TIPS & ADVICE SPECIAL REPORTS

Safety Procedures That Work

indicator

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THE ROLE OF PROCEDURES IN SAFETY MANAGEMENT

What's the legal position?

There's no legal requirement to ensure that all of the processes etc. on your site are covered by a procedure. But the use of a procedure should be identified in a risk assessment. For example, if there are important rules etc. that staff must follow, then a procedure for the work is likely to be necessary. For example, a method statement is a standard way of identifying what is being done, how, and by whom on a construction project. Having the document in place will ensure all parties know what's going on and how they should be acting.

KEY POINT

There's no specific legal requirement to create procedures; however, they are a recognised way of informing staff and others of safe systems of work.

How are procedures used?

Procedures are used in a range of different circumstances, including:

- **Operations.** To document normal and unusual operating tasks, e.g. start-up, shut-down, normal operation and response to unplanned events.
- **Maintenance.** Often divided into the different disciplines, e.g. mechanical, electrical, utilities, computers and control systems.
- **Administrative.** To explain how management systems are implemented, e.g. safety maintained whilst performing tasks, e.g. permit-to-work, confined space entry, hot work, electrical isolation, incident reporting and investigation.
- **Environmental.** Generic instructions that ensure environmental regulations and standards are maintained whilst performing tasks, e.g. energy conservation, waste disposal, discharge monitoring, incident reporting and investigation.
- **Engineering.** Methods used that ensure design and modification of equipment conforms to standards.

Some procedures are generic in nature, whilst others only cover very specific activities. They may apply over the long term or developed for one-off events. Whatever the circumstances, many of the same principles apply to their development and use.

How do procedures impact on safety?

There are two answers to this question. The first gives a theoretical explanation whilst the second suggests that in practice there is significant divergence from the theory.

The theory says that writing a procedure gives you the opportunity to consider the task, identify potential hazards and develop a method that successfully manages the risk. By writing this down anyone performing the task will know what method has to be used and so the task will always be performed in a safe way.

In practice, the role of procedures can never be so clear-cut. It's impossible to predict every circumstance in which a procedure will be used and to describe every aspect of a task in words. Therefore, the extent to which risks are managed is determined in part by the competence of the staff performing the task. Finally, staff do not like reading procedures, and in some circumstances it's physically impossible or completely counter-productive for someone to be following a procedure line-by-line when carrying out a task.

KEY POINT

Simply writing a procedure has no influence on safety performance. Only if a good procedure is properly implemented and subsequently followed can such a goal be achieved.

WHAT TO INCLUDE IN PROCEDURES

Do we need procedures for every task?

It's counterproductive and unnecessary to write a procedure for every task. The requirement is simply that they are written where their absence can adversely affect the business objectives. Therefore, you need a process for identifying which procedures will actually provide a benefit to the business. Not only will this allow you to focus your efforts, you will be able to answer employees, auditors or regulatory inspectors when they ask "why haven't you got a procedure?"

TIP

It's not necessary to write a procedure for every task, but you need a process for identifying which ones you actually need.

How do we decide which tasks need procedures?

Answering the following questions can help you to identify which procedures will actually be of benefit:

- **How complex is the task?** If it's highly complex, staff are likely to get confused, miss steps or carry them out in the wrong order. If it's a simple task, it's very unlikely anyone will ever choose to read a procedure as they will feel they know what they are doing.
- **How critical is the task?** If it's a very critical task, the consequences of getting it wrong will be severe so there's an incentive to encourage the use of a procedure. If the potential consequences are minor, the effort of writing, implanting and maintaining procedures is unlikely to be justified.
- **How often does someone perform the task?** The more often someone performs a task, the less likely they are to perceive the need to use the procedure, no matter how complex or critical the task is. If the task is performed infrequently, staff will be more inclined to look for the reassurance of a procedure provided they perceive the effort required to find and use it is worthwhile.
- **How much time does someone have to find and use the procedure?** Where a task is planned well in advance, staff have time to prepare themselves by getting the procedure out and reading it through. For unplanned, rapidly occurring events, there may not be enough time.

TIP

You need to understand the task before you can decide whether writing a procedure is justified.

What's a critical task?

It's sometimes difficult to decide which tasks are critical and will require a procedure. Staff will often conclude that all tasks are critical "otherwise we wouldn't do them". Whilst this is true to a certain extent, it's not very helpful. Therefore, it's useful to agree some criteria to use in determining a task's

criticality. The following should be considered:

- nature of hazard involved - the potential to cause harm based on inherent properties and quantities involved
- how the task interacts with the hazard
- presence of safety systems - of particular concern if they are disabled as part of the task
- introduction of an ignition source
- potential consequences of error
- reliance on communication between individuals and teams.

