

# ISO 14001 - The Seven (7) Steps To Certification

## EnviroRisk Management

### EXECUTIVE SUMMARY

The last few years have seen an influx of companies aiming to be certified to the international standard AS/NZS ISO 14001:1996 Environmental Management Systems – Specification with Guidance for Use to demonstrate to the public a commitment to managing environmental impacts resulting from daily business activities.

During this period lessons have been learnt about the path best travelled in order to achieve certification in a time and resource efficient manner.

The path to certification involves seven (7) steps:

#### Step 1: Highly visible top level commitment

It is essential that the top management effectively promote the EMS throughout the whole organisation. It is important that Senior Managers be seen to be involved with, and supportive of, employee actions and initiatives.

#### Step 2: A comprehensive initial review

It is interesting to note that many companies expect that meeting ISO 14001 will be as simple as pasting the word 'environment' into existing quality or health and safety documentation. This is not the case as the main feature of ISO 14001 is the identification and control of significant environmental impacts.

The initial review exposes the 'gaps' in existing management systems to control activities with potential for causing environmental impact.

#### Step 3: Site based 'Champions' at functional levels to lead program

To successfully implement an EMS, a site-based team of 'Champions' striving to achieve goals is paramount. These 'Champions' drive the implementation process and demand ownership through their 'can do' attitude and enthusiasm. Champions are invaluable and should be sought from the beginning of the systems implementation.

#### Step 4: Detailed compliance and conformance review

Environmental performance versus strict compliance with legislation is generally not measured prior to implementing an EMS, particularly by the small to medium sized organisations. This predominantly amounts to a lack of awareness of applicable legislation.

As the Environmental Policy is to include a commitment to comply with legislation, it is critical that specialists review legislative requirements and that compliance be demonstrated.

#### Step 5: Integration of systems documentation

The increasing importance of implementing management systems can lead to generating an abundance of documentation, most of which is only read by the systems coordinator. Although there are significant differences in management system standards, there is a certain amount of documentation that can be readily integrated, eliminating duplication of documents, condensing and simplifying the system.

#### Step 6: Education and awareness

In many cases there is minimal environmental awareness throughout the workforce. It is impossible to have a system that manages environmental aspects without operational personnel being aware of the risks.

Training needs to be conducted in a timely manner throughout the organisation to educate employees. The level of training for each individual will be dependent on their level of involvement in environmental impact areas.

#### Step 7: Final status check audit

To ensure that all the essential elements of the EMS are completed, a final status audit should be conducted, with a particular emphasis on operational control procedures.

In addition to the audit reinforcing that the system is functional, it provides evidence of continual improvement when compared to the initial review.

This paper expands on our hands on experiences applying the Seven (7) Step approach to a sustainable EMS.

### **KEY WORDS**

ISO 14001:EMS, Certification, Implementation

### **INTRODUCTION**

With increased environmental awareness in society and industry today, more pressure is being applied to reduce impacts on the environment from everyday activities. This pressure has encouraged industries to implement an Environmental Management System (EMS) and be certified to a standard to demonstrate their efforts for managing impacts on the environment. In recent times the EMS's have been based on the international standard AS/NZS ISO 14001:1996 Environmental management systems – Specification with guidance for Use (ISO 14001).

Today it quite common for companies of any size to implement an EMS, where possible, alongside or integrated with existing management systems such as quality and health and safety.

It is also becoming apparent that unless you have an EMS certified to the ISO 14001 standard, that providing products and services within and outside Australia is more difficult, especially when competitor companies are certified.

One factor contributing to an increased number of companies being certified to ISO14001 in recent times is the directive from larger industries for their supplier companies to have a system certified to ISO 14001 to remain in the supplier chain.

This factor has enabled us to take a number of organisations from scratch to certification to the ISO 14001 standard. During our time working alongside companies to implement a certifiable system important lessons have been learnt. Experience has revealed that organisations, regardless of their size and operations, should progress along a Seven (7) Step framework to ensure certification requirements are met in a timely and sustainable manner. The Seven (7) Steps are explained below.

### **Step 1: Highly Visible Top Level Commitment**

The successful implementation of an EMS requires commitment from Management to put into effect a new work culture and allocating capital to upgrade any facilities to meet environmental objectives.

There will be a need for renewed environmental focus within the organisation. It is therefore important that Senior Managers be seen to be involved with, and supportive of, employee actions and initiatives. Managers must 'walk the talk'.

At the commencement of implementing an EMS in many organisations, environmental awareness is at a minimum. In addition to this, the perception of implementing another system (believed to mean more work for everyone), right from the start can introduce some negativity. Company directors, general managers and executives, whether or not they know all the fine details of an EMS, need to provide direction to all employees and stress that an EMS is the way of the future for the company.

Having a management representative made responsible for ensuring the EMS is implemented and certified has proven to work well. This person or these people, have contact with people at all levels of the organisation to ensure the system is established smoothly.

