## PERCEPTION OF BASIS OF SHE AND SHE RISK MANAGEMENT

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### INTRODUCTION

After the merger between the two pharmaceutical companies Astra and Zeneca in 1999, it was discovered that they had been working differently with SHE Risk Management. Astra had a not very rigid way of working whilst the Zeneca way was more or less the opposite. A project group was then set up to align the two different ways of working, if possible, into a common guideline and implement a common way of working. This paper outlines the development of SHE Risk Management in AstraZeneca and particularly the perception of those implementing the new way of working.

## SHE RISK MANAGEMENT IN ASTRAZENECA

The project group produced a corporate SHE guideline called "SHE Risk Management" (Fröberg, Preston et al). In the guideline a workflow according to Figure 1 represents the SHE Risk Management model.

One of the keys to effective SHE Risk Management according to the guideline is the provision of relevant information throughout the life of a facility, equipment, process or activity. In the model above this information is provided in the Basis of SHE documents. These documents play a central role in SHE Risk Management.

### BASIS OF SHE

Basis of SHE is a tool to ensure on-going risk management and is in itself NOT a risk assessment tool. Basis of SHE is a result of the risk assessment process, a document that outlines the measures to manage the risks to an appropriate level and enables the review process to be undertaken efficiently and effectively.

### DEFINITIONS

### Basis of SHE

A document that defines the boundaries within which facilities, equipment, processes and activities must be operated to ensure that risk is maintained at tolerable levels.

### SHE risk management

The ongoing process of ensuring that risk is maintained at tolerable levels.



Figure 1. SHE Risk Management model

### Risk

The combination of the severity of the potential consequences arising from a hazard (or combination of hazards) and the likelihood that those consequences will be realised.

## THE STUDY

After the implementation of the corporate SHE guideline SHE Risk Management it was necessary to do a follow up study of the project and to find out peoples perception about the SHE guideline and the proposed documentation called Basis of SHE.

## THE METHODOLOGY

The methodology is an in-depth interview study and each person is asked the same set of questions. The result from the methodology is qualitative, i.e. the result from the study can't be quantified. That is because the questions used are meant to attract a discussion around a specific subject/question and are not meant to measure an opinion.

The information contained in the "summary of findings" sections in this paper is supported by selected quotations from the interviewed people.

The complete set of questions used can be found in Appendix 1.

The study was performed during August to October 2004. The following groups of people were interviewed:

- SHE-specialists in Sweden
- SHE-specialists in UK
- Production line managers in Sweden
- Production line managers in UK

## **RESULTS AND DISCUSSION**

The answers received during the interviews were compared to internal AstraZeneca documentation about the application of SHE risk management. The results of this exercise have been divided into three categories:

- 1. Perception of risk.
- 2. Perception of responsibility for SHE Risk Management
- 3. Perception of Basis of SHE as a tool to aid SHE risk management.

### GENERAL

Discussion of SHE Risk Management with a number of different people shows that there is a misunderstanding of terminology. The term Basis of SHE is often used to describe SHE Risk Management, when in truth the Basis of SHE is merely a tool to assist people to manage SHE risk. The study did not show whether this was merely confusion with the terminology or a more serious lack of understanding of the real meaning of risk management.

### PERCEPTION OF RISK

The definition of risk implies that the probability and the severity of the consequence are given equal consideration when to determining the level of risk, i.e. a consequence with a low severity and high probability shall be given the same level of acceptability as one with high severity and low probability.

### SUMMARY OF FINDINGS

There was no difference in the perception of the term risk among those interviewed. Everyone agreed that the definition used internally in AstraZeneca is valid and usable. However, the Production Line Managers demonstrated a greater awareness of business and economic risks than did the SHE Professionals.

Most of the people interviewed believed that risk is seen mainly as a something negative for people, property or environment. There was also a general feeling that during the risk assessment process within AstraZeneca more time and effort is spent attempting to remove negligible hazards than in the management of significant risk sources and their corresponding risks. There was also wide agreement that risks derived from consequences with high severity and low probability were treated more seriously than those from consequences with low severity and high probability. The survey did not show whether this was the result of a poor understanding of risk among the wider community or a culture of risk aversion.