If necessary, it's possible to score or rate each task against the criteria. The tasks with the highest overall score are the most critical.

TIP

In order to avoid every task being considered critical it's sometimes useful to have a set or agreed criteria against which to rate each task.

How do we justify having some tasks without procedures?

There are two main justifications for not having a procedure for every task. The first is that the more there are, the less likely they are to be used because staff cannot find what they are looking for. The second is that procedures are actually a poor method of risk control on their own.

KEY POINT

Although it's quite logical not to have procedures for every task, some people will be uncomfortable with this philosophy. As well as highlighting the practical benefits, it may be necessary to point out that procedures are actually quite a poor method of controlling risks on their own.

How do we decide what content to include?

To determine what content to include in the procedure, it's necessary to understand why it was considered necessary in the first place. Given that this is largely related to the task's complexity, criticality and frequency that it's performed, the following considerations are likely to apply:

- **Complex tasks.** The content of the procedure needs to support the user so that they can perform the task without getting confused or making the wrong decision.
- **Critical tasks.** The procedure needs to highlight the steps that ensure the associated hazards are kept under control.
- **Planned, infrequent tasks.** The procedure needs to be comprehensive to overcome unfamiliarity.
- **Unplanned, infrequent tasks.** The procedure needs to prompt staff to make decisions and select appropriate actions.

Is there anything in particular that can be left out?

Many companies have standards that require every procedure to have the same basic sections. These may include a glossary or definitions, revision or authorisation history, distribution list, purpose or scope. Whilst the purpose of these is valid, they bulk out procedures with extra text that can deter staff from reading them. Also, staff will tend to skip over these sections and sometimes miss important, task-specific information.

These extra sections are often there to make administration easier rather than to improve usability. If a glossary is considered necessary, there must be some question about whether suitable language has been used. So just use simple references in headers or footers along with effective page numbering as a pointer to extra information.

KEY POINTS

- **to decide the content of a procedure you need to understand why a procedure was considered necessary in the first place, based on the task's complexity, criticality and the frequency it's performed**
- **avoid adding sections for administrative purposes as the extra text can deter people from reading procedures or cause them to skip over important information. Simple references in headers or footers, along with good page numbering are usually sufficient.**

WRITING PROCEDURES

What's the best approach to writing procedures?

It's generally better to spread the workload over a longer time frame, rather than trying to churn out procedures quickly.

Who should write procedures?

Ideally, writing procedures should be the responsibility of the staff who will ultimately use them because they will describe methods which are actually used in a way that is easily understood by the end-users. One or more individuals should be given a facilitation role to organise the process.

TIP

It's much better if procedures are written by groups of people who will use them rather being assigned to an individual.

How do we get other staff involved?

Companies often state that they achieve user involvement in procedure writing by requiring everyone to review and sign all new procedures before they are implemented. Unfortunately, this is rarely effective because staff are inclined to sign-off procedures without checking them in detail. They often sign to say the procedure is acceptable, not that it's the method they use or that they would use in the future.

A compromise may be required. Rather than getting everyone together, it's usually acceptable to involve small groups of staff who represent a range of views from the group as a whole. However, as well as being involved in the writing, it's important that they are also responsible for explaining the procedure to their colleagues so that everyone agrees they will use the procedure in the future.

TIP

Assigning small groups the responsibility to develop and implement procedures is usually a practical method of progress that will encourage others to use the procedures.

How do we know the procedure is safe?

Companies that have previously used technical personnel to write procedures are often concerned that ones developed by end-users may be unsafe. This is a possibility, but it makes little difference if the procedure is never used.

To ensure procedures are safe, it's important that they are technically reviewed before formal issue. This is an important responsibility that must be assigned to someone with the appropriate competence and an understanding of what the new procedures are aiming to achieve. In performing their review, they should ask themselves the following questions:

- what are the hazards associated with each step, can they be removed or the risk reduced?
- why is each step performed, is it necessary or can it be simplified?

- how long does the step take?
- how do we know the step is complete? Is there a reliable indication or is it easy to misinterpret the information?
- can parts of the task be performed earlier, in a different order, in parallel with others or more effectively?

KEY POINT

Technical review is an important part of the process, but must not detract from the requirement to have a usable procedure system.

What are the basic rules when writing procedures?