### **Step 2: A Comprehensive Initial Review**

Conducting an initial environmental review is critical to identify any gaps in a company's current environmental management performance.

It is interesting to note that many companies with existing management systems expect that meeting ISO 14001 will be as simple as pasting the word 'environment' into existing quality or health and safety documentation.

This is not the case as the main feature of ISO 14001 is the identification and control of significant environmental impacts, an element not considered in other standards.



**Figure 1 Environmental aspect – drum storage**

We have found that the EMS implementation process must include a comprehensive initial baseline review. We explain that this is the best way to approach implementing a system for two reasons:

1. it highlights the status of the current system that exists at the company; and
2. enables an accurate schedule to be developed to establish the EMS.

Conducting an initial review is especially worthwhile when the company feels that because they have a management system such as quality or health and safety, that adding in the environmental component will be an easy task. Going through the review questions based on ISO 14001 elements at these companies in a majority of cases reveals critical gaps in ISO 14001 requirements. The gaps generally comprise:

1. Aspects and Impacts (and associated operational control procedures, objectives and targets etc.); and
2. Legal and Other Requirements.

Due to much of ISO 14001 being based on environmental aspects and impacts, having quality and/or health and safety systems in place usually positions a company only a quarter to a third of the way through the environmental management system implementation process.

For companies with few systems in place, the focus is typically on health, safety and quality. The environment is not seen as an important business issue until practices are pointed out that could represent non-compliance to environmental legislation and the cost of the potential fine. For these companies, an initial review highlights the important requirements in ISO 14001, process change requirements and an appreciation of the timeframe and resources necessary to implement and maintain a functional EMS.

In many instances the initial review has identified a large number of gaps and caused some concern to companies if they have already set a date for their third party certification audit before properly considering what is involved in an EMS.

The AS/NZS ISO 14004 General guidelines on principles, systems and supporting techniques, highlights items that need to be considered in the initial review. The initial review must include a site assessment to identify the current status of environmental management practices including details of air, water and noise emissions, waste management, and environmental risk items including fuel/ oil/ chemical storage, amenity protection and emergency preparedness.

An initial review that provides assistance to the site and its management team can include a graphical summary that rates the site based on a percentage followed up with recommendations highlighting where and what additional work is necessary to meet certification. The initial review also needs to identify where physical work needs to be carried out to meet good practice guidelines and regulatory requirements. Such issues can include installing bunds and pollution control devices.

If performed properly, the initial review report can become the basis for the organisations Environmental Management Program (EMP) and help demonstrate continual improvement when reviewed at a later stage.

### **Step 3: Site Based 'Champions' at Functional Levels to Lead Program**

A sustainable Environmental Management System requires more than making a few amendments to some Quality Control procedures. An EMS requires people to identify and

solve problems. We title these problem solvers or task achievers 'Champions'. Such people are invaluable for implementing successful EMS's and should be sought from the outset.

Site based Champions are critical as they initiate and fulfil projects to improve environmental performance. It is much easier to influence cultural change (if required) in an organisation when there are key people involved up-front with the issues.

Where significant aspects are identified in the initial review, the 'Champions' act on recommendations and find ways to streamline activities or processes to minimise waste of resources.



**Figure 2 Site based Champions**

It is issues such as waste management where these people need to exert their influence. One success story achieved by a site Champion included having waste materials collected for free and recycled, rather than paying a significant cost to have the bulky waste collected and dumped in a landfill.

These people bring the EMS to life with their actions. They demonstrate to all that responsible environmental practice makes good business sense.

Ground level supervisors are good candidates for the 'Champion' role as they work alongside their colleagues everyday ensuring things are done correctly, and these Champions will want their area to meet all goals and timelines it is allocated.

#### **Step 4: Detailed Compliance and Conformance Review**

As pointed out in Step 2, the importance of environmental performance is not usually considered until the potential fines and penalties associated with breaches and non-compliance is pointed out.

A major commitment made in the Environmental Policy is to 'comply with relevant environmental legislation and regulations, and with other requirements to which the organization subscribes' (Joint Technical Committee QR/11 Environmental Management, 1996). This statement requires a company to actually have some understanding of what the rules are and how to abide by them.

There is environmental legislation applicable to every State and Territory in Australia, and indeed every other Country. There are also National or Commonwealth laws. A company

is not expected to hire a full time legal specialist to ensure compliance is ongoing. However, we have found that if there is no internal specialist, a technical specialist or legal adviser well versed in environmental management will save considerable time and effort by providing an overview of the main legislation relevant to site operations.

In addition to the legislation, there are policies, guidelines, licences and bulletins that will be applicable to the site operations and these should also be referenced in procedures.

Due to the nature of some activities and size of operations, some sites need an Environmental licence. The conditions in the licence need to be reviewed to ensure compliance is achieved.

We have found that by reviewing the significant aspects of the site that a relevant list of legislation can be developed. Alongside the 'legislation and other list' we provide a concise explanation of why it is applicable to the site.

