DEVELOPING AND IMPLEMENTING A SAFETY MANAGEMENT SYSTEM IN AN ADVENTURE OPERATION

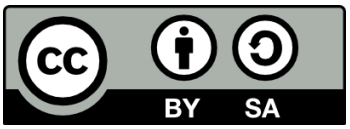
(SA AIA Guideline for Safety Management Systems)

ADVENTURE INDUSTRY ASSOCIATION

A GUIDELINE BY S.A.A.I.A

(SA Adventure Industry Association)

Author:	Rob Thomas	robt@sml.co.za
Contributors:	Dewald Venter	DewaldH.Venter@gmail.com
	Pieter Snyman	SnymanPieterL@gmail.com



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1. BACKGROUND

Although the adventure industry uses activities of varying degrees of risk in order to achieve its goals, the risks associated with those activities need to be carefully managed.

As evidenced from the drowning of a school pupil from Parktown Boys High on 15 January 2020, it takes just one high profile accident to do massive and almost irreparable harm to the entire adventure industry. Many adventure-camp operators providing adventure-based developmental camps to schools lost all of their business for several months during the busiest part of the year as a direct consequence of this accident, despite the fact that they had no involvement in the accident at all.

At face value, the proper implementation and entrenchment of a safety management system would have prevented this death and therefore the damage done.

It is vitally important to keep in mind that the real purpose of a Safety Management System is to identify sources of danger and then implement measures to prevent accidents. A secondary purpose of the SAFETY MANAGEMENT SYSTEM is to ensure that if an accident or incident does occur then the operator already has a plan in place to minimise the harm that may arise from the accident or incident. The purpose of a Safety Management System is NOT to protect you in court. If your primary reason for having a Safety Management System is to use it as evidence in court then your focus is in the wrong place. Your best defence in court is not to end up there in the first place, which is best achieved by preventing the accidents through the thoughtful implementation of a rational, robust SAFETY MANAGEMENT SYSTEM.

After comparing a number of standards, SA AIA decided that ISO 21101, published by the International Standards Organisation, would be the best fit for the broader adventure industry in SA and adopted that as their recommended standard

The South African adventure industry as a whole, and not just those operators who cater to the needs of schools, would benefit from having structured safety management systems in place. Some operators already have sound SAFETY MANAGEMENT SYSTEMs in place, but many simply don't know where to start.

The purpose of this document is to provide adventure operators with a basic framework from which to develop a Safety Management System for their operation which is appropriate to the adventure industry. In doing so they will have met many (but not all) of the requirements of ISO21101. The purpose of this document is NOT to simply provide a set of templates into which an operator plugs the name of their operation and changes a couple of details and then assumes that they have a working SAFETY MANAGEMENT SYSTEM. The true value lies within the thought processes that go into developing the SAFETY MANAGEMENT SYSTEM and not just the documents that are a product of that process.

2. OVERVIEW OF A SAFETY MANAGEMENT SYSTEM

2.1. PURPOSE

The purpose of a a Safety Management System is to provide a structured approach to the identification and management of the aspects of an adventure operation that entail risk over and above that which is faced in day-to-day living. For most adventure operators this means looking at the specific activities that they offer and managing the risks associated with those activities, but it should also address the risks that are inherent to their physical location.

If properly implemented, a Safety Management System will analyse both the venue's location as well as the activities offered by it and seek to:

2.1.1. Establish an overall approach to safety management
2.1.2. Identify the various role-players and their responsibilities
2.1.3. Identify the hazards present
2.1.4. Analyse the risks posed by each hazard, both physical and emotional
2.1.5. Identify the controls required to manage the risks
2.1.6. Implement the identified controls to ensure that the risks are adequately managed
2.1.7. Monitor the implementation of the controls
2.1.8. Correct any deficiencies that are identified in the implementation of the controls

2.2. COMPONENTS

The SAFETY MANAGEMENT SYSTEM contains various components. Most SAFETY MANAGEMENT SYSTEMs will include the following:

2.2.1. An overarching Safety Policy
2.2.2. A Code of Conduct
2.2.3. A Risk Assessment for the venue as a whole
2.2.4. A Risk Assessment for each activity that details the planned responses to identified risks.
2.2.5. A Standard Operating Procedure for each activity
2.2.6. An Incident Management Procedure
2.2.7. Training records
2.2.8. Proforma documentation for participants which includes medical particulars and assumption of risk agreements

