding?
- How can I help remove uncertainty?

✓ These questions reinforce good operational judgement.

#### 12.9 Learning from Change

Every significant change provides an opportunity to improve future work.

After completion, consider:

- Was the change foreseeable?
- Could planning have anticipated it?
- Were responsibilities clear?
- Was communication effective?
- Should future work packages be prepared differently?

✓ The objective is continual improvement—not retrospective criticism.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 12.10 When Change Is Permanent: Handing Off to Management of Change

Everything else in this chapter is about change to a specific, temporary piece of work — the job in front of you, today. Sometimes what you discover during that job is not a task-level problem at all, but evidence that the plant, the process, or the way the organisation does something should permanently change.

A Permit is not the tool for that decision. TS24 draws this boundary explicitly: permanent or design-basis change goes through your Business Unit's Management of Change (MOC) process, not through Permit authorisation.

A **simple test**: if the change should still be true tomorrow, next week and next year — not just for the duration of this job — it is very likely an MOC matter, not a Permit amendment.

If you are a Permit Issuer or Permit Issuing Authority or Area Authority or Custodian and you identify a need for permanent change while managing task-level change, your responsibility is to initiate your Business Unit's MOC process. Continuing to authorise the work is a separate decision from starting that referral, and neither should be delayed by the other.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **Red Flag**

A “temporary” modification that has been re-authorised on every Permit for the same job for months.

### **Good Practice**

During replacement of a conveyor gearbox, the work party discovered that the new gearbox had a different mounting arrangement from the original.

Although the Permit remained technically valid, the supervisor recognised that the installation method would change.

The work was paused.

The lifting arrangement was revised.

The work sequence was updated.

The team was re-briefed before recommencing.

The delay was less than one hour.

The revised installation was completed safely.

### **Why this is good**

The supervisor understood that maintaining operational control is more important than maintaining the original schedule.

### **Common Mistakes**

Avoid:

- treating every change as insignificant because it appears small;
- assuming that similar work requires no further discussion;
- relying on verbal agreements to change the work;
- continuing simply because the work is almost complete;
- allowing schedule pressure to replace sound operational judgement.

These behaviours often develop gradually and may become normal unless leaders actively challenge them.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● *Learning from Failure*

#### Scenario

A contractor was replacing corroded pipework during a planned shutdown.

After removing the first section, the team identified extensive corrosion extending into an adjacent line.

Because scaffolding, lifting equipment and isolations were already in place, the supervisor instructed the team to replace the additional section without further review.

The Permit remained unchanged because the work was considered “essentially the same.”

The additional work required removal of temporary supports that had not been considered in the original work sequence.

During cutting, the unsupported pipe shifted unexpectedly, seriously injuring a worker.

#### What Went Wrong?

The failure was not the discovery of additional corrosion.

It was the assumption that similar work required no further operational decision.

The conditions under which the work had originally been authorised had changed.

The decision to continue had not been reconsidered.

#### What Should Have Happened?

The discovery of additional work should have prompted a structured pause.

The Area Authority or Custodian, Permit Issuer or Permit Issuing Authority and Permit Initiator and Acceptor should have jointly determined:

- whether the revised work remained within the authorised scope;
- whether the work sequence required revision;
- whether additional supporting documents were needed; and
- whether the existing authorisation remained appropriate.

The work should have resumed only after these questions had been answered and the appropriate operational decision had been made.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 12.11 Field Guide

#### Managing Change During Work

Whenever conditions change, ask:

- Has the work changed?
- Has the method changed?
- Have the conditions changed?

If the answer to any of these is yes, pause long enough to determine whether the original operational decision remains valid.

Remember:

**The purpose of a pause is not to stop work. It is to restore confidence that the work can continue safely.**

#### Key Message

**Operational Work Control is maintained not by preventing change, but by recognising when change requires a new operational decision.**

A mature Permit to Work system does not expect work to proceed exactly as planned. It expects competent people to recognise when the basis for the original authorisation has changed, to pause when necessary, and to ensure that decisions continue to reflect the work actually being performed.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Chapter 13: Operational Work Control Assurance

#### Identifying Organisational Patterns and Prioritising Improvement

The purpose of Operational Work Control assurance is not to determine whether permits comply with the standard. It is to determine whether the organisation is consistently capable of planning, authorising, executing and completing hazardous work without losing operational control.

##### 13.1 Why Assurance Matters

An effective PTW system cannot be judged by reviewing individual permits in isolation.

A Permit may be technically correct while the underlying operational practices remain weak.

Conversely, a minor administrative deficiency may exist within an otherwise well-controlled piece of work.

The purpose of assurance is therefore to answer one question:

**“What organisational patterns are emerging that affect our ability to consistently control hazardous work?”**

Answering this question requires evidence collected over time, across different sites, activities and teams.

✓ Assurance is therefore concerned with patterns, not isolated findings.

##### 13.2 The Role of Operational Assurance

Operational Assurance complements, but does not replace, line management accountability.

Operations remain responsible for planning and executing hazardous work.

Business Leaders remain responsible for improving organisational performance.

The HSE Function provides independent assurance by:

- observing how Operational Work Control is applied;
- identifying recurring organisational themes;
- distinguishing isolated issues from systemic weaknesses;
- advising Business Leaders where attention is most needed; and
- monitoring whether organisational improvements are effective.

Operational Assurance should not become another approval stage within the Permit process.

✓ Its value lies in independent observation and informed judgement.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 13.3 Sources of Assurance

No single observation should determine the health of an Operational Work Control system.

Instead, assurance should be based on multiple sources of evidence.

Examples include:

- completed Integrated Work Packages (IWPs);
- field verification observations;
- leadership work reviews;
- incident and near-miss investigations;
- planned assurance visits;
- contractor performance reviews;
- examples of good operational practice; and
- work stoppages initiated to restore operational control.

Each source provides only part of the picture.

The purpose is not to combine every source into a single assurance score. It is to test whether the same organisational pattern is visible from different perspectives and under different circumstances.

✓ Confidence increases when similar patterns emerge from multiple sources.

### 13.4 Looking for Patterns, Not Findings

Traditional assurance often reports individual deficiencies.

For example:

- Permit incomplete.
- Signature missing.
- Gas test overdue.

These observations should be corrected.

However, they rarely explain why similar issues continue to occur.

Operational Assurance should therefore ask a second question:

**“What organisational condition is producing this recurring pattern?”**

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

Examples are shown below.

| Observation                                                  | Possible Organisational Theme       | Questions to Explore Before Recommending Action                                                                                   |
|--------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Frequent amendments to IWPs after work start                 | Weak work planning                  | Are maintenance plans mature enough? Is engineering information complete? Are shutdown schedules driving premature authorisation? |
| Workers unable to explain the fatality scenario              | Weak pre-job communication          | Observe several toolbox talks. Is the issue communication, supervision, workload or competence?                                   |
| Similar verification weaknesses across different sites       | Inconsistent operational discipline | Are verification expectations clearly understood? Are supervisors receiving sufficient field coaching?                            |
| Contractor interface issues recurring across Businesses      | Interface management                | Are responsibilities clear? Are Vedanta and contractor systems aligned at the point of work?                                      |
| Repeated dependence on “retraining” as the corrective action | Superficial learning                | Have organisational conditions been examined before selecting corrective actions?                                                 |

- ✓ **Do not begin by recommending corrective actions.**
- ✓ First establish that the pattern is real, understand the organisational condition producing it, and determine whether that condition is within the Business’s control to change.

### 13.5 Distinguishing Isolated Issues from Organisational Weaknesses

Not every deficiency indicates a systemic problem.

Operational Assurance should distinguish between:

| If you observe...                          | Consider...                                                                     |
|--------------------------------------------|---------------------------------------------------------------------------------|
| One isolated Permit issue                  | Local execution, supervision or an unusual circumstance.                        |
| Similar issues within one department       | A local management or operating condition.                                      |
| Similar issues across multiple departments | A Business-wide organisational condition may be involved.                       |
| Similar issues across several Businesses   | A Group-wide learning opportunity or common organisational condition may exist. |

- ✓ This distinction helps determine where further enquiry is required and prevents the scope of the response from being larger—or smaller—than the evidence supports.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 13.6 Turning Assurance into Leadership Action

The purpose of assurance is not to produce more reports.

Its purpose is to focus leadership attention on the issues that matter most.