Some ways to ensure that you are keeping up to date with any changes in environmental legislation is to have a document with internet hyperlinks to relevant regulatory bodies (eg. Environment Protection Authority). Other ways to keep up with any changes is to subscribe to organisations that provide a newsletter highlighting changes in legislation or that distribute all the latest legislation on a CD-Rom.

A few key players involved in the implementation and maintenance of the EMS must understand the concepts of the legislation. We have found that access to specialists who can respond to questions as they arise has been of considerable advantage.

It is also necessary that any commitments made to programs such as the Greenhouse Challenge, be fulfilled. Programs such as these are part of the 'other requirements'.

### **Step 5: Integration of Systems Documentation**

Where existing documentation relevant to the EMS is available, we recommend making some amendments rather than reinventing the wheel. It is more worthwhile continuing to use documentation that works and that people are already familiar with, instead of implementing large scale change.

Many companies who aim to be certified to ISO 14001 are certified to the Quality Standard ISO 9001. Similarities between ISO 9001 and ISO 14001 include records and document control, internal auditing, training and incident reporting. Being certified to both 9001 and 14001 can enable companies to have one streamline 'business' system.

Identifying EMS elements through a numbering system can follow any process, as long as there is a method of defining how all the procedures, forms and other documents link together (ie. a flow chart). We have found that numbering the system elements in the same order as ISO14001, making any direct references to other applicable systems documents has worked well.

If the company has a systems manager/ co-ordinator, generally that role is responsible for the storage and management of documents and records. A method companies have employed to distinguish between environmental and other systems requirements is to have a green filing cabinet, or a green shelf. All employees relate to green representing the environment.

Through the integration of documentation and eventually systems, it may be possible to save on audit costs and time due to having one external audit instead of separate visits. Integration reduces confusion for employees and minimizes the risk of the incorrect forms or documents being used for handling issues that arise on site.

### Step 6: Education and Awareness

Environmental education and awareness is vital for an EMS. Without an understanding of what an environmental impact is, employees cannot be expected to improve their performance. It needs to be emphasized that the work place and home is part of one environment sharing air, water and soil. After understanding the basics, such as waste costs money, people see the advantages of having an EMS that controls environmental impacts.

General environmental awareness can be promoted throughout the company via tool-box talks, posters and training sessions that include hands on exercises.



Figure 3 Examples of environmental awareness posters

Critical elements in ISO 14001 include environmental aspects and impacts and legislation. 'Train the trainer' involves external specialists assisting a few people in the organisation to understand important areas of environmental management including legislation, auditing and the EMS. These internal people can then send the messages through the company.

Another important element in the EMS is environmental audits. 'Internal auditor training' ensures that some selected people within the company understand the system and are able to identify and correct deficiencies. Upgrading the skills of quality auditors via a one or two day environmental auditor training session has proven successful with most organisations. Having internal auditors ensures that the company will be equipped to meet ongoing audit requirements.

Feedback suggests the use of visual aids best explains good and bad practice. Visual aids include posters, 'before and after' photos of areas on the site, signs, and messages like 'drain only for rain' painted on stormwater grates.

Another method used by a company was to make pocket sized information slips. The information included the environmental policy and the company's slogan for protecting the environment.

### **Step 7: Final Status Check Audit**

At the start of the EMS implementation process we recommend that any gaps be identified in the existing management system. We also recommend that this same review be conducted a couple of weeks prior to the certification audit.

After a majority of the EMS has been established and awareness training commenced, a final status review is necessary to ensure that all the essential elements of the EMS are completed. This review checks that any recommendations made in the initial review have been included in the objectives and targets program and that all necessary procedures are available for review.

As explained in Step 2, the score in the initial review provides a useful reference point. Using the process of initial and final status audit checks, we have found that small to medium sized organisations usually rate about 25 – 40% in the initial review. At the final status check, sites ready for third party certification should score greater than 90%. Allowing a couple more weeks to polish their system implementation has the sites scoring in the high nineties.

In addition to this audit reinforcing that the system is functional, it provides evidence of continual improvement in the company's performances when compared to the initial review. Such continual improvement is a requirement for the certification process.

### **CONCLUSION**

The Seven (7) steps approach to certification has been proven to work. As long as the company is serious about being certified to ISO 14001, following these steps should result in success.

The Seven (7) steps are systematic. This enables the smooth transition of a company with limited environmental management to become a company displaying certification to the ISO 14001 standard.

This method of implementing an EMS's has been commended by the industries we have worked along side

It has proven to be an efficient means to progress through the ISO 14001 certification process and achieve improved environmental performance.

### **ACKNOWLEDGEMENTS**

We would like to acknowledge the contributions of the Companies that invited us to play key roles in the implementation and certification of their EMS in particular Plexicor Australia, GE Plastics Australia, Lothway TBS and Insulform.

### **REFERENCES**

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