Key guidance includes:

- use simple and concise language
- avoid jargon and acronyms
- ensure any warnings appear before the relevant parts of the procedure
- use active rather than passive language
- don't capitalise sections of text and avoid italics because they are more difficult to read - underline text for emphasis instead
- only write one task step per paragraph.

TIP

It's important to consider how the procedure is presented to make it clear and unambiguous.

Does one size fit all?

Many companies have taken the approach that all procedures must follow the same format. It has often been perceived that it's easier to achieve quality systems and standards this way. These procedures tend to have a lot of text, which is further increased by making certain requirements mandatory for every procedure, e.g. purpose, definitions, references etc.

The reality is that different formats of procedure lend themselves to different types of task. There is a place for the traditional, text-based procedure, but this is really restricted to planned tasks that are performed infrequently, e.g. major start-up and shutdowns of complex systems. For many tasks, a more simplified format, perhaps using flowcharts and diagrams, is often more useful and appealing to the user.

Whilst it's rarely appropriate to have one format for all procedures, it's quite acceptable to have a number of templates so that the most applicable can be chosen for each task. This gives a balance between tailoring the format to specific tasks while keeping some standardisation.

KEY POINT

There is no single format that suits every task in every situation, but having a number of templates for different procedures is helpful for creating a benchmark and maintaining standards.

How do we decide what format to use?

It's necessary to select the correct format for the nature of the task and the circumstances in which it will be used. Some try to get away from text-based procedures and convert them all to flow charts and checklists, but these alternative formats are only suitable for certain types of task.

The following provides some guidance when formatting a procedure:

- **Traditional, text-based procedure.** These are never particularly useful when a task is actually being performed. However, they can be useful for pre-task preparation and training.
- **Checklists.** Useful when performing relatively long, complex tasks as they allow staff to keep track of progress. However, they need to be used sparingly as having too many checklists or requirements for ticks and signatures can be counterproductive as staff start to complete them without thinking carefully.
- **Flowcharts.** Useful for assisting staff when making decisions and/or selecting an appropriate course of action.
- **Diagrams.** Useful for physical tasks where staff need to be able to locate particular components.
- **Tables and charts.** Reduces the need for mental arithmetic, which is prone to error.
- **Job aids.** Bulleted lists, local notices and labels give a quick overview of main parts of the task or reminders about key actions. They are particularly useful if they are located close to the task so the effort to retrieve them is minimised.

TIP

Using the right format for the task will make it far more useful and more likely to be used in practice.

KEY POINTS

- **the basic rules for writing procedures related to use of language and text formatting apply, no matter what format is selected for a task**
- **the format of a procedure needs to be appropriate to the nature of the task and the circumstances in which it's performed. There is no single format, but having a number of templates for different procedures is helpful**
- **getting away from a "one size fits all" approach means more appropriate formats can be used for procedures and this means they are far more likely to be used in practice.**

IMPLEMENTING THE PROCEDURES

How should we introduce new procedures?

If someone is going to use a procedure, they need to know it exists, understand when it needs to be used and be able to find it. If an existing procedure has changed, staff need to understand what has changed and be able to access the latest version. Unfortunately, simply sending a memo or e-mail to everyone is rarely enough. Staff are busy and will only look for a procedure when they feel they need it, which may be some considerable time after they received the memo. Also, simply asking them to read a new procedure is not enough to ensure they understand it and its differences from the previous version.

If the users of the procedure have been involved in the development, they will already have a good understanding of what it covers and need relatively little information. However, involving everyone is rarely practical and so it's likely that staff will need some information. Everyone will need training on the new procedure; this may take the form of a five-minute briefing or it could be a formal training course. This highlights why procedures, training and competence must all be considered closely together.

KEY POINT

It's not good enough just to tell staff a new procedure has been issued, they need to understand why it was issued, when it's to be used and how it differs from any previous procedure.

Do procedures need to be complete before issue?

Before a procedure can be formally issued it's important that it's had a technical review and is incorporated into a document control system. However, this process can take some time, potentially leaving a void for the user. In this case, you need to ask yourself whether it's better to make an incomplete procedure available, with the risk that it may include some errors, or to delay it with the risk that staff will be performing a task without a procedure. There is no one answer to this, but it does highlight the fact that technical review and document control should be achieved as quickly as possible.

Where the plan is to produce a number of procedures, another question is whether it's better to wait until they are all complete before issue, or to release individual procedures as they become available. If staff know procedures are being developed but they do not see any output, they will start to wonder what is happening. This can make them reluctant to get involved and when they finally receive the procedures the amount they need to read may deter them from doing a proper review. At the start of a procedure development project it may make sense to delay issue until a few examples are available, but then each procedure should be released when it's complete.

TIP

People expect to see results and so it's important to make sure any delays in issuing procedures are minimised.

Where should procedures be kept?

Staff must be able to easily access and obtain the latest version of a procedure. Anything that makes it difficult simply increases the likelihood that the procedure won't be used.

For planned tasks that are performed infrequently, it's perfectly acceptable to keep electronic copies, providing part of the planning for the task involves printing the latest version. In other cases, whilst making the electronic copy available for reference is a good idea, some controlled hard copies are usually required.

When considering where to locate hard copies, it's important to remember the aim is to make it as easy as possible to obtain the procedure you want. In many ways the best solution is to present the procedure as a sign or label in the workplace. Where this is not possible, well-organised folders are more than adequate as long as the number of procedures is minimised to those relevant.

KEY POINT

Despite the advancement of technology, staff will generally want hard copies of procedures to be readily available. These need to be controlled whilst being easy to locate and access should be as near to the work site as possible.

What document control do we need?

Both the electronic and hard copies of procedures will need to be controlled. The copies of procedures accessed via a computer should be write-protected so that anyone accessing cannot make unauthorised changes. Also, if a copy is printed from the computer it should be made clear that it's uncontrolled and should not be retained for future use. It will be necessary to make changes in the future and the staff authorised to do this will need access, possibly via a password.

For hard copies, it's important that a log is kept of when they have been issued. All should be marked with a revision number so that it can be identified as the latest version. Old copies should be destroyed and staff should be discouraged from making unofficial copies.

KEY POINT

Electronic and hard copies of procedures need to be controlled so that staff know they are working with the latest version and to ensure any changes are properly authorised and implemented.

How do we know if a procedure needs updating?

As with any system it's important that you continually monitor the performance of your procedure system. The following questions will help you identify whether you need to make changes to an individual procedure or the system as a whole:

- are the procedures being used as intended? If not, why?
- are staff providing feedback about the procedures? If not, it may be that staff do not think it's important that they are up-to-date
- have new procedures been introduced as a result of changes in the workplace, this can include new equipment, personnel changes or updates to working methods?
- are new procedures implemented quickly and efficiently?

- are procedures used during training?
- are procedures kept in the right place?
- are only the most up-to-date procedures available?
- are they in a good physical condition? If they are dirty and worn it's a good sign that they are being used, but they may need to be reprinted more regularly
- are only necessary procedures in place, or have there been any knee-jerk reactions to events that have resulted in procedures being developed that do not follow the overall philosophy?
- are there any obsolete procedures still in circulation?

Usually, if something is wrong with a number of procedures it means that there is something wrong with the overall system. It can be a sign that the company's culture has not accepted procedure use as a core value.

TIP

You need to continually review the situation to identify where individual procedures, your system or company culture, may need improving.

What should we do when things change?

Changes to equipment, number of staff available to perform the task, their skills or experience, regulations, good practice or other methods, e.g. management, administrative or safety systems, can all require changes to procedures. So if change occurs, the need to produce new procedures or update existing ones should be considered.

The modification process should follow the same principles set out above for development, including involvement of end-users, technical review, document control and implementation. It's vital that procedure users are informed about changes, including what has changed and why. Previous versions of procedures must be disposed of, although it's good practice to keep an archived copy.

How do we drive improvement?

Even if nothing changes, there may be opportunities to improve the way tasks are performed and so procedures will then need to be updated. This is particularly important where the staff performing the tasks feel they have identified an improvement, as they might experiment with a new method even if the procedure is not updated.

Staff are naturally quite resistant to change, and may need to be convinced that the benefits of a procedural update are worthwhile. Again, involving procedure users in updates is a good way of overcoming any negativity.

KEY POINT

Even if nothing changes there may be opportunities to improve the way tasks are performed. However, staff can be resistant to change and so implementation of new procedures in these circumstances need to be managed carefully.

COMMON PROBLEMS WITH PROCEDURES

Why are procedures not always used?

Obviously, if procedures have not been written for the tasks staff perform, they cannot be used. However, when procedures have been written, there are many reasons why they might not be used. For example:

- staff are not able to find the procedure they need
- they don't know a procedure exists
- they think they know how to perform the task and so don't need the procedure
- they believe the procedure is incorrect
- it's physically impossible to read the procedure whilst doing the task
- the culture in the organisation means that staff are considered inferior if they need, or choose, to use a procedure.

Is failure to use a procedure always a problem?

