



Mining & Quarrying
OCCUPATIONAL HEALTH &
SAFETY COMMITTEE

Safe Operating Procedures Guide

Promoting Work Health and Safety in the Workplace

The South Australian Mining and Quarrying Occupational Health and Safety Committee

Promoting Work Health and Safety in the Workplace

This workplace industry safety resource is developed and fully funded by the Mining and Quarrying Occupational Health and Safety Committee (MAQOHSC).

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Safe Operating Procedures Guide

AIM

The aim of this Guidance Material is to provide a Person Conducting a Business or Undertaking (PCBU) with practical guidance on Safe Operating Procedures (SOPs).

Forward

Documenting procedures and eliminating unplanned approaches to workplace health and safety are a vital part of your legislative responsibility to provide and maintain a safe working environment. Safe operating procedures are a critical component of this responsibility to provide a systematic and organised approach to workplace safety.

1. What is a Safe Operating Procedure?

A safe operating procedure (SOP) is a written document that provides step-by-step instructions on how to safely perform a task or activity which involves some risk to health and safety. A safe operating procedure is sometimes referred to as a safe work procedure or safe work method statement.

2. When do I need a Safe Operating Procedure?

Safe operating procedures may need to be developed as a risk control measure:

- When indicated from the outcomes of a risk assessment carried out in accordance with legislative requirements to identify hazards and manage risks to health and safety;
- When introducing new work practices;
- When introducing new equipment / technology; or
- Following on from a workplace inspection, either internal or external (i.e. regulatory inspection).

Note: *The above list is not exhaustive and should be used as a guide only.*

3. Risk Management

As a safe operating procedure is a risk control measure designed to ensure the health and safety of workers and others. The first step in developing a safe operating procedure is to conduct an assessment of the task. This involves the use of a Job Safety Analysis (JSA), sometimes referred to as a Job Safety Environment Analysis (JSEA), Task Hazard Analysis (THA), or Job Hazard Analysis (JHA).

Note: See the MAQOHSC Hazard Identification and Risk Management Guide and Job Safety Analysis Template for further assistance and guidance.

4. Content of a Safe Operating Procedure

A safe operating procedure should include:

- The task / process to be undertaken;
- Details of any legislative requirements that are appropriate and have been considered in the safe operating procedure, e.g. for high risk tasks, forklift operations, confined space entry, hot works, etc.;
- Definitions of any specialised or unusual terms;
- Specific information regarding the potential hazards and associated risks of the task;
- Precautions required to eliminate or adequately control the risk prior to commencing the task, such as isolation procedures, ensuring guarding is in place, communication procedures, etc.;
- Personal protective equipment (PPE) required to be worn while undertaking the task, (this includes site standard personal protective equipment);
- The environment where the task shall or should be undertaken;
- Clear and simple instructions for undertaking the task in a safe manner;
- Correct environmental, cleanup and waste disposal measures, this will require referring to any appropriate safety data sheets (SDSs);
- Emergency procedures; and
- Shutdown and housekeeping.

Each safe operating procedure must be dated and assigned a document control number, a version number, an issue date, a review date and detail the document owner and approver.

Note: See the Safe Operating Procedure Template, Appendix A.

5. How to prepare a Safe Operating Procedure

Safe operating procedures should be written using plain English and must be set out in a concise, logical, step-by-step, easy-to-read format. The use of photos or diagrams may assist with this process.

Reference to the manufacturer's or supplier's user manuals or information may be required to assist in providing accurate information.

The safe operating procedure should be written and developed in consultation with workers (inclusive of any elected Health and Safety Representatives HSRs) and others involved in the task.

Note: Documented records of the consultation will need to be recorded and maintained. The MAQOHSC Document Review Form Template will be of assistance.

5.1. Sequence of job steps

Break down the task or operation into the basic steps to complete the work task and / or operate the item of plant / equipment. For example, what is done first, what is done next and so on.

Record each step of the task in the order of normal sequence, making sure you describe what is done, not how it is done. As a working guide, the task description should be contained within approximately 10 broad steps. This of course may vary depending on the complexity and the hazardous nature of the job.

5.2. Potential hazards / risks

For each step in the work task, list the potential hazards / risks that are reasonably foreseeable.

This may include, but is not limited to:

- Being struck by or contacted by anything;
- Striking against or contacting anything;
- Being caught in, on, under or between anything;
- Falling from height or being exposed to falling objects;
- Hazardous manual tasks;
- Being exposed to welding rays, fumes, light, electricity or other forms of energy;
- Being exposed to stored energy; or
- Being exposed to hazardous chemicals.

5.3. Recommended control measures

For each step in the work task, list the most appropriate risk control measure that will eliminate or minimise the risk to the person(s) completing the work task.