In addition, it may include policies that support the objectives of the safety policy w.r.t:

2.2.9. The Protection of Minors
2.2.10. Compliance with the POPI Act
2.2.11. Substance Abuse
2.2.12. A STANDARD OPERATING PROCEDURE for the selection, care, inspection, use, storage and retirement of equipment
2.2.13. A Transport STANDARD OPERATING PROCEDURE

The venue's Disciplinary Policy must be adapted to address implementation of and adherence to the various aspects of the SAFETY MANAGEMENT SYSTEM.

2.3. INTEGRATION

The SAFETY MANAGEMENT SYSTEM is an integrated system. Individual components should not be seen as stand-alone items but must integrate with one another. For example, a previously unidentified

hazard may come to light as part of an incident report. The SAFETY MANAGEMENT SYSTEM needs to have a mechanism to record this hazard and what (if any) actions need to be taken to address the hazard. This may require a review of a specific Risk Assessment which may, in turn result in a change to a Standard Operating Procedure that, in turn again, requires a training update for those staff involved in facilitating the activity in question. The SAFETY MANAGEMENT SYSTEM needs to track the progress of each step in order to ensure that all of the corrective actions are implemented.

2.4. SCALEABILITY

The scale, depth and breadth of a Safety Management System will vary from one operation to another. It is unlikely that a small adventure operation involving one single activity with no overnight accommodation and 3 or 4 staff would need a written training record for each staff member, as all staff would likely be present at any meeting that addresses training needs. Conversely, a large operation that might have hundreds of attendees from a number of different client organisations present on site for several days at a time would need to address the physical, legal and emotional risk issues that arise in the risk management associated with these complexities, sometimes even going as far as including application to the local municipal Joint Operations Committee (JOC). For some operations this SAFETY MANAGEMENT SYSTEM may go so far as to have a Master Document Index to track the changes made to various documents (including those within the SAFETY MANAGEMENT SYSTEM), thus making sure that everyone is aware of which version of a document is the currently authoritative version.

Each operation should assess whether the SAFETY MANAGEMENT SYSTEM it has implemented meets the needs of keeping track of and managing these issues. There is no one-size-fits-all solution.

3. SAFETY POLICY

3.1. PURPOSE

The Safety Policy is the over-arching document that lays out how safety will be managed by the operation. It sets the framework for how the process of maintaining safety will be implemented and monitored and explains how the various components should interact with one another.

3.2. KEY ASPECTS

Typical aspects to be addressed in the document (normally as distinct headings / paragraphs) may include:

3.2.1. Who the stakeholders are that would be affected by a safety-related incident and how such incident would affect them.
3.2.2. Who the Safety Policy seeks to protect.
3.2.3. What the objectives of the Safety Policy are.
3.2.4. A description of the overall SAFETY MANAGEMENT SYSTEM and its components.
3.2.5. Roles and responsibilities w.r.t. implementing the SAFETY MANAGEMENT SYSTEM.
3.2.6. Which day-to-day aspects are addressed by the SAFETY MANAGEMENT SYSTEM.
3.2.7. The adventure activities conducted by the venue and how the SAFETY MANAGEMENT SYSTEM addresses them.
3.2.8. How the various aspects of the SAFETY MANAGEMENT SYSTEM fit together (RAs, STANDARD OPERATING PROCEDUREs, Incident Reports, Safety Action Register, etc)

3.2.9. How the implementation of the SAFETY MANAGEMENT SYSTEM is to be monitored and managed.
3.2.10. How often the SAFETY MANAGEMENT SYSTEM and its implementation should be reviewed.
3.2.11. What information needs to be conveyed to participants and the timeframes for various aspects of communication to clients, participants or stakeholders.

3.3. PERIODIC REVIEW

The Safety Policy is not a static policy. It needs to be reviewed at least one per year in order to ensure that it has kept pace with the reality of the operation. It is strongly recommended that the Safety Policy be reviewed at least once every 12 months.