### QUOTATIONS ABOUT RISK

- 1. "The probability and the frequency when something can go wrong".
- 2. "The consequence of an incident for people, buildings or environment".

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- 3. "A Risk is when you expose people for danger of some sort".
- 4. "It's a bigger risk at home and in the car between home and the workplace".
- 5. "Financial risks".
- 6. "Loss of something, a negative thing".

# QUOTATIONS RELATING TO THE IMPORTANCE OF SEVERITY AND PROBABILITY

1. "No assessment is done on the basis of risk (i.e. consequence\*probability); we just try to find a solution to the negative consequence".

## PERCEPTION OF THE RESPONSIBILITY FOR SHE RISK MANAGEMENT

SHE Risk Management, as defined above, is an ongoing process. It is, therefore important to understand who is responsible for making it happen.

### SUMMARY OF FINDINGS

There was general agreement that the line manager has the responsibility for SHE Risk Management. The identity of this person may vary depending on the state of the facility at a particular time. During normal operation it will be the facility/plant manager who is responsible. However, while a significant capital project is in progress it is likely to be the project manager who assumes the role.

Among those people interviewed there was no doubt that, while it is the manager's responsibility to manage the risks, it the responsibility of everyone to draw attention to SHE risks that are not being managed satisfactorily.

The perception of who owned SHE problems that had been identified varied according to the role of the person being interviewed. Production people generally felt that they were left with problems for which they did not have the expertise to solve. SHE personnel clearly felt that their role was purely to advise and that the responsibility for solving the problem remained with the production managers.

## QUOTATIONS RELATING TO THE RESPONSIBILITY FOR SHE RISK MANAGEMENT

- 1. "The person that has the responsibility for the activity. The Line Manager".
- 2. "If the project is working close to my area, the responsibility can either be shared, the project leaders or mine. We must agree about that from the beginning".
- 3. "Everyone has a responsibility to point to the fact that something can be wrong and raise the question".
- 4. "The Project has the responsibility during the construction and commissioning phase".

# PERCEPTION OF BASIS OF SHE AS A TOOL FOR SHE RISK MANAGEMENT

### SUMMARY OF FINDINGS

When talking about a SHE Risk Management system the general opinion amongst those interviewed was that any new system should be in line with other, related systems that exist today in order to facilitate the use of existing data and ensure compliance with legislation and regulations is made a easy as possible.

Opinion as to how standardized the system should be was divided. Some people preferred a uniform system that was applied rigorously throughout AstraZeneca. Others thought that the system should consist of guiding principles for SHE Risk Management, allowing the individual facilities to develop the detail in a way that is most appropriate to their needs. However, many of those interviewed thought that there was value in having something that make the SHE documents easily recognized throughout the company.

Some of the people interviewed believed that a former system that concentrated heavily on risk assessment was superior and should have been retained while others, from similar backgrounds were happy with the new model where the importance of ongoing risk management is more heavily emphasized.

When trying to describe how a SHE Risk Management system should be designed and used, the interviewees' used words such as

- Robust
- Easy to use
- Clear ownership
- Easy to keep up to date
- Simple

Among those interviewed there was no clear understanding of the definition or purpose of a Basis of SHE beyond the fact that a Basis of SHE is a document covering the hazards and risks in a facility.

Some of the interviewees' believed that the Basis of SHE documents can be used to help build a SHE Risk Management system while other thought that the concept was too complex.

Some people took the opportunity presented by the survey to criticize the number of, apparently, parallel systems with which they have to comply.

Among the people interviewed, those who had been most involved in the project to develop the SHE Risk Management system formed the majority of those who considered it to be worthwhile.

## QUOTATIONS RELATING TO THE PERCEPTION OF BASIS OF SHE AS A TOOL FOR RISK MANAGEMENT

BASIS OF SHE AS A TOOL

- 1. The system should provide "guiding principles for risk management"
- 2. "Changing things in the name of uniformity and consistency does not make friends"

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- 3. "If I had a blank piece of paper and created a system from the beginning it would probably look like Basis of SHE".
- 4. "When the system was introduced the general feeling was that it wasn't as good as had been used previously. People want to stick with what they have done before".
- 5. "Basis of SHE suits our needs. It focuses on relevant risk assessment methodologies".
- 6. "A tool for the facility to document all the hazards".

