

ISO 14000

KC Somaratna, a chemical engineer and a former research and development manager, is the chairman/ managing director of Somaratna Consultants (Pvt) Ltd. He has just established the Somaratna Institute for Professional Advancement (SIPA), which among other subjects offers seminars and courses on obtaining ISO 14000 accreditation. In this interview he answers some of the questions that pertain to the notion of environmental management.

What is ISO 14000?

It is a series of standards not regulations, which focuses on environmental management not performance. It does not tell a company how to be environmentally responsible. It provides a road map as it were, by which a company can meet its environmental goals. It is not intended to replace existing government regulations or other control systems. Instead it encourages voluntary compliance. It allows any manufacturing or service organization in any sector to manage the impact of its activities on the environment.

How does ISO 14000 differ from the ISO 9000 series?

The ISO 9000 series basically looks at the quality management system. ISO 14000 is a standard for environmental management systems. If you look at a product coming out of an organization, you need to have good quality products and how the products are manufactured within an organization is described in the quality management system. Whatever by-products and waste materials result from this process, go into the environment and is no one's concern. There are however, regulations and in order to meet these regulations we need to have a management system within the organization which makes sure the environment is not harmed.



K C Somaratna

So is ISO 14000 applicable only to heavy industries that emit pollutants?

It is applicable to any organization because if you look even at a service organization they produce waste as well. In today's context KC Somaratna you have pollution in liquid, gaseous or solid state, you have noise and heat pollution. All these things need to be looked at if you want to go into ISO 14000 certification.

What is an Environmental Audit?

Systematic, documented verification process of objectively obtaining and evaluating evidence to determine whether specified environmental activities, events, conditions, management systems or information about these matters conform with audit criteria, and communicating the results of this process to the client - (ISO Definition).

Does it logically follow that you have to go through ISO 9000 accreditation before getting 14000 or can you skip and go straight for 14000?

Yes you can. It depends on the context in which you work. It may be that your customers are not very demanding and you have already got a system in place so you don't need to go in for a quality management system such as ISO 9000. But it may be that the environmental lobby and society itself are very restrictive and you

need to look at how you manage the environment, then you need to go in for 14000.

How did the concept of ISO 14000 come about?

In 1991 in response to environmental lobbying and as a result of disaster and accidents taking place, the International Standards Organization (ISO) Technical Committee 176 which was responsible for ISO 9000 suggested a Strategic Advisory Group for Environment (SAGE) to look into the preparation of an environmental management system. In 1993 Technical Committee 207 was appointed to draft all the environmental management system standards.

How would you guide a potential client interested in ISO 14000 accreditation?

To go in for ISO 14000 you need to know a certain amount about environmental and pollution control technology. In 14000 it's not just a matter of getting certification for today, you need to have objectives and targets to improve your performance all the time. And for this you need some amount of technological backing.

We have a data base where we can answer the queries of clients in any industry. We can then give him/her all the regulatory requirements as applicable. If the client wants to know about the technology that needs to be adopted to meet the regulatory requirements, there again we can provide the data. We would carry out an initial audit, study the processes and identify the environmental aspects, identify the regulatory requirements, which might have to be done in a few stages; we would then prepare the objective and targets and help the organization to attain the 14000 certification. We establish the systems necessary to meet the 14000 requirements.

What about the cost factor in obtaining ISO 14000?

The cost is not prohibitive and if the system runs right it should bring in benefits to the organization. It might be wise to work on 9000 and 14000 at the same time so you get both certificates in one go.

However in Sri Lanka we do not have a registrar accreditation board for ISO 14000 yet. The Sri Lanka Standards Institute (SLSI) has been accredited by the Dutch accreditation board for ISO 9000.

As industries become more hi- tech, will they have to conform to higher levels of environmental management?

That's right, it is a cascading effect. As technology develops, the extent of pollution will become less damaging and as environmental requirements get more advanced, society's environmental demands will increase. In the case of noise pollution, today you might tolerate 75 decibels but once technology progresses, you might insist on 45 decibels. It's like a never-ending race and that's the challenge of science and technology.

What we need to remember is that ISO 14000 is really a series of standards. There is environmental labeling, known as eco-labeling, environmental performance evaluation and life cycle assessment. In life cycle assessment we look at where the raw materials came from, how the product was made, what will happen during usage and after disposal and what environmental impacts these will have.

Environmental Management System

The part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy.

What has been your motivation in promoting ISO 14000 in Sri Lanka?

I have been involved in pollution control aspects in different situations. At Haycarb I worked with water purification systems, I have done R&D work on gas masks and I have worked on coir dust. When you look at ISO 9000 consultants I have a terrific advantage over others in the ISO 14000 field because of my chemical engineering background and because of the work I have been doing.

The motto of my Institute SIPA is 'Satisfaction Through Application of Knowledge'. We believe that if Sri Lankans apply 50% of what they know this country would be 100% better!

What kinds of industries in Sri Lanka should address environmental management?

If you look at large industries like cement, paper, petroleum all these people need to look at this issue. I feel ISO 14000 will have an advantage over 9000 because

everybody feels the gravity of it.

You might not be an environmentalist at work, but the moment you come home and you see a cement block manufacturer next door and when you feel the oil and the dust and you start wheezing, you get the impact. I believe it will be easier to motivate people towards 14000.

Benefits of ISO 14000

- Helps to control environmental impacts
- Reduces compliance costs
- Addresses companies, financial goals
- Promotes commitment of top management
- Reduces exposure to liability
- Improves competitive edge
- Reduces need for multiple audits
- Facilitates commercialism by removing international trade barriers
- Provides an opportunity for companies to gain powerful public relations benefits by showing the public that they are environmentally responsible



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