4. CODE(S) OF CONDUCT

A code of conduct will describe to people what behaviour is expected of them. A very large part of this code of conduct will explain the role of the individual and the behaviour that is expected of them in support of safety at the venue. The key components of a code of conduct will allow the individual to understand their role in maintaining safety. It will often list general and specific behaviours that are respectively expected of the individual and that are prohibited.

The individual is expected to adopt this code of conduct as their own. This is often done by signing a written copy of the code of conduct, but can sometimes be done purely by obtaining verbal agreement.

Best practice would be to have different codes of conduct for staff and for clients/participants.

5. DISCIPLINARY POLICY

Any operation that employs staff or contract workers will have need a disciplinary policy as part of its standard HR practices. The disciplinary policy should contain specific provisions that deal with failure to adhere to the provisions of the SAFETY MANAGEMENT SYSTEM. In addition it should be made clear that any action which places the safety of another in danger is deemed to be extremely serious, even if not specifically mentioned in any part of the SAFETY MANAGEMENT SYSTEM. What is important, though, is that certain actions should be specifically mentioned (such as wilful non-adherence to a STANDARD OPERATING PROCEDURE).

Furthermore, the operation needs to have a disciplinary policy that applies to clients, especially for activities that last more than a day. It is also advisable for the contract with the client to include a clause according to which the participant subjects themselves to the disciplinary policy. Depending on the depth of this policy, it may suffice to include the broad strokes of it in the code of conduct to which the participants subscribe at the start.

6. RISK ASSESSMENTS

Each of the aspects that was itemised in 3.2.6 and 3.2.7 should be subjected to a RA. As a matter of course, each RA should be revisited each time the Safety Policy is reviewed, or at least at the same

interval. The purpose of revisiting the RA is to check whether any new hazards have crept in (or are no longer resent) and also whether the responses to hazards remain appropriate.

6.1. PURPOSE

The purpose of the RA is to analyse the activity or daily living aspect for hazards, and then to work out how the operation intends to respond to each hazard so reach a point where the risk has been managed down to an acceptable level.

6.2. GENERAL FORMAT

The most frequently used format for a RA is a matrix. Each aspect of an activity is analysed and the following topics are addressed:

6.2.1. Aspect /Phase
6.2.2. Hazard
6.2.3. Risk / Description of the unwanted event
6.2.4. The probability of the event occurring
6.2.5. The potential consequences if the event does occur
6.2.6. A risk ranking without any controls in place
6.2.7. The response to the hazard (accept, reject, how to mitigate)

6.3. OUTPUTS

It is important that the RA should not just be a paper exercise but that responses identified in 6.2.7 should be put into practice. It is therefore helpful to have a final column in the RA that record where the proposed response is implemented or addressed. It is in implementing the responses that we manage the risks.

7. STANDARD OPERATING PROCEDURES

The STANDARD OPERATING PROCEDURE explains the “how to” of any activity and needs to be very carefully written. The STANDARD OPERATING PROCEDURE should be both sufficient and minimally prescriptive. It is very easy to fall into the two traps of either writing an STANDARD OPERATING PROCEDURE that is so vague that there is nothing standardised in it, or so tightly prescriptive that the smallest deviation places the operator in breach of the STANDARD OPERATING PROCEDURE.

The big advantages of the STANDARD OPERATING PROCEDURE are that (a) the facilitator / guide is given clear direction as to how to prepare for, commence, execute and terminate a task or activity, thus removing the need for them to craft their own solutions and (b) the operator has a well thought out procedure that, if properly implemented, makes the likelihood of an accident or incident very slim indeed.

7.1. PURPOSE

The purpose of the STANDARD OPERATING PROCEDURE is primarily to protect the operation from the risks inherent in the activity. Secondary benefits are that is ensures that the correct equipment is available, that appropriately-trained staff are leading the activity, that the administration associated with the activity is complete and that the equipment is correctly maintained.