## PERCEPTION OF BASIS OF SHE

- 1. It provides "a common way of describing risks and developing action plans to deal with residual risks".
- 2. "Basis of SHE is a document that sets out the way of operating a facility so that the S, H and E risks are acceptable".
- 3. It is "a system that ensures that we have a safe working environment".
- 4. "Nearly identical tasks are performed without any obvious connections".
- 5. "Basis of SHE works well".

## USING BASIS OF SHE

- 1. "My experience of Basis of SHE so far in the company is; Whenever anybody does a Basis of SHE they come up with a different answer to the next person".
- 2. "We try to make it fit for purpose. So far, I've haven't heard anyone saying that they find it difficult".
- 3. Basis of SHE "covers all levels of the organization".
- 4. "Easier than the previous system but requires more judgment".
- 5. "It is a way of working to handle and document the risks associated with activities".

## CONCLUSIONS AND LEARNING'S

## CONCLUSIONS

- 1. The general feeling amongst the interviewees was that the organization spent a lot of resources removing hazards and risks with high severity and not managing risks completely, despite that they agree about the definition on the term risk.
- 2. There was agreement regarding responsibility for SHE Risk Management in the organization.
- There were different perceptions and levels of acceptance regarding the corporate guideline SHE Risk Management and Basis of SHE amongst the interviewees. Probably that will always be the case in a large organization.
- 4. There was a misunderstanding of terminology between Basis of SHE and SHE Risk Management.

### LEARNING

- 1. Involve many people in the organization before a new guideline or way of working is introduced in order to increase the knowledge and minimize the number of misunderstandings. The acceptance for the new guideline or way of working will increase.
- 2. Use existing ways of working as a base for the new guidelines, procedures etc...
- 3. Look at other systems that are in place in the company, and try to align them with each other.

### REFERENCES

Fröberg, M, Preston, R; Johnsson, P, Lundqvist, S, McGowan, M, Svatos, P, Svensson, P, 2001,'Risk Management in the Pharmaceutical Industry', 10th Loss Prevention and SafetyPromotion in the Process Industries, Proceedings 1, T3-12, Elsevier, pp. 401.

### APPENDIX 1 THE PERSON

1. Who are you? Name and position. What are you working with?

## YOUR OWN ATTITUDE REGARDING RISK AND SHE RISK MANAGEMENT SYSTEM

- 2. Can you describe what risks mean for you? What is most important consequence or probability?
- 3. Who according to your opinion has the responsibility for SHE Risk Management? Activity and Project?
- 4. How do you believe a SHE Risk Management should be designed?

# OTHER PEOPLE'S ATTITUDE REGARDING RISK AND SHE RISK MANAGEMENT SYSTEM

- 5. How do you believe that other people (colleagues as well as clients/customers) understand the term risk?
- 6. How do you believe that other people (colleagues as well as clients/customers) understand responsibility?
- 7. How do you believe that other people (colleagues as well as clients/customers) believe a system for SHE Risk Management should have been designed?

### BASIS OF SHE

- 8. What do you believe Basis of SHE is?
- 9. Where you involved in the design of the Basis of SHE?

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- 10. Describe what you have done to promote Basis of SHE?
- 11. How many Basis of SHE have you written yourself or participate in the making of?

## THE LAUNCH OF THE SHE RISK MANAGEMENT SYSTEM

- 12. How much did you know about a The SHE Management system before launch?
- 13. What type of information did you get before launch?
- 14. How many training courses have you give/received in Basis of SHE/SHE Risk Management?

### BASIS OF SHE IN THE ACTIVITY

- 15. Has the document Basis of SHE meant anything for the safety level in the activities?
- 16. Has the document Basis of SHE meant anything positive for the administration of the safety work in the activity?

### SHE RISK MANAGEMENT AND BASIS OF SHE IN THE FUTURE

17. How should the SHE Risk Management system and the document Basis of SHE be developed in the future?