

ECFIA 's CARE Programme – In line with the EU 's goals of Corporate Social Responsibility

Introduction

In March 2010 the European Commission made a commitment to renew the EU strategy to promote Corporate Social Responsibility as a key element in ensuring long term employee and consumer trust. The European Commission's definition of Corporate Social Responsibility is:

"A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis."

Corporate Social Responsibility functions as a built-in, self-regulating mechanism whereby business monitors and ensures its active compliance with the spirit of the law, ethical standards, and international norms.

The goal of Corporate Social Responsibility is to embrace responsibility for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees, communities, stakeholders and all other members of the public sphere.

As an early example of applying the principles of Corporate Social Responsibility, ECFIA the European association of the manufacturers of High Temperature Insulation Wools started their Controlled And Reduced Exposure (CARE) Programme in 1996 as part of their Product Stewardship Programme (PSP).

ECFIA 's Product Stewardship Programme (PSP)

ECFIA began to develop and implement a comprehensive Product Stewardship Programme (PSP) in the 1990s. This was done on an initiative of the High Temperature Insulation Wools (HTIW) industry.

The PSP is designed to assist HTIW manufacturers and end-users in the evaluation, control and reduction of workplace exposures to fibrous dust emanating from HTIW products.

Programme recommendations are intended to help support the proper handling, manufacture, storage, use and disposal of HTIW products.

The PSP's key elements include: communication, workplace monitoring, exposure assessments, study of workplace controls, health effects research, product research and special studies.

Special studies include specific monitoring at customers and manufacturers looking at by-products from the lifecycle of refractory products.

The experience, data and evaluations conducted during the past 15 years have resulted in substantial reductions in exposure to HTIW fibrous dust at workplaces and provide a firm foundation for future PSP initiatives.

The Controlled And Reduced Exposure (CARE) Programme

Note: These activities are a service provided by ECFIA members to their customers / end-users.

The CARE programme is an important part of the PSP, it allows employers to proactively minimize fibrous dust exposure and thus protect workers' health.



Further Reading

High Temperature Insulation Wool (HTIW)

Basically, there are three types of inorganic HTIW. HTIW processed into products contain fibres with different diameters and lengths. When handling the products, fibrous dusts can be emitted. These can include fibres that correspond to the WHO definition.

Owing to the technical requirements and limited availability compared to mineral wool, HTIW products are used in special technical and industrial applications. [\[Read more ...\]](#)

Care Guidance

The CARE Guidance documents form a comprehensive library of information on safe handling and use of HTIW products. They have been written by industry experts and are designed to give customers of ECFIA members helpful information to put in place effective controls to minimise exposure to airborne fibres. This series of documents will progressively grow as new documents are produced. [\[Read more ...\]](#)

STEP 1: WORKPLACE MONITORING

ECFIA and its member companies conduct exposure monitoring activities, both at HTIW manufacturing plants and at their customer and end-user facilities. Customer facilities are randomly selected by an independent consultancy firm upon the request of ECFIA members. In addition companies may request exposure monitoring assistance on their own. ECFIA hygienists evaluate workplace control methods and monitor airborne fibrous dust with filter analysis carried out at an accredited external laboratory.

Sample collection goals have been established for the two primary programme elements:

Internal Sampling

Samples collected within HTIW manufacturing plants are categorized into 7 functional job categories (assembly, auxiliary, HTIW production, finishing, mixing / forming, modules and "other"). Employees sampled will be randomly selected among all work shifts.

External Sampling

Customer employees will be randomly selected for sampling, among all work shifts when practical, samples collected are categorized into 8 functional job categories (assembly, auxiliary, finishing, installation, mixing / forming, modules, "other" and removal). ECFIA will also try to accommodate customer requests.

Further facts at a glance:

- Fibre counting is done by an independent accredited laboratory using phase-contrast optical microscopy (PCOM) in accordance with WHO Euro counting rules.

- ECFIA will ensure that the employers and employees being monitored are provided with the results of the monitoring activities.
- During the last fourteen years of the CARE programme, a total of over 6 300 ATWA¹ measurements were conducted.
- Analysis of concentrations showed no statistically significant difference between those of selected facilities and those that volunteered.

STEP 2: WORKPLACE EXPOSURE ASSESSMENTS

A key element of CARE and the PSP is the evaluation of workplace exposure levels, ECFIA's industrial engineers and occupational hygienists can advise user industries on engineering controls and appropriate respiratory protection.

The sources of dust release related to HTIW-application(s) must be identified and quantified (nature, concentration, duration) in order to define a proper level of control. This evaluation can be carried out by conducting personal air monitoring or by using existing information from the ECFIA CARE Programme or other sources.

Evaluation by air monitoring

The levels of fibrous dust released while using HTIW may be monitored. In this case an approved method must be used². Measurements should be made with personal samplers worn by the operators while they carry out significant tasks. The monitoring will help to identify and prioritise the needs for control. It will also help to check that conditions are not deteriorating with time. Airborne dust levels should always be kept to a minimum. Through the CARE programme, ECFIA or the ECFIA member being the supplier can help organise measurements

and will inform on benchmarking levels based on anonymous aggregated data.

STEP 3: STUDY OF WORKPLACE CONTROLS

Over the past several years, ECFIA has invested considerable effort in the evaluation of effective engineering controls and handling practices in its members' own production facilities to control the levels of airborne fibrous dust. Many of these techniques can also be used economically and effectively at customer and end-user workplaces.

Based on this evaluation, ECFIA is able to define the appropriate control measures on:

- Dust control (organisation of work, technical measures)
- Working habits
- Housekeeping
- Personal protective equipment
- Work clothes
- Skin itching
- Waste disposal

Control measures should always be applied in the following hierarchy:

- Control or elimination at the source (e.g. using pre-sized or dust suppressed products)
- Control between the source and worker (e.g. exclusion barriers, enclosure and exhaust ventilation)
- Control at the level of the worker (e.g. information showing use of respiratory protective equipment)

For further information see ECFIA publication called Recognition and Control of Exposure to ASW / RCF³.

CARE – 15 years of accumulated experience

15 years of practical experience based on the CARE programme enable ECFIA's experts to identify applications where exposures to HTIW fibrous dust are likely to be encountered and provide practical advice for limiting these exposures.

This comprehensive experience, based on internationally recognised data, allows workplace concentrations to be estimated and technical and organisational measures to be devised.

Proper application of these measures will help to adequately control exposure and thus, more importantly, protect worker health.

Conclusion

- ECFIA's members proactively developed and implemented the CARE programme as a part of their PSP as from 1996.
- The CARE programme is a service provided by ECFIA members' to their customers and end-users.
- The CARE programme consists of: workplace monitoring, workplace exposure assessments, study of workplace controls.
- In the last 15 years ECFIA was able to create a comprehensive database on work place concentrations and of effective engineering controls and handling practices.
- Many of these techniques can be used economically and effectively at customer and end-user workplaces.
- The CARE programme helps responsible employers to adequately control and reduce exposure.

Note: This publication is for information only and does not claim to be comprehensive and ECFIA shall not incur any liability for its use. For more information on the subjects mentioned in this issue, please contact ECFIA (3 rue du colonel Moll, 75017 Paris) or connect to its website: www.ecfia.eu

¹ ATWA: Actual Time-Weighted Averages

² For example: Determination of airborne fibre number concentrations. A recommended method, by phase contrast optical microscopy (membrane filter method) - World Health Organisation, Geneva 1997.

³ available on the ECFIA website under www.ecfia.eu