The output of every assurance cycle should therefore answer **three questions**.

#### Question 1

**What recurring organisational patterns have we observed?**

For example:

- frequent changes to IWPs after work begins;
- recurring contractor interface weaknesses;
- inconsistent quality of work planning.

#### Question 2

**Which of these patterns presents the greatest risk to Operational Work Control?**

Not every recurring issue deserves immediate leadership attention.

Prioritise those that have the greatest potential to contribute to a fatal or high-consequence event.

#### Question 3

**Which leadership conversations should these patterns trigger?**

This is where assurance connects directly to the leadership review process described in Chapter 6.

The leadership conversation should address the organisational condition, not simply repeat the assurance finding.

Examples include:

| Assurance Theme                               | Leadership Conversation                                                                           |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------|
| Frequent IWP changes after authorisation      | Why are we authorising work before planning is sufficiently mature?                               |
| Contractor interface failures                 | What aspects of our operating model make these failures predictable?                              |
| Weak field verification                       | What organisational conditions prevent supervisors from consistently verifying Critical Controls? |
| Repeat deficiencies despite completed actions | Why are our corrective actions failing to change future operational decisions?                    |

- ✓ The role of Operational Assurance is not to answer these questions.
- ✓ Its role is to ensure that leaders ask them.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 13.7 Evaluating Improvement

Improvement should be judged by changes in operational capability rather than administrative performance.

Indicators of improvement may include:

- fewer significant changes after work commences because planning has improved;
- better alignment between IWPs and actual work;
- more effective operational discussions during leadership reviews;
- stronger field verification;
- reduction in repeat organisational themes over successive assurance cycles.

The measure of improvement should be linked to the organisational condition that was identified. If the original concern was late changes to work scope, improvement should be demonstrated by fewer significant scope changes or earlier identification of changes—not simply by higher compliance with the Permit process.

Improvement should not be assumed simply because:

- more training has been completed;
- more audits have been conducted;
- more corrective actions have been closed.

✓ These activities may contribute to improvement, but they are not evidence of improvement by themselves.

#### **Good Practice**

An Operational Assurance review across three smelters identified repeated amendments to Integrated Work Packages after work had commenced.

Rather than recommending refresher training for Permit Issuer or Permit Issuing Authority, the assurance team reviewed maintenance planning, shutdown preparation and engineering readiness.

The review showed that work was routinely being authorised before final inspection data was available.

Business Leaders subsequently strengthened shutdown planning and introduced readiness reviews before authorisation.

Six months later, amendments to Integrated Work Packages had reduced significantly.

#### **Why this is good**

The assurance process identified and addressed the organisational condition rather than the visible symptom.

#### **Common Mistakes**

Operational Assurance becomes less effective when it:

- reports individual findings without identifying recurring themes;
- recommends corrective actions before understanding organisational conditions;
- focuses on administrative compliance rather than operational capability;
- reports large numbers of findings without prioritising those that present the greatest operational risk;
- measures activity instead of improvement.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### ● *Learning from Failure*

#### Scenario

Over twelve months, an assurance programme identified more than one hundred Permit-related findings across several operations.

Most findings related to incomplete documentation, inconsistent Permit wording and missing signatures.

Each finding was corrected.

Training sessions were repeated.

Compliance scores improved.

Despite this, two significant permit-related incidents occurred during shutdown activities.

A subsequent review showed that both incidents were associated with late changes to work scope and weak contractor interfaces—issues that had appeared repeatedly in earlier assurance reports but had never been recognised as organisational themes.

#### What Went Wrong?

The assurance programme focused on individual findings.

It did not connect those findings into patterns.

As a result, leadership attention was directed towards administrative improvements rather than the operational conditions contributing to high-consequence risk.

#### What Should Have Happened?

The assurance team should have consolidated recurring observations into a small number of organisational themes, tested those themes against evidence from different sources, prioritised those with the greatest potential for serious harm, and presented them to Business Leaders as priorities for review under the leadership process described in Chapter 6.

The value of assurance lies not in the number of findings reported, but in its ability to identify the organisational conditions that require leadership attention.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### 13.8 Operational Assurance Guide

At the end of every assurance cycle, ask:

- What recurring organisational patterns have we identified?
- Which patterns present the greatest potential for serious harm?
- What evidence supports these conclusions?
- Which leadership conversations should these patterns trigger?
- How will we know whether organisational capability has improved during the next assurance cycle?

#### Key Message

**Operational Assurance is successful when it helps the organisation recognise and address recurring organisational conditions before they contribute to a serious incident.**

Its purpose is not to produce more findings or more reports. Its purpose is to convert observations from the field into meaningful organisational insight that guides leadership attention, supports continual improvement and strengthens the organisation's ability to consistently maintain Operational Work Control.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### PART 5: APPENDICES

#### Appendix A: Minimum Information Requirements for Permit to Work Systems

##### A.1 Purpose

This appendix establishes the minimum information that shall be captured by every Permit to Work (PTW) system implemented across Vedanta.

The requirements apply equally to:

- paper-based PTW systems;
- electronic PTW systems;
- integrated maintenance management systems; and
- mobile PTW applications.

Business Units may add information to meet local operational or legislative requirements but shall not omit the mandatory information defined in this appendix.

##### A.2 Information Principles

Every PTW system shall provide sufficient information to demonstrate that:

- the work has been planned;
- hazards have been assessed;
- Controls/Critical Controls have been verified;
- competent persons have authorised the work;
- operational control has been maintained;
- the work has been safely completed.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### A.3 Mandatory Information Requirements

Every Permit shall contain, as a minimum, the following information.

| Information Category       | Minimum Requirement                                                                                                    |
|----------------------------|------------------------------------------------------------------------------------------------------------------------|
| Permit Identification      | Unique permit number and status                                                                                        |
| Work Details               | Description, location, plant/equipment, work boundaries                                                                |
| Work Planning              | Work order/reference, Permit Initiator and Acceptor, work party                                                        |
| Risk Assessment            | Reference to approved risk assessment/JSA and identified Critical Risks                                                |
| Controls/Critical Controls | Required controls and evidence of verification                                                                         |
| Supporting Documents       | References to gas tests, lift plans, rescue plans and other supporting records                                         |
| Isolation                  | Reference to isolation certificate(s), where applicable                                                                |
| Authorisation              | Permit Issuer or Permit Issuing Authority, Area Authority or Custodian, Permit Initiator and Acceptor, dates and times |
| Work Monitoring            | Extensions, suspensions, revalidations and significant changes                                                         |
| Completion                 | Confirmation of work completion, workplace restoration and plant reinstatement                                         |
| Audit Trail                | Record of amendments, approvals and closure                                                                            |

### A.4 Permit Status

The PTW system shall identify the current status of every Permit.

As a minimum, the following status values shall be available.

| Status      | Meaning                        |
|-------------|--------------------------------|
| Draft       | Under preparation              |
| Active      | Work authorised                |
| Suspended   | Work temporarily stopped       |
| Revalidated | Re-authorised following review |
| Closed      | Work completed and accepted    |
| Cancelled   | Withdrawn before completion    |

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **A.5 Traceability**

The PTW system shall maintain a complete record of:

- issue;
- amendments;
- extensions;
- suspensions;
- revalidations;
- closure.

Electronic systems, where present, shall maintain an immutable audit trail.

For paper-based systems, traceability needs to be maintained for at least six months.

### **A.6 Data Quality**

Business Units shall ensure PTW information is:

- accurate;
- complete;
- legible;
- traceable;
- secure; and
- retrievable.

### **A.7 Digital PTW Requirements**

Where electronic PTW systems are implemented, they shall, as a minimum:

- generate unique Permit numbers;
- maintain version control;
- record all approvals and amendments;
- confirmation that Permit Issuers have physically verified the workplace conditions before issuing the permit
- prevent unauthorised modification of approved Permits;
- maintain a secure audit trail;
- retain historical records in accordance with Business Unit document retention requirements.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Appendix B: Worked Example – Operational Work Control in Practice

#### Applying TS24 and GN48 to a High-Risk Maintenance Activity

##### B.1 Purpose

This appendix demonstrates how the principles described throughout TS24 and GN48 are applied during a typical high-risk maintenance activity.

The example is illustrative. Local documentation, permit formats and approval requirements may differ across Businesses.

The objective is to demonstrate how the different elements of Operational Work Control connect to one another in practice—not to prescribe a single method of execution.

##### B.2 Scenario

###### Scenario

During routine condition monitoring, Operations identifies excessive vibration and seal leakage on **Slurry Pump P-204** supplying concentrate to the flotation circuit.

Engineering determines that the pump must be removed and replaced during a planned maintenance window.

The activity requires:

- Mechanical isolation
- Electrical isolation
- Critical lifting
- Breaking containment
- Hot work (contingency only)
- Contractor support
- Simultaneous maintenance in adjacent areas

This activity therefore requires an **Integrated Work Package (IWP)**.

The activity is deliberately chosen because it brings together several different hazards, decision authorities, supporting documents, contractor interfaces and potential changes within one piece of work.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **B.3 Stage 1 – Planning the Work**

#### **Objective**

Develop a shared understanding of the work before preparing documentation.

#### **Good Practice**

Before preparing any Permit, representatives from Operations, Maintenance, Engineering and the contractor meet to discuss:

- the work scope;
- the sequence of activities;
- equipment and resource requirements;
- interactions with adjacent work;
- foreseeable changes or uncertainties; and
- contingency arrangements.

The discussion identifies one credible fatality scenario:

**Uncontrolled release of stored energy or a dropped load during pump removal resulting in fatal injury.**

Planning concludes only when all participants have a common understanding of the work.

#### **✗ Poor Practice**

Planning begins by retrieving the Permit used for the previous pump replacement.

The contractor receives the work package on the morning of the shutdown.

The crane contractor has not visited the work area.

Engineering drawings have not been verified.

Everyone assumes that unforeseen issues will be managed during execution.

#### **Why This Matters**

The quality of Operational Work Control is determined long before the first Permit is issued.

Poor planning inevitably shifts decision-making into the field, where time pressure and uncertainty are greater.

This shared understanding becomes the basis for developing the Integrated Work Package.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **B.4 Stage 2 – Developing the Integrated Work Package**

The planning team prepares one Integrated Work Package containing:

- Work Scope
- Risk Assessment
- Permit to Work
- Mechanical Isolation Certificate
- Electrical Isolation Certificate
- Lift Plan
- Equipment Drawings
- Emergency Response Arrangements

Each document supports the same work activity.

No document contradicts another.

#### **Good Practice**

Every supporting document references the same equipment, work boundaries and sequence.

Changes to one document trigger review of the others.

#### **✗ Poor Practice**

Operations prepares isolations.

Maintenance prepares the Permit.

The contractor prepares the Lift Plan.

Each document is technically correct.

However, they describe different work boundaries and different assumptions.

#### **Why This Matters**

People perform one job.

The documentation should therefore support one operational decision.

The integrated work package then provides the common basis against which workplace readiness and authorisation can be tested.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **B.5 Stage 3 – Permit Authorisation**

#### **Objective**

Confirm that the planned work can now be safely undertaken.

#### **Good Practice**

Before authorisation:

The Area Authority or Custodian visits the workplace.

The Permit Issuer or Permit Issuing Authority confirms:

- equipment identification;
- work boundaries;
- isolations;
- contractor readiness;
- compatibility with adjacent work.

Questions raised during the review improve the quality of the work package before approval.

#### **✗ Poor Practice**

The Permit is issued from the office because production is waiting.

No workplace inspection is undertaken.

The Permit Issuer or Permit Issuing Authority assumes field conditions match the documentation.

#### **Why This Matters**

Permit authorisation is an operational decision—not an administrative approval.

Once the work is authorised, that understanding must be transferred to everyone who will perform and supervise the work.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **B.6 Stage 4 – Pre-Job Briefing**

#### **Objective**

Develop one shared operational understanding.

#### **Good Practice**

The Permit Initiator and Acceptor conducts a single briefing involving:

- Vedanta employees;
- contractor personnel;
- crane operator;
- lifting supervisor;
- standby personnel.

The discussion covers:

- work sequence;
- credible fatality scenario;
- Critical Controls;
- communication arrangements;
- stop-work triggers.

The supervisor concludes by asking several workers to explain the work back in their own words.

Misunderstandings are corrected before work begins.

#### **✗ Poor Practice**

Each contractor conducts a separate toolbox talk.

Operations assumes everyone understands the overall activity.

Workers understand their individual tasks but not how they interact.

#### **Why This Matters**

Operational Work Control depends on shared understanding—not multiple disconnected briefings.

The briefing establishes the shared understanding against which Critical Controls can then be verified in the field.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **B.7 Stage 5 – Verifying Critical Controls**

#### **Objective**

Replace assumptions with evidence.

Before work begins, the supervisor verifies:

#### **Mechanical Isolation**

- Equipment identity confirmed.
- Lock numbers match the Isolation Certificate.
- Zero-energy test completed.

#### **Critical Lift**

- Actual lift configuration matches the approved Lift Plan.
- Ground conditions suitable.
- Lift Plan available.
- Exclusion zone established.

#### **Breaking Containment**

- Pressure released.
- Residual product drained.
- Line of fire eliminated.

#### **Good Practice**

Verification is undertaken in the field.

The supervisor observes and confirms each Critical Control before authorising work to commence.

#### **✗ Poor Practice**

The Permit contains all required signatures.

No one physically confirms the isolations or the exclusion zone.

Verification relies entirely on documentation.

#### **Why This Matters**

Critical Controls should be demonstrated—not assumed.

Once verified, these controls become part of the basis on which the work can safely commence and continue.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **B.8 Stage 6 – Managing Change**

During dismantling, additional corrosion is discovered extending beyond the planned repair.

#### **Good Practice**

The supervisor pauses the work.

The Area Authority or Custodian, Permit Issuer or Permit Issuing Authority and Permit Initiator and Acceptor jointly review:

- the revised work scope;
- the lifting implications;
- additional isolation requirements;
- impact on adjacent work.

The Integrated Work Package is updated.

The work party is re-briefed.

Only then does work recommence.

#### **✗ Poor Practice**

The supervisor instructs the team to continue because:

“We’re already here.”

The additional work proceeds without review.

#### **Why This Matters**

Good Operational Work Control manages change through disciplined decision-making rather than informal agreement.

The same decision-making discipline must continue through completion; a Permit is not complete simply because the physical work has finished.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **B.9 Stage 7 – Completing the Work**

#### **Objective**

Restore the workplace to a safe operational condition.

#### **Good Practice**

Before Permit closure, the team confirms:

- Equipment reassembled.
- Guards reinstated.
- Temporary equipment removed.
- Housekeeping completed.
- Isolations removed in accordance with procedure.
- Operations formally accepts the equipment.

Only then is the Permit closed.

#### **✗ Poor Practice**

The Permit is signed because maintenance activities have finished.

Operations later discovers missing guards during start-up.

#### **Why This Matters**

Permit closure confirms restoration of operational control—not simply completion of maintenance.

Completion therefore creates the opportunity to capture what the organisation should carry forward into future work.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **B.10 Stage 8 – Learning Review**

Following completion, the team conducts a short review.

Discussion focuses on:

- What helped maintain Operational Work Control?
- What unexpected conditions arose?
- Which decisions added the greatest value?
- What should be improved before the next pump replacement?

The review identifies:

- engineering drawings require updating;
- contractor mobilisation should occur earlier;
- lifting access can be improved.

These improvements are incorporated into future maintenance planning.

### **✗ Poor Practice**

No review is conducted.

The same planning issues recur during the next shutdown.

### **Why This Matters**

Learning should improve future work—not simply explain past work.

The learning is valuable only when it changes how similar work will be planned or controlled in the future.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### B.11 Bringing It All Together

The following table summarises how the principles of TS24 and GN48 were applied.

| Stage            | Principle Demonstrated                  | Good Practice                                      |
|------------------|-----------------------------------------|----------------------------------------------------|
| Planning         | Work is understood before documentation | Collaborative planning before permits are prepared |
| IWP Development  | One job, one operational decision       | All documents support the same work                |
| Authorisation    | Operational judgement                   | Workplace verified before approval                 |
| Pre-Job Briefing | Shared understanding                    | One integrated briefing for all parties            |
| Verification     | Evidence over assumption                | Critical Controls demonstrated in the field        |
| Managing Change  | Disciplined decision-making             | Work paused and IWP updated before continuing      |
| Completion       | Safe restoration                        | Workplace returned safely to Operations            |
| Learning         | Continuous improvement                  | Organisational learning captured for future work   |

### B.12 Reflection Questions

This example should be discussed during training and leadership workshops.

Consider the following questions.

1. Where did the team first establish the operational decision that allowed the work to proceed?
2. Which later stage depended most heavily on decisions made during planning?
3. Which part of the Integrated Work Package could have created the greatest risk if it had told a different story from the other documents?
4. Which Critical Control required the strongest evidence before work could begin, and why?
5. When the additional corrosion was discovered, what changed: the Permit, the work, or the basis for the original decision?
6. What organisational conditions made it possible for the team to complete this work safely, and which of those conditions would you want to reproduce for the next comparable job

### **Key Learning**

**Operational Work Control is not a series of independent activities. It is a continuous chain of operational decisions that begins with planning and ends only when the workplace has been safely returned to Operations.**

- ✓ Every Permit, isolation, verification, briefing, leadership discussion and learning review either strengthens or weakens that chain. The effectiveness of the system depends on how well these elements work together, not on how well any one element works in isolation.
- ✓ Understand the difference. Reassess the decision. A change is not automatically a reason to issue a new Permit. It is a reason to reconsider whether the original operational decision remains valid.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Appendix C: Operational Decision Guides

#### Quick Reference Decision Trees for Operational Work Control

##### Purpose

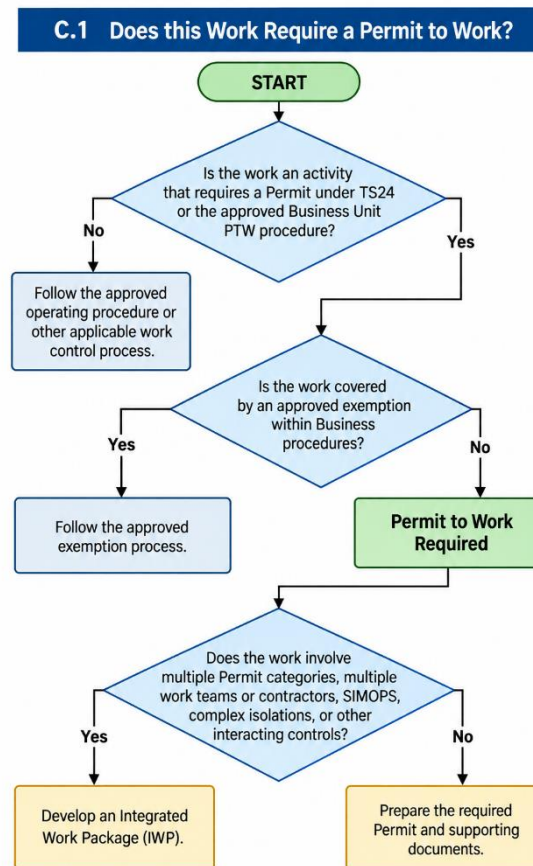
This appendix provides practical decision guides for Permit Issuer's or Permit Issuing Authorities, Area Authorities or Custodians, Permit Initiator's and Acceptor's.

The guides support operational judgement during hazardous work.

They do not replace the requirements of TS24 or the guidance contained within GN48.

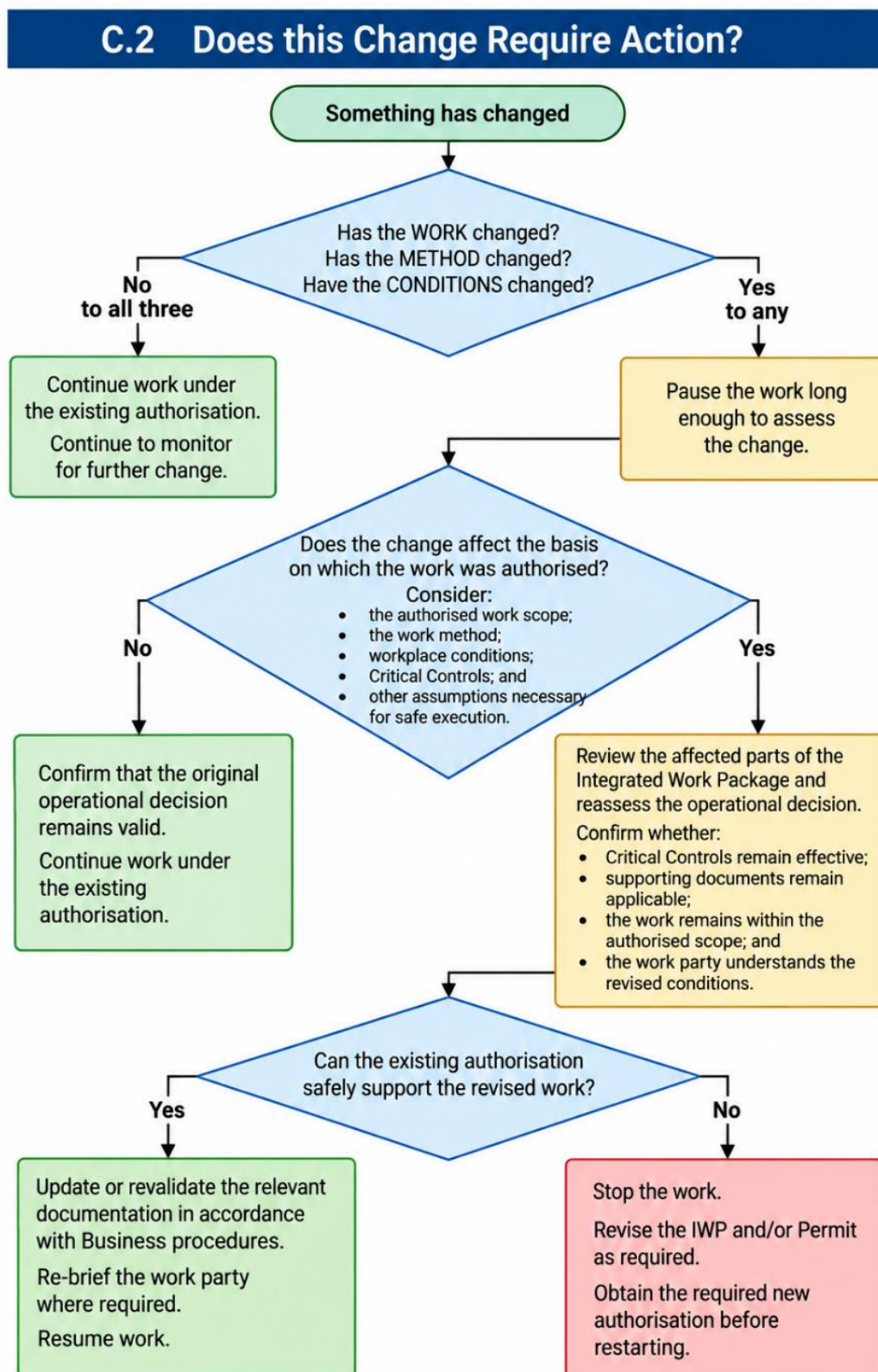
Where there is uncertainty, the applicable Decision Gate, Permit requirement or Business Unit procedure shall be followed.

#### C.1 Does this Work Require a Permit to Work?



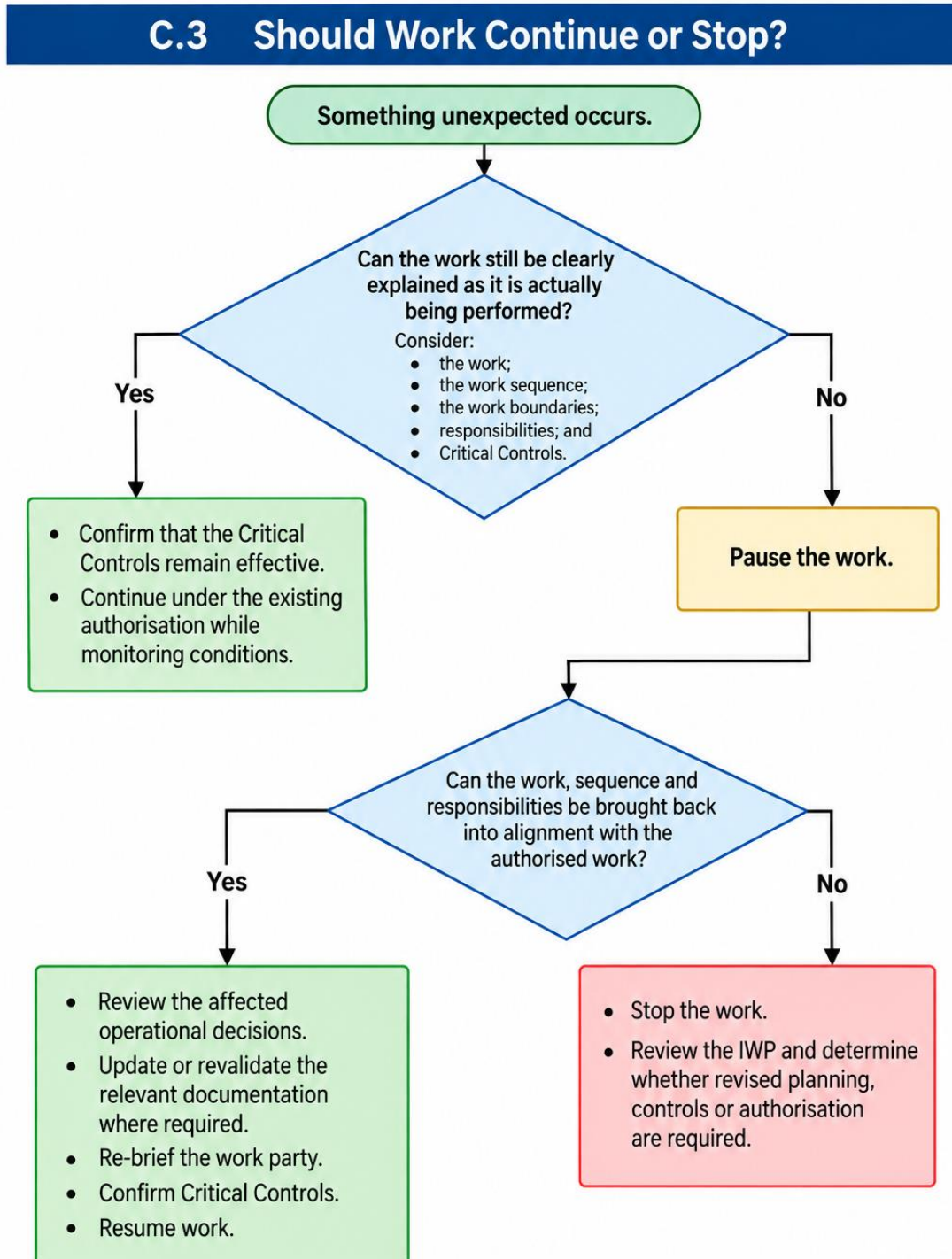
# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## C.2 Does this Change Require Action?



# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## C.3 Should Work Continue or Stop?



# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### C.4 Permit Amendment or New Permit?

Do not decide based only on the type of change.

#### **First determine:**

Does the change affect the basis on which the work was authorised?

Use the following guide.

| Situation                                            | Minimum response                                                                                           |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Minor administrative correction                      | Correct in accordance with Business procedure                                                              |
| Extension within approved Business rules             | Revalidate/amend as permitted by Business procedure                                                        |
| Shift handover                                       | Complete formal handover and revalidate                                                                    |
| Additional work within the original authorized scope | Review the operational decision and IWP; amend documentation where required                                |
| Significant change in work scope                     | Review IWP and authorization; revise as required                                                           |
| Different equipment                                  | Reassess whether the existing authorization remains applicable                                             |
| Different work location                              | Reassess the authorization; obtain new authorization where the existing Permit does not cover the location |
| Different work method                                | Reassess the operational decision and affected controls                                                    |
| New high-risk activity introduced                    | Review the IWP and add the required Permit/control                                                         |
| Additional Permit required                           | Review and integrate the IWP                                                                               |
| Operational control lost                             | Stop work and reassess before restarting                                                                   |

#### **Fundamental rule**

The change itself does not determine whether a new Permit is required.

The decision depends on whether the existing authorisation still safely supports the work now being performed.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **C.5 Permit Revalidation Guide**

A Permit shall be revalidated when work resumes after a significant interruption, shift change or other event that may affect the basis of the original authorisation.

Permit validity periods should be defined by the Business for each Permit category and should reflect the rate at which the relevant hazards, controls and operating conditions can change.

A Permit reaching its maximum validity period shall not be extended simply because the work remains incomplete. The work shall be reviewed and reauthorized or revalidated in accordance with the applicable Business procedure.

### **Typical triggers**

| Trigger                                                   | Revalidation |
|-----------------------------------------------------------|--------------|
| Shift change                                              | Yes          |
| Significant work interruption                             | Yes          |
| Weather deterioration                                     | Yes          |
| Loss or reinstatement of isolations                       | Yes          |
| Changes to the work party that affect operational control | Yes          |
| Significant change in process conditions                  | Yes          |
| Extended suspension of work                               | Yes          |

### **During revalidation confirm:**

- Work remains within the authorised scope.
- Conditions remain consistent with the IWP.
- Critical Controls remain effective.
- The incoming supervisor / Permit Initiator and Acceptor understands the current status of the work.
- Outstanding risks, controls and restrictions are understood.
- The work party understands any revised conditions.

### **Then decide:**

Can operational control still be demonstrated and maintained?

### **YES**

Revalidate and resume work.

### **NO**

Do not resume. Reassess and obtain the required authorisation before restarting.

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### C.6 Escalation Guide

#### Escalate when:

- operational decisions cannot be agreed;
- work extends beyond the authorised scope;
- significant uncertainty remains;
- conflicting instructions are received;
- Critical Controls cannot be demonstrated;
- additional hazards cannot be adequately controlled;
- simultaneous activities create unacceptable interface risks;
- the appropriate decision authority is unavailable, and the work cannot safely continue under the existing authorisation.

#### **Remember**

Escalation is not failure.

It is evidence that the PTW system is functioning as intended when people recognise that the existing decision is no longer sufficient.

**Do not allow unresolved uncertainty to become an operational decision by default.**

### C.7 Integrated Work Package Guide

Use an **Integrated Work Package** whenever work involves one or more of the following:

- Multiple Permit types.
- Multiple work teams.
- Multiple contractors.
- SIMOPS.
- Complex isolations.
- Critical lifting combined with other high-risk work.
- Major shutdown activities.
- Work involving several departments.

#### **Before work begins, confirm:**

- One work scope.
- One agreed work sequence.
- One integrated understanding of the fatality scenario.
- Compatible Critical Controls.
- Supporting documents aligned.
- One integrated pre-job briefing.
- One shared operational understanding.

The **objective** is simple:

**One job. One operational decision. One coordinated work package.**

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### C.8 Work Suspension Guide

**Suspend work** whenever:

- work no longer matches the authorised activity;
- uncertainty cannot be resolved immediately;
- Critical Controls are unavailable or ineffective;
- emergency conditions arise;
- new hazards significantly alter the work;
- required supervisory control is unavailable because the necessary handover has not been completed.

**Before restarting:**

- Review the IWP where affected.
- Update documentation if required.
- Reassess and revalidate affected Critical Controls.
- Re-brief the work party where conditions or responsibilities have changed.
- Confirm operational understanding.
- Confirm that the required authorisation has been restored.

**Restart only when:**

Operational control can once again be demonstrated and maintained.

### C.9 Completion Guide

**Before closing the Permit**, confirm:

- Authorised work has been completed.
- Equipment has been reinstated as required.
- Guards and safety devices have been restored.
- Temporary equipment has been removed.
- Isolations have been removed in accordance with procedure.
- Housekeeping is satisfactory.
- Operations accept the equipment/workplace.
- Required documentation has been completed.

### **Remember**

Permit closure signifies that **operational control has been safely returned to Operations—not merely that maintenance work has finished.**

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### **C.10 One-Minute Decision Aid**

Whenever uncertainty exists, ask:

**1. Has anything changed?**



**2. Does that change affect the original operational decision?**

Consider the:

- work;
- method;
- conditions;
- Critical Controls; and
- work boundaries.



**3. Can I still confidently explain:**

- what work is being done;
- the sequence of work;
- the Critical Controls;
- who is responsible; and
- the conditions under which the work may safely continue?



**4. If not, what must happen before work continues?**

**Pause. Understand the change. Reassess the operational decision. Take the necessary action.**

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## Quick Reference Summary:

| Situation                                         | First Action                                                                                                        |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Work, method or conditions change                 | <b>Pause and determine whether the original operational decision remains valid</b>                                  |
| Change affects the basis of authorization         | <b>Reassess affected controls and revise/revalidate the IWP and authorization as required</b>                       |
| Change does not affect the basis of authorization | <b>Confirm the original authorization remains valid and continue</b>                                                |
| Critical Control unavailable or ineffective       | <b>Stop work immediately</b>                                                                                        |
| Different work location                           | <b>Confirm whether the existing authorization covers the revised location; obtain new authorization if required</b> |
| New high-risk activity                            | <b>Review and revise the IWP and required Permits/controls</b>                                                      |
| Uncertainty exists                                | <b>Pause, understand and decide</b>                                                                                 |
| Conflicting instructions                          | <b>Escalate before proceeding</b>                                                                                   |
| Shift change                                      | <b>Complete handover and revalidate before continuing</b>                                                           |
| Work completed                                    | <b>Restore the workplace and return operational responsibility to Operations</b>                                    |

## Final Reminder

Decision guides support operational judgement—they do not replace it.

**A change is not automatically a reason to issue a new Permit. It is a reason to reconsider whether the original operational decision remains valid.**

Whenever the correct course of action remains uncertain:

**Pause. Understand the difference. Reassess the decision. Ensure the Integrated Work Package and authorisation continue to represent the work being undertaken.**

Only then should work continue.

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## Appendix D: Critical Control Verification Cards Field Reference Guide

### Purpose

This appendix provides concise verification guides for the Critical Controls most commonly encountered during hazardous work.

These guides support Permit Issuers or Permit Issuing Authorities, Area Authorities or Custodians, Permit Initiator's and Acceptor's and Supervisors when conducting field verification.

They are not checklists to replace professional judgement.

They are field prompts identifying the evidence that should normally be available to support a decision to proceed.

The required evidence may vary with the work and conditions.

### CRITICAL CONTROL VERIFICATION CARDS:



**THINK  
QUESTION  
VERIFY  
STAY SAFE**

D.1

## Hazardous Energy Isolation

Critical Control Verification Card

Field Reference Guide



|                                                                                     |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>What Are We Preventing?</b>      | <ul style="list-style-type: none"> <li>Prevent the unintended release of hazardous energy.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                |
|  | <b>What Should Be Verified?</b>     | <ul style="list-style-type: none"> <li>Correct equipment identified.</li> <li>Isolation points match the approved isolation plan.</li> <li>Lock and tag applied.</li> <li>Lock numbers match the Isolation Certificate.</li> <li>Zero-energy confirmed by test.</li> <li>Isolation boundary clearly understood.</li> <li>Number of personal locks applied matches the number of work personnel for the task.</li> <li>Isolation prevents access to the hazardous energy within the defined work boundary.</li> </ul> |
|  | <b>Good Verification Looks Like</b> | <ul style="list-style-type: none"> <li>Isolation physically demonstrated.</li> <li>Test-for-zero-energy witnessed.</li> <li>Work party understands what remains energised and what has been isolated.</li> </ul>                                                                                                                                                                                                                                                                                                     |
|  | <b>Poor Verification Looks Like</b> | <ul style="list-style-type: none"> <li>Isolation assumed because the Permit is signed.</li> <li>Lock applied to the wrong equipment.</li> <li>Isolation verified from the control room rather than at the equipment.</li> <li>Zero-energy not demonstrated.</li> </ul>                                                                                                                                                                                                                                               |
|  | <b>Stop Work If</b>                 | <ul style="list-style-type: none"> <li>Equipment identity cannot be confirmed.</li> <li>Isolation has been disturbed.</li> <li>Lock ownership is unclear.</li> <li>Zero-energy cannot be demonstrated.</li> </ul>                                                                                                                                                                                                                                                                                                    |

**Universal Verification Principles**

Regardless of the Critical Control, always ask:

- Can I see the control?
- Can I demonstrate that it is effective?
- Could anything reasonably cause it to fail during the work?
- If it failed, how would we know?
- What action would we take immediately?

If any answer is uncertain, do not rely on assumption. Obtain sufficient evidence to make a confident operational decision before allowing work to proceed.

**Field Reminder**

**Do not verify paperwork. Verify the workplace.**

Documentation records the intended controls. Field verification confirms that those controls exist, remain effective and continue to protect people throughout the work.

**Safe Work  
Enables  
Sustainable  
Operations**

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System



THINK  
QUESTION  
VERIFY  
STAY SAFE

## D.2

## Confined Space Entry

### Critical Control Verification Card

Field Reference Guide



#### What Are We Preventing?

- Prevent exposure to atmospheric and physical hazards.



#### What Are We Verifying?

- Isolation of the confined space from the process in order to ensure no fluid, gas or materials can enter the confined space and endanger personnel within it.
- Current gas test available.
- Atmospheric conditions acceptable.
- Ventilation operating.
- Standby person present.
- Rescue equipment immediately available.
- Communication established.



#### Good Verification Looks Like

- Gas testing repeated whenever conditions change.
- The frequency and method of atmospheric monitoring are appropriate to the hazards and conditions of the entry.



#### Poor Verification Looks Like

- Gas test completed several hours earlier.
- Ventilation assumed effective.
- Rescue equipment unavailable.



#### Stop Work If

- Gas testing expires.
- Ventilation stops.
- Rescue arrangements become unavailable.
- Atmospheric conditions change.



#### Universal Verification Principles

##### Regardless of the Critical Control, always ask:

- Can I see the control?
- Can I demonstrate that it is effective?
- Could anything reasonably cause it to fail during the work?
- If it failed, how would we know?
- What action would we take immediately?

If any answer is uncertain, do not rely on assumption. Obtain sufficient evidence to make a confident operational decision before allowing work to proceed.



#### Field Reminder

**Do not verify paperwork.  
Verify the workplace.**

Documentation records the intended controls. Field verification confirms that those controls exist, remain effective and continue to protect people throughout the work.



Safe Work  
Enables  
Sustainable  
Operations

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System



**THINK  
QUESTION  
VERIFY  
STAY SAFE**

D.3

## Working at Height

### Critical Control Verification Card

Field Reference Guide



|                                                                                     |                                     |                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>What Are We Preventing?</b>      | <ul style="list-style-type: none"> <li>• Prevent falls from height and falling objects.</li> </ul>                                                                                                                                                                                                                           |
|    | <b>What Should Be Verified?</b>     | <ul style="list-style-type: none"> <li>• Approved access provided.</li> <li>• Platform inspected.</li> <li>• Harness inspected.</li> <li>• Approved anchor point available.</li> <li>• Continuous attachment possible.</li> <li>• Dropped-object controls established.</li> <li>• Rescue arrangements understood.</li> </ul> |
|  | <b>Good Verification Looks Like</b> | <ul style="list-style-type: none"> <li>• Continuous fall protection is maintained in accordance with the approved access and fall-protection system.</li> </ul>                                                                                                                                                              |
|  | <b>Poor Verification Looks Like</b> | <ul style="list-style-type: none"> <li>• Harness worn but not connected.</li> <li>• Improvised anchor point.</li> <li>• Loose tools at height.</li> </ul>                                                                                                                                                                    |
|  | <b>Stop Work If</b>                 | <ul style="list-style-type: none"> <li>• Anchor point becomes unavailable.</li> <li>• Weather exceeds safe limits.</li> <li>• Access equipment becomes unstable.</li> <li>• Rescue arrangements cannot be maintained.</li> </ul>                                                                                             |



**Universal Verification Principles**

**Regardless of the Critical Control, always ask:**

- Can I see the control?
- Can I demonstrate that it is effective?
- Could anything reasonably cause it to fail during the work?
- If it failed, how would we know?
- What action would we take immediately?

If any answer is uncertain, do not rely on assumption. Obtain sufficient evidence to make a confident operational decision before allowing work to proceed.



**Field Reminder**

**Do not verify paperwork. Verify the workplace.**

Documentation records the intended controls. Field verification confirms that those controls exist, remain effective and continue to protect people throughout the work.



Safe Work  
Enables  
Sustainable  
Operations

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System



**THINK  
QUESTION  
VERIFY  
STAY SAFE**

D.4

## Critical Lifting

### Critical Control Verification Card

Field Reference Guide



|                                                                                     |                                     |                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>What Are We Preventing?</b>      | <ul style="list-style-type: none"> <li>• Prevent dropped loads.</li> </ul>                                                                                                                                                                                                                                                                                            |
|   | <b>What Should Be Verified?</b>     | <ul style="list-style-type: none"> <li>• Lift Plan approved.</li> <li>• Load weight confirmed.</li> <li>• Crane capacity suitable.</li> <li>• Ground conditions acceptable.</li> <li>• Lifting equipment inspected.</li> <li>• Exclusion zone established.</li> <li>• Communications agreed.</li> <li>• Lift configuration matches the approved Lift Plan.</li> </ul> |
|  | <b>Good Verification Looks Like</b> | <ul style="list-style-type: none"> <li>• One Lift Supervisor controls the lift.</li> </ul>                                                                                                                                                                                                                                                                            |
|  | <b>Poor Verification Looks Like</b> | <ul style="list-style-type: none"> <li>• Estimated load weight.</li> <li>• Multiple people directing the crane.</li> <li>• Workers inside the exclusion zone.</li> </ul>                                                                                                                                                                                              |
|  | <b>Stop Work If</b>                 | <ul style="list-style-type: none"> <li>• Ground conditions deteriorate.</li> <li>• Wind exceeds Lift Plan limits.</li> <li>• Communications fail.</li> <li>• Lift configuration changes.</li> </ul>                                                                                                                                                                   |



**Universal Verification Principles**

Regardless of the Critical Control, always ask:

- Can I see the control?
- Can I demonstrate that it is effective?
- Could anything reasonably cause it to fail during the work?
- If it failed, how would we know?
- What action would we take immediately?

If any answer is uncertain, do not rely on assumption. Obtain sufficient evidence to make a confident operational decision before allowing work to proceed.



**Field Reminder**

**Do not verify paperwork.  
Verify the workplace.**

Documentation records the intended controls. Field verification confirms that those controls exist, remain effective and continue to protect people throughout the work.



Safe Work  
Enables  
Sustainable  
Operations

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System



**THINK  
QUESTION  
VERIFY  
STAY SAFE**

D.5

## Excavation

### Critical Control Verification Card

Field Reference Guide



|                                                                                     |                                     |                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>What Are We Preventing?</b>      | <ul style="list-style-type: none"> <li>• Prevent collapse, service strikes and engulfment.</li> </ul>                                                                                                                                                                                                                                               |
|   | <b>What Should Be Verified?</b>     | <ul style="list-style-type: none"> <li>• Underground services have been identified and their location verified using the approved site process.</li> <li>• Excavation Permit approved.</li> <li>• Ground conditions assessed.</li> <li>• Barricades established.</li> <li>• Safe access provided.</li> <li>• Daily inspection completed.</li> </ul> |
|  | <b>Good Verification Looks Like</b> | <ul style="list-style-type: none"> <li>• Inspection repeated after rain or changing ground conditions.</li> </ul>                                                                                                                                                                                                                                   |
|  | <b>Poor Verification Looks Like</b> | <ul style="list-style-type: none"> <li>• Utility drawings assumed accurate.</li> <li>• Spoil placed at excavation edge.</li> <li>• No inspection after weather changes.</li> </ul>                                                                                                                                                                  |
|  | <b>Stop Work If</b>                 | <ul style="list-style-type: none"> <li>• Ground movement observed.</li> <li>• Unknown service discovered.</li> <li>• Water ingress occurs.</li> <li>• Barricades removed.</li> </ul>                                                                                                                                                                |



**Universal Verification Principles**

Regardless of the Critical Control, always ask:

- Can I see the control?
- Can I demonstrate that it is effective?
- Could anything reasonably cause it to fail during the work?
- If it failed, how would we know?
- What action would we take immediately?

If any answer is uncertain, do not rely on assumption. Obtain sufficient evidence to make a confident operational decision before allowing work to proceed.



**Field Reminder**

**Do not verify paperwork.  
Verify the workplace.**

Documentation records the intended controls. Field verification confirms that those controls exist, remain effective and continue to protect people throughout the work.

**Safe Work  
Enables  
Sustainable  
Operations**

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System



**THINK  
QUESTION  
VERIFY  
STAY SAFE**

D.6

## Electrical Work

### Critical Control Verification Card

Field Reference Guide



|                                                                                     |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>What Are We Preventing?</b>      | <ul style="list-style-type: none"> <li>Prevent electric shock and arc flash.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    | <b>What Should Be Verified?</b>     | <ul style="list-style-type: none"> <li>Electrical isolation complete.</li> <li>Electrical protections are in service and available.</li> <li>Testing is scheduled, completed by due date and results are within acceptable limits.</li> <li>Arc flash labelling, and boundaries, is present and is as per Statutory/Vedanta requirements.</li> <li>Arc flash clothing/appropriate PPE available, checked, within its life, correctly rated.</li> <li>Electrical cabinets are in good condition and are appropriate for the environment.</li> <li>Interlocks fitted are serviceable, tested and maintained.</li> <li>Electrical energy access is restricted (Guarding of aerial conductors, controlled access to restricted areas).</li> </ul> |
|  | <b>Good Verification Looks Like</b> | <ul style="list-style-type: none"> <li>Confirmed that the electrical protection is not in service.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|  | <b>Poor Verification Looks Like</b> | <ul style="list-style-type: none"> <li>Breaker opened but not locked.</li> <li>Incorrect PPE.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|  | <b>Stop Work If</b>                 | <ul style="list-style-type: none"> <li>Isolation disturbed.</li> <li>Test equipment unavailable.</li> <li>Work scope changes.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |



**Universal Verification Principles**

Regardless of the Critical Control, always ask:

- Can I see the control?
- Can I demonstrate that it is effective?
- Could anything reasonably cause it to fail during the work?
- If it failed, how would we know?
- What action would we take immediately?

If any answer is uncertain, do not rely on assumption. Obtain sufficient evidence to make a confident operational decision before allowing work to proceed.



**Field Reminder**

**Do not verify paperwork. Verify the workplace.**

Documentation records the intended controls. Field verification confirms that those controls exist, remain effective and continue to protect people throughout the work.



Safe Work  
Enables  
Sustainable  
Operations

# Guidance Note - Operational Work Control Handbook \_ Permit to Work System

## D.7

## Mobile Equipment & Pedestrian Interface

### Critical Control Verification Card

Field Reference Guide



#### What Are We Preventing?

- Prevent collisions between people and mobile equipment.



#### What Should Be Verified?

- Driver/ Operator has the required competency certification to operate the equipment (authorization & license).
- Traffic management plan is available and the arrangements are understood.
- Pedestrian routes segregated.
- Spotter appointed where required.
- Positive communication established.
- Vehicles and mobile equipment are fit and their fitness is confirmed with pre-operational checks.



#### Good Verification Looks Like

- Operator and pedestrian confirm understanding before entering shared work areas.



#### Poor Verification Looks Like

- Workers assume they have been seen.
- Vehicle left running during maintenance.
- No exclusion zone established.



#### Stop Work If

- Visual contact lost.
- Spotter unavailable.
- Traffic routes change unexpectedly.
- Mobile equipment enters the work area without coordination.



#### Universal Verification Principles

Regardless of the Critical Control, always ask:

- Can I see the control?
- Can I demonstrate that it is effective?
- Could anything reasonably cause it to fail during the work?
- If it failed, how would we know?
- What action would we take immediately?

If any answer is uncertain, do not rely on assumption. Obtain sufficient evidence to make a confident operational decision before allowing work to proceed.



#### Field Reminder

**Do not verify paperwork.  
Verify the workplace.**

Documentation records the intended controls. Field verification confirms that those controls exist, remain effective and continue to protect people throughout the work.



Safe Work  
Enables  
Sustainable  
Operations

# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Appendix E: PTW Playbook



## PTW PLAYBOOK

Practical Implementation Framework for TS24 and GN48

E.1
Purpose
🎯

- The PTW Playbook provides the practical implementation framework between TS24 and the field. It may be adapted to local systems provided the minimum requirements of TS24 are maintained.

E.2
Document Hierarchy
📁

- TS24** – What Vedanta requires: principles, accountabilities and minimum mandatory requirements.
- GN48** – How the requirements should be understood and applied: role guidance, decision models, technical guidance and examples.
- PTW Playbook** – How the Business implements the process: local procedures, role matrices, Permit categories, digital workflow and supporting arrangements.
- Field Tools** – What people use at the workplace: decision aids, verification cards, handover prompts, checklists and briefing aids.
- The Playbook shall not create requirements that contradict or reduce TS24.

E.3
Work and Permit Selection
📋

- Define the job, location, work boundaries and method.
- Identify the credible fatality or high-consequence scenario.
- Identify hazards requiring specific controls.
- Determine whether the work requires a Permit under TS24 and Business Unit procedure.
- Determine whether more than one Permit category applies.
- Where multiple Permits or interacting controls exist, establish an Integrated Work Package.

**⚠️ Never select a Permit simply because a particular tool is being used. Select the required Permit(s) based on the hazards and controls that must be managed.**

E.4
Integrated Work Package
⚙️

- One work scope.
- One agreed sequence.
- One fatality scenario.
- One integrated risk assessment.
- Compatible Permit conditions.
- Aligned supporting documents.
- One integrated pre-job briefing.
- One shared operational understanding.

**📄 If one document changes, consider the effect on every other document and on the operational decision before work resumes.**

E.5
Operational Decision Gates
🚦

GN48 uses **nine Operational Decision Gates** as a practical implementation model. They are not intended to become a second approval bureaucracy.

- DG1 **Work Planned:** Is the work sufficiently understood and planned?
- DG2 **Risk Understood:** Are hazards, Critical Risks and required controls understood?
- DG3 **Controls Verified:** Have applicable Critical Controls been verified with appropriate evidence?
- DG4 **Workplace Ready:** Can the workplace be safely released for the work?
- DG5 **Work Authorised:** Can the work safely begin under the current authorisation?
- DG6 **Work Controlled:** Can the work safely continue as conditions and circumstances evolve?
- DG7 **Work Completed:** Is the authorised work genuinely complete and the workplace safe?
- DG8 **Plant Reinstated:** Can the plant safely return to Operations?
- DG9 **Permit Closed:** Has operational responsibility been formally returned and the record completed?

**🚦 Each gate should produce a conscious operational decision: GO, HOLD or STOP. The evidence and decision should be traceable through the Business Unit PTW system.**

E.6
Role and Decision Authority Matrix
👥

- Area Authority** – operational control of the workplace.
- Permit Issuer** – authorisation of hazardous work.
- Permit Acceptor** – acceptance of authorised work.
- Performing Authority** – supervision of execution.
- Isolation Authority** – isolation verification where applicable.
- Work Party** – safe execution and immediate reporting of changes.
- HSE** – governance, assurance, learning and technical support; not routine operational authorisation.

E.7
Shift Change-over Playbook
🔄

- A shift change is a transfer of operational responsibility. The handover should be treated as a control point, not an administrative exchange.

| 👤 <b>Outgoing shift – prepare the handover:</b>                                                                                                                                                                                                                                                                                                                                                           | 👤 <b>Joint handover – where practicable:</b>                                                                                                                                                                                                                                    | 👤 <b>Incoming shift – accept responsibility only after confirming:</b>                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Current work status and completed work.</li> <li>Remaining work and expected sequence.</li> <li>Current Permit and IWP status.</li> <li>Critical Controls and isolation status.</li> <li>Changes from the original plan.</li> <li>Outstanding hazards, restrictions and temporary conditions.</li> <li>Any suspended, unresolved or unusual conditions.</li> </ul> | <ul style="list-style-type: none"> <li>Review the actual workplace.</li> <li>Confirm work boundaries.</li> <li>Confirm current equipment and isolation status.</li> <li>Discuss changes and unresolved conditions.</li> <li>Confirm what would require work to stop.</li> </ul> | <ul style="list-style-type: none"> <li>The current work is understood.</li> <li>The current controls are understood and effective.</li> <li>The basis of the original authorisation remains valid.</li> <li>Outstanding risks and restrictions are understood.</li> <li>The work can safely continue.</li> </ul> |

**🔄 A routine shift change does not automatically require a new Permit. If the handover identifies a change affecting operational control, manage the change before continuing.**

E.8
Change and Revalidation
🔄

- Identify the change.
- Pause long enough to understand it.
- Determine whether it affects the basis of the original operational decision.
- Reassess affected Critical Controls and supporting documents.
- Decide whether to continue, amend/revalidate, or stop and reauthorise.
- Re-brief affected personnel before resuming.

**📄 The change itself does not determine the outcome. Its effect on the operational decision does.**

E.9
Completion and Close-out
✅

- Work complete.
- Temporary equipment removed.
- Guards and safeguards restored.
- Housekeeping complete.
- Isolations managed correctly.
- Operations accepts the workplace.
- Operational responsibility formally returned.
- Permit closed and records retained.

E.10
Assurance and Learning
📊

- Business Unit assurance should combine workplace observation, Permit/IWP review, Critical Control verification, competency assurance, incident learning and analysis of recurring organisational patterns.
- The objective is not to maximise findings. It is to identify conditions that affect the organisation's ability to maintain Operational Work Control and determine whether improvement changes future operational decisions.



# Guidance Note - Operational Work Control Handbook \_

## Permit to Work System

### Appendix F: Field Tools



# FIELD TOOLS

These tools support judgement at the workplace. They do not replace TS24, Business Unit procedures or competent decision-making.

**THINK  
QUESTION  
VERIFY  
STAY SAFE**

**F1** One-Minute Operational Control Aid


- Has anything changed?
- Does that change affect the original operational decision?
- Can I explain the work, sequence, Critical Controls and conditions for safe continuation?
- If not, what must happen before work continues?


Pause. Understand the difference. Reassess the decision. Then act.

**F2** Permit Quality Field Card


- Is the work scope specific and bounded?
- Is the credible fatality scenario clear?
- Are Critical Controls specific, observable and verifiable?
- Do all supporting documents tell the same story?
- Does the workplace match the Permit?
- Does every signature represent a completed operational decision?

**F3** Leadership Field Questions


- Walk me through the job.
- What could have gone seriously wrong?
- Which decision mattered most?
- What evidence gave you confidence?
- What changed during the work?
- What would make you stop?
- If this job were repeated next week, what could we change to make the right decision easier?

**F4** Critical Control Verification Card


- What exactly are we trying to prevent?
- What evidence would convince us that the control is effective?
- Can I see or demonstrate the control?
- What could cause it to fail during the work?
- How would we know if it failed?
- What action would we take immediately?
- When should the control be verified again?


Do not verify paperwork. Verify the workplace.

**F5** Shift Change-over Card


**Before the outgoing shift leaves:**

- What has been completed?
- What remains?
- What has changed?
- What Critical Controls and isolations remain in place?
- What temporary or unusual conditions exist?
- What would require the work to stop?

**Before the incoming shift assumes control:**

- I understand the current work.
- I understand the current controls.
- I understand the current conditions.
- I understand what has changed.
- I am satisfied that the basis of the authorisation remains valid.

**F6** Integrated Work Package Card


- One work scope.
- One sequence.
- One fatality scenario.
- One integrated risk assessment.
- Compatible controls and Permit conditions.
- Aligned supporting documents.
- One integrated briefing.
- One operational understanding.

**F7** Pre-Job Briefing Card


- What are we doing?
- Where are the boundaries?
- What could seriously harm someone?
- Which Critical Controls prevent that event?
- Who is responsible for what?
- What are the interfaces with other work?
- What changes would require us to stop?
- Ask selected workers to explain the work back in their own words.

**F8** Work Suspension / Restart Card


Stop when operational control cannot be demonstrated or maintained.

- Pause and understand why work stopped.
- Review affected work scope, conditions and controls.
- Review the IWP where relevant.
- Reverify affected Critical Controls.
- Re-brief the work party where required.
- Revalidate or reauthorise as required.
- Resume only when operational control is restored.

**F9** Completion Card


- Work complete.
- Temporary items removed.
- Guards and safeguards restored.
- Housekeeping complete.
- Isolations managed correctly.
- Workplace accepted by Operations.
- Operational responsibility returned.
- Permit closed.

**F10** HSE Assurance Card


- Am I evaluating the work or merely the paperwork?
- Is this an isolated finding or a recurring pattern?
- What organisational condition may be producing the pattern?
- What evidence supports that conclusion?
- Which pattern has the greatest potential for serious harm?
- Which leadership conversation should this trigger?
- How will we know whether organisational capability has improved?