For each potential hazard / risk, identify and list the steps of how the work task is to be completed, including what the operator(s) should or should not do to manage the level of risk. Specifically describe the safe operating procedure and precautions that must be taken for each step.

Attach any appropriate information or references. A safe operating procedure may reference other safe operating procedures.

5.4. Personal Protective Equipment (PPE)

List the types of Personal Protective Equipment that is required to be used whilst undertaking the task.

Note: *This includes site standard Personal Protective Equipment.*

5.5. Perform the task

Test the written procedure by carrying out the task in accordance with the documented safe operating procedure, completing the following checks:

- Inspect the task again;
- Check the upstream and downstream tasks that may have an impact;
- Seek improvement to the work method;
- Consider all hazards at each step;
- Ensure understanding in the work group or an individual worker of the hazards associated with each step of the procedure; and
- Reassess and modify the safe operating procedure, as required.

Note: *Each time the safe operating procedure is modified a new version shall need to be recorded.*

6. Training

Training and instruction on the safe operating procedure must be provided to all persons that shall be required to undertake the task / process for which the safe operating procedure was developed. This may include a verification of competency (VOC) for operational procedures, such as for loaders, crushers, dump trucks, cutting saws, etc.

Note: *See the MAQOHSC Verification of Competency Guide for further information.*

A record of the completed training must be maintained.

Note: *See the MAQOHSC Training and Qualifications Register.*

7. Review of Safe Operating Procedures

Safe operating procedures should be reviewed on a periodic basis, e.g. every 2 years, depending upon the level of risk, to ensure that the procedure remains current and appropriate.

Reviews of safe operating procedures will be required sooner than two years in the event:

- An incident occurs that relates to the safe operating procedure;
- There has been a change to a process;
- New plant or equipment is introduced; or
- New chemicals or substances are introduced.

If a safe operating procedure describes a task or process that is no longer required to be followed, then the safe operating procedure should immediately be withdrawn and archived.

FURTHER ASSISTANCE

MAQOHSC Work Health and Safety Specialists are available to provide further advice and assistance on all Work Health and Safety matters.

MAQOHSC Work Health and Safety Specialists are able to be contacted via our website at www.maqohsc.sa.gov.au or email maqohsc@sa.gov.au.

ADDITIONAL INFORMATION

Work Health and Safety Legislation, Codes of Practice, fact sheets, Health and Safety Representatives (HSR) information and guides can be found at the following websites:

SafeWork SA – www.safework.sa.gov.au or call 1300 365 255

Safe Work Australia – www.safeworkaustralia.gov.au or call 1300 551 832

Appendix A: Safe Operating Procedure Template *(ensure to delete)*

| | | | |
|-----------------|--|-----------------|--|
| Document No: | | Version Number: | |
| Issue Date: | | Review Date: | |
| Document Owner: | | Signature: | |
| Approver: | | Signature: | |

| | |
|--|--|
| Task Description | |
| Competencies (Licences and competencies required to perform the work) | |
| Tools and Equipment (Any additional tools and equipment required to perform the task) | |
| Chemicals and Substances (Chemicals or substances that will be used to perform the work) | |
| Isolations required (Does this task require any isolations, e.g. for performing maintenance tasks on plant or equipment) | |
| Permits required (Such as Hot Work Permit, Working at Heights Permit, Confined Space Entry Permit) | |
| References (Documents that are to be referred to when performing the task, e.g. other safe operating procedures, legislative requirements, etc.) | |

ANY PROBLEMS, MALFUNCTIONS OR DAMAGE TO EQUIPMENT OR GUARDING MUST BE REPORTED TO YOUR SUPERVISOR

| | Steps and Safety Instructions How to do the work in the right order including safety instructions | Hazards Applicable at each step in the work process (refer Job Safety Analysis) | Risk Controls |
|----|---|--|----------------------|
| 1. | | | |
| 2. | | | |

Insert Company Logo
Here

Title _____

Safe Operating Procedure

ANY PROBLEMS, MALFUNCTIONS OR DAMAGE TO EQUIPMENT OR GUARDING MUST BE REPORTED TO YOUR SUPERVISOR

| | Steps and Safety Instructions How to do the work in the right order including safety instructions | Hazards Applicable at each step in the work process (refer Job Safety Analysis) | Risk Controls |
|-----|---|--|----------------------|
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
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| 8. | | | |
| 9. | | | |
| 10. | | | |
| 11. | | | |
| 12. | | | |

Insert Company Logo
Here

Title _____
Safe Operating Procedure

I have read and understand the procedure described above and are aware of my legal obligation to follow the procedure.

Where I have identified this procedure to be incorrect or incomplete, I will immediately report it to my Supervisor and conduct a risk assessment to ensure adequate controls are in place to manage the hazard before commencing the task.

Signed _____

Print Name _____

Date _____

Supervisor Signature _____

Note: *This section is to be removed and recorded in the workers training file.*

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