7.2. KEY COMPONENTS

A STANDARD OPERATING PROCEDURE will typically address most of the following aspects of preparing for, running and concluding the activity:

7.2.1. The metadata surrounding the STANDARD OPERATING PROCEDURE, such as version number, approvals, who is responsible for it, when it is due for review and the procedure to be followed if a staff member identifies a shortcoming or wishes to request a change.
7.2.2. A description of the activity and the objectives associated with it.
7.2.3. Any referenced documents or referenced legal requirements.
7.2.4. A description of the intended participant relation / engagement with the activity and the potential emotional risks.
7.2.5. The location where the activity is to take place, or a description of the characteristics of the location if it may be done in various locations.
7.2.6. Restrictions on the activity w.r.t. operating hours or other conditions.
7.2.7. The required qualifications and capabilities of the staff.
7.2.8. Acceptable staff to participant ratios.
7.2.9. Any requirements in terms of participant ability (physical or emotional / cognitive), or reasons that a participant's degree of participation may need to be limited.
7.2.10. Responsibilities of the staff.
7.2.11. Required equipment and quantities.
7.2.12. Pre-activity preparation.
7.2.13. How the activity is to be configured / set up.
7.2.14. Responsibilities of the participants.
7.2.15. Essential elements of the briefing to participants.
7.2.16. Conditions under which the activity should be suspended.
7.2.17. Activity process flow.
7.2.18. Post activity procedures to be followed.
7.2.19. Emergency procedures (if not covered by a generic Emergency Procedure).

7.3. ENTRENCHMENT

STANDARD OPERATING PROCEDURES should not be theoretical documents. They need to be used in order to have value. In order for this to happen staff need to be intimately familiar with the STANDARD OPERATING PROCEDURE and should be able to refer to it at any time. For this reason it is advisable that a copy of the STANDARD OPERATING PROCEDURE should form part of the activity equipment. It is also advisable that staff should have their understanding of the STANDARD OPERATING PROCEDURE formally assessed.

7.4. MATCHING THE PRACTICE TO STANDARD OPERATING PROCEDURE

A STANDARD OPERATING PROCEDURE which is not adhered to is a recipe for disaster. The STANDARD OPERATING PROCEDURE is created in order to ensure a consistency of approach within the organisation that is based on best practice. Having staff who deviate from the STANDARD OPERATING PROCEDURE without repercussions creates a culture of "normalisation of deviance" which then runs the risk of permeating to other areas of the operation. If a staff member feels that the STANDARD OPERATING PROCEDURE is either impractical or sub-optimal then they need to request a change to the STANDARD OPERATING PROCEDURE. This change can then be evaluated for the risk/reward balance and (if accepted) the STANDARD OPERATING PROCEDURE can then be changed to reflect the new practice. Staff to choose to deviate from the STANDARD OPERATING PROCEDURE should be counselled and if this fails should be disciplined.

8. TRAINING RECORDS

In the larger operations it becomes necessary to have a written record of each staff member's training completed, as well as when any training needs to be refreshed or redone. A register of training records then becomes essential. This may be as simple as a board in the Ops Manager's office or it may be an entire file dealing with training. Either way, training events should also be reflected in facilitators' / guides' logbooks.

Training can be any one of a number of formats, depending on the complexity or the task and the risks associated with it. These formats can include:

- On the job coaching
- In-house workshops
- In-house formal training
- Online external workshops / training
- External participation-only training
- External training with formal certification
- Conferences and seminars

8.1. PURPOSE

The purpose of the training record is to keep track of staff training in order to ensure that any staff who are given a task are appropriately trained to carry out that task safely w.r.t. technical, non-technical, risk and safety and environmental abilities. For this reason the training record needs to reflect the demands of the organisation and its activities. The skills required in the STANDARD OPERATING PROCEDURES and EMERGENCY PROCEDURES need to be reflected as training requirements.

It is essential that management understand exactly what a certification includes and excludes, and what the exit-level capabilities are once the training has been completed. One example sometimes seen is that staff are recruited possessing a "Water Safety" certificate. Some questioning reveals that their training covers only very basic personal swimming skills and the use of rescue aids such as throw ropes and buoys. They are not capable of in-water contact rescues ("life-saving techniques"), yet people with these qualifications have been given life-guard duty at venue swimming pools.

8.2. CONTENT

A training record should reflect very simple information. This would include the name of the staff member, the name of the training course or workshop, when completed and when the refresher is due.

9. INCIDENT AND EMERGENCY MANAGEMENT PROCEDURE

Despite all the measures we put into place we may find ourselves in a situation where an emergency arises and we need to be prepared for that eventuality. The Emergency Management Procedure should preferably be as simple and as generic as possible so that people who are in stressful situations

do not need to think too much about them. It also helps if each staff member has a laminated card with basic instructions on it as an aide memoire.

It is also vitally important that emergency plans get practiced from time to time. Some of the practices can be "walk-through" type practices and others can be simulations.

9.1. PURPOSE

The Emergency Management Procedure provides a pre-defined response template for managing emergencies as well as smaller incidents, removing the need for people to "think on their feet" whilst trying to manage the emergency.

9.2. COMPONENTS

An Emergency management plan will typically contain:

9.2.1. Emergency response organogram.
9.2.2. Emergency contact details of the main office, operations manager and any other key role players (first aiders, life savers, etc).
9.2.3. Emergency contact details of outside support organisations (Medical, Fire, Police, etc)
9.2.4. First aid kit inspection and replenishment processes.
9.2.5. Site diagram with evacuation routes and emergency assembly points.
9.2.6. Site plan showing water, electricity and gas layout.
9.2.7. Simple response flow for various types of emergencies, such as medical, fire, crime, missing participant, etc.
9.2.8. Emergency resources available on site (sometimes with a map / location diagramme).
9.2.9. Maps of the venue and how to get there, as well as other location information and road directions.
9.2.10. Any post-incident actions that are required such as a notification to the liability insurer, quarantine of involved equipment, debriefs, follow-up with client, etc.
9.2.11. Incident report form as an appendix.
9.2.12. Appendix containing the contents list of the field first aid kits so that staff can do a stock check before heading out into the field.

9.3. POST-INCIDENT / POST-ACCIDENT FEEDBACK

It is strongly suggested that significant incidents are subject to a formal debrief in order to extract the lessons that present themselves to be learned. Similarly, incident report forms should contain some form of notification in the event that an unexpected hazard / behaviour has been encountered that requires re-looking at the Risk Assessments / STANDARD OPERATING PROCEDUREs.

10. COMMUNICATION TO PARTICIPANTS AND CLIENTS

Part of managing safety is ensuring that participants are adequately prepared before arriving for their adventure. This needs to be communicated sufficiently in advance to allow participants to conduct the necessary preparation before they arrive so that they arrive with everything they need and their families have the required information while they are gone.

10.1. INFORMATION TO COMMUNICATE

There is a lot of information that can be communicated and the degree of detail will vary from one organisation to another. Topics which need to be considered include but are not limited to:

10.1.1. Dates and timeframes for the proposed activity.
10.1.2. Description and location of the venue.
10.1.3. Single point of contact administrative contact number.
10.1.4. After hours emergency contact number(s). …and perhaps a few examples of what actually constitutes (and does NOT constitute) an emergency.
10.1.5. Any other notes on communications, such as what routine communications can be expected from the operation to those at home, and what communications infrastructure exists at the venue.
10.1.6. Personal information particulars required for each participants, such as name, age, sex, medical problems, family doctor, medical aid details, any medications currently taken (and dosage regime).
10.1.7. What the participant should bring and what they should specifically not bring.
10.1.8. The need for spare medications, spare prescription spectacles / contact lenses, etc.
10.1.9. Notification of any skills or abilities required.
10.1.10. Recommendations w.r.t. any physical preparation that may be necessary.
10.1.11. Whether venue insurance covers medical care or not.
10.1.12. Policy relating to transportation of sick / injured participants (transport by venue vs ambulance)
10.1.13. Mobile phone reception and on-site data connectivity.
10.1.14. Policy w.r.t. sharing of photographs after the event.

11. A FINAL NOTE

A SAFETY MANAGEMENT SYSTEM is only as robust as its implementation. This needs to become part of the organisation's DNA, so to speak. Impressive documents sitting neatly in a file mean nothing if the actual practices don't match them or if the staff are unware of their contents. It takes time to entrench a Safety Management System properly and it can be a frustrating process if staff don't buy in to the process. Taking the time to explain to staff what the benefits are to them, and how they have a say in the development of the SAFETY MANAGEMENT SYSTEM goes a long way towards getting it ingrained in the culture of the organisation. It needs to be a formal part of staff induction and should include subsequent testing of staff knowledge, comprehension and adherence on a regular basis

Good luck with your implementation!

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