In many cases staff don't use procedures because they think they don't need them, especially for frequently performed tasks for which they've received training and have experience. Just because someone is not reading a procedure when they are performing a task does not mean they are necessarily using an unsafe or unapproved method. In other words, the procedure is "in their head". For many tasks you'll want staff to be competent without needing to read a procedure.

Should we cover everything?

It's unlikely that written procedures will cover every eventuality. If staff have to refer to procedures all the time, it may suggest they lack basic competence, and are unable to understand the risks they are dealing with. If they blindly follow procedures, it's possible that they will sometimes continue with a task even when circumstances make it unsafe to proceed. Bear in mind that even where it's appropriate to be using a procedure, the fact that someone has it open in front of them and appears to be following through the steps, it doesn't necessarily mean they are doing what it says.

KEY POINT

Whilst the aim is to increase the use of procedures, someone having one open in front of them when working doesn't necessarily mean you have solved the problem.

What are the common problems with procedures?

The fundamental problem is that many companies have either provided the wrong procedures, generated ones that do not address the needs of the users or failed to implement their procedures properly or fully. There are a number of reasons why this has occurred.

The desire to comply with regulations or implement management systems has caused particular problems. In these cases, it's often a failure to interpret the requirements properly. For example, ISO9001 requires procedures to be in place where their absence can adversely impact on quality. However, many have interpreted this to mean procedures are required for every task performed, using the rationale that every one could impact on quality to a greater or lesser extent.

KEY POINT

Many problems occur because it's incorrectly assumed that procedures need to be written for every task.

What are the consequences of not using procedures?

Clearly, if staff don't use safe methods of work, there can be serious health and safety consequences. In reality, tasks are often performed in companies without staff following procedures, and there are no mishaps or serious problems. But this doesn't mean that failure to use procedures won't contribute to accidents.

Do we have a particular problem?

Procedures don't provide the panacea many are looking for, but they are still an important element in the management of risks. Asking yourself the following questions will help you understand if you have any particular problems:

- is it common knowledge that your procedures are not the best way to do the job?
- do managers sometimes encourage deviations from procedures or turn a blind eye to get the job done quickly?
- do you review your procedures to identify room for improvement?
- do you update your procedures when things change?
- do you modify your procedures in light of learning from safety, environmental and quality incidents?
- does everyone have the same understanding about whether your procedures need to be followed "to the letter" or are more of a guide?
- do you have records to demonstrate that procedures are being used correctly?

TIP

Answering the questions above will give you an idea of how your procedures work in practice and whether they have a positive contribution to the management of risks.

WHAT TO CONSIDER WHEN IMPROVING PROCEDURES

What should be the aim of a procedure?

Companies often get into trouble because they look at one procedure at a time and not the whole system. Each one, when looked at individually, may appear to be fit for purpose, but taken together the system is unworkable. Therefore, from the start, it's important to have a clear idea of what you are aiming to achieve with your procedures.

The first thing to remember is that a procedure that is not used is of no value, and the time and effort taken to write it was wasted. To understand how this is can be achieved it's important to recognise that there may be different users, and their requirements will vary depending on the type of task. For example, trainees will require procedures to support their training, whereas experienced personnel will only want them for the more complex, infrequently performed tasks.

KEY POINT

It's important to look at the whole procedures system and focus on the user's needs.

Where do we start to improve our procedures?

A good place to start is a gap analysis. However, in this case the "gaps" are not necessarily where a procedure does not exist, but perhaps where the existing procedure does not fulfil or exceed the user's requirements.

A good way of carrying out this gap analysis is to generate a list of tasks that are performed in the workplace. For each task you can ask:

- does a procedure exist?
- is it up-to-date?
- is it in a suitable format for users?
- is it being used?
- is it required?

This is a relatively easy task, and gives you a very good understanding of where you are starting from. It also allows you to see how many procedures are already in place, their status and suitability. And from this you can start to prioritise.

How do we generate a task list?

Spending some time to generate a list of tasks is usually of great benefit. Not only does it allow you to prioritise your work, it has a multitude of other uses. For example, the same list can be particularly useful when identifying training needs and assessing competence.

There are a number of different ways of developing a task list. Typically, a set of headings is useful for both identifying the tasks and structuring the list. It doesn't particularly matter which you use, as long as it suits your business activities.

Usually, it makes sense to have separate headings for operational, maintenance and emergency tasks. These can be further sub-divided according to geographical or departmental areas, or types of task.

KEY POINT

Generating a comprehensive task list is a great way to start when improving procedures. The list should be structured in line with your business and is likely to be far longer than the list of procedures you have or need.