



Downstream Users Brochure

VOLUNTARY EMISSIONS CONTROL ACTION PROGRAMME

Greening the Textiles Supply Chain

Greening the Textiles Supply Chain

Final product manufacturers and retailers, from car manufacturers to supermarkets, have been increasingly demanding more information on the materials and manufacturing practices used up their own supply chains and put into the products they sell. This is part of a greater effort to account for the environment impact of a product throughout the life-cycle. The old saying that you are “only as green as your supplier” is more relevant than ever.

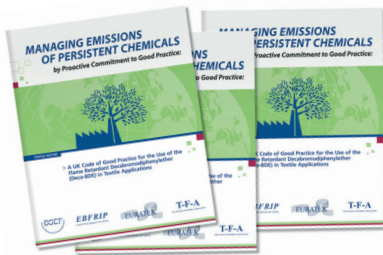
Until now, chemical manufacturers have taken little account of the actual industrial practices of downstream users and their impact on the environment. Reliance on users adhering to the letter of the law and complying with integrated pollution permits are now seen by some suppliers as insufficient. Industrial discharges to the environment may continue perfectly legally, therefore some manufacturers now want to work with their users to enable them to go beyond legal controls.

There is another side to this issue, those users who have invested in minimizing their waste and make a genuine effort to reduce their environmental impact, receive little or no recognition for their efforts. For the textiles supply chain, this is about to change.



A Joint Industry Initiative

In 2004, the UK was chosen as a pilot for a European-wide programme aimed at controlling and reducing industrial emissions of DecaBDE, a brominated flame retardant (BFR). By the end of 2005, all industrial users of DecaBDE in the UK textiles industries will be implementing reduced emissions techniques in line with the Code of Good Practice (CoP). The CoP has been established under an industry Voluntary Emissions reduction and Control Action Programme (VECAP).



Managing Emissions of Persistent
Chemicals brochure
Textile sector

The Code commits companies to the following practices:

- the producers of Deca-BDE will provide guidance to their customers on the correct handling and processing of Deca-BDE.
- producers of DecaBDE will also seek confirmation that the code of practice is being followed and may refuse to supply those companies who do not provide such assurances.
- textile users will analyse product flows and processes to define where efficiency improvement is feasible
- textile users will implement measuring and recording of DecaBDE use, gather data on waste flows and product loss of DecaBDE
- textile users will manage data and achieve emissions control of DecaBDE

How does VECAP work?

Companies participating in VECAP will go round a cycle. This starts with a commitment to the Code of Good Practice and verification of the actual working procedures with those required according to the Code of Good Practice. Then the company will critically analyse its product flow and processes to identify the potential for emissions. Measuring and recording the relevant data will identify the plants actual emissions baseline throughout the entire production process. Once this emissions balance is known, an emissions report can be drawn up which will enable closure of the mass balance¹.

Verification of the actual working procedures combined with this emissions report will enable appropriate actions to be taken to improve process control and reduce the emissions that have been identified.

The user company has now been round the process once. Now the user goes round the process again changing, if necessary and appropriate, their measures to reduce emissions. Deca-BDE suppliers are committed to supporting users in building such a risk management system. Another audit can be undertaken, if necessary by the supplier, to check that the processes are controlled and that reported emission data is correct.

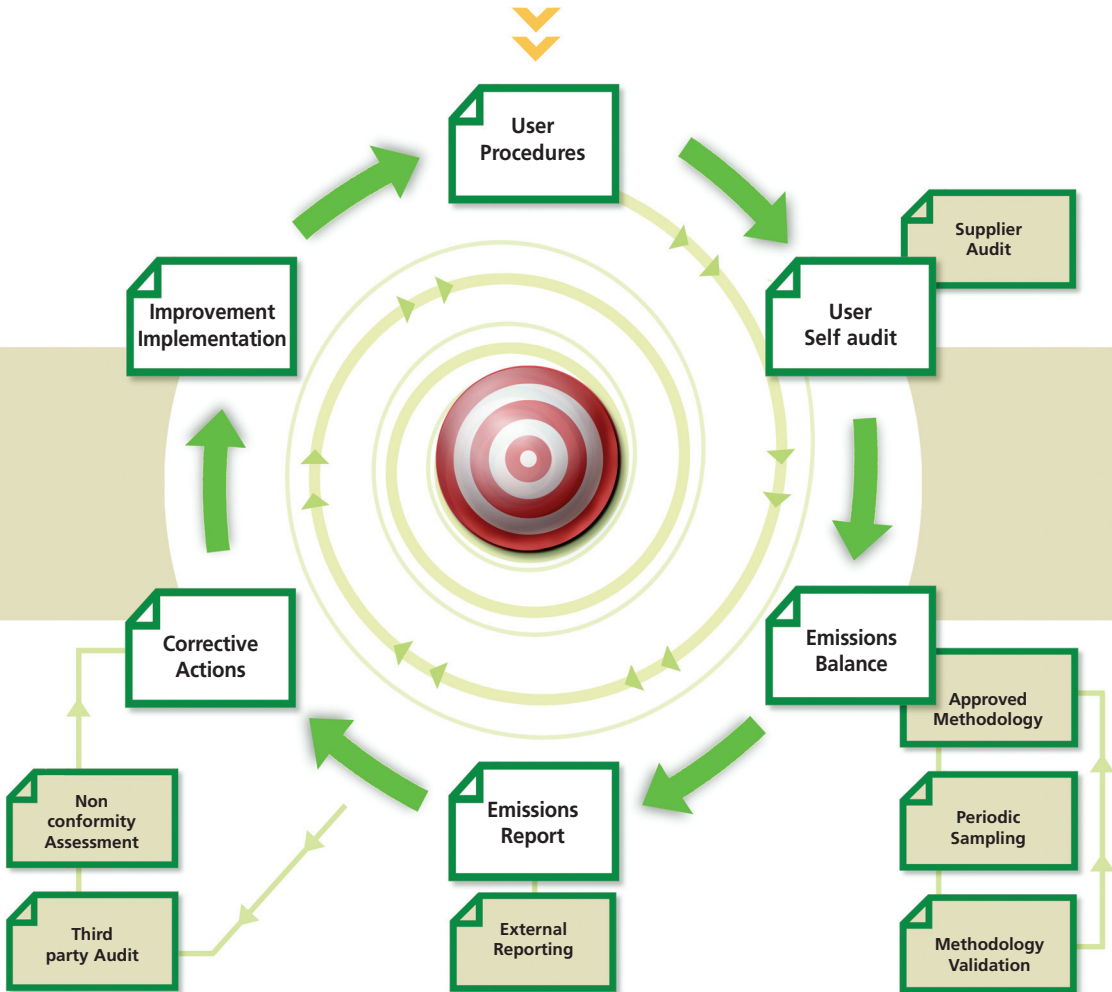
If necessary, an independent consultancy will audit the user to undertake basic verification of the control, reliability and progress of the user. By going round this loop users will ensure that their emissions are reduced through cost effective actions.

Experience from trials in the UK has demonstrated that in textile coating processes it has been possible to obtain emission reductions as high as 90% for minimal additional cost.

Since the introduction of the VECAP process within a user company is comparable to the introduction of a new business/manufacturing 'process', companies who are registered to ISO 9000 or ISO 14000

¹ Mass balance is ensuring that all of the substance, in this case DecaBDE, brought into a plant is accounted for. Therefore, a textile coater would be able to account for the amount of DecaBDE that leaves the factory in textiles, the amount that goes into various waste streams and the amount in other streams such as empty packaging. The VECAP process, once completed, aims to close the mass balance.

Code of good practice



will be encouraged to include their VECAP process within their registration. This will ensure that a culture of emission minimization, the aim of VECAP, is maintained over time.

What sort of materials will be supplied under VECAP?

This initiative was started by an industry consortium to minimize emissions of the flame retardant Deca-BDE, and is already being applied in the UK textile industry to other flame retardants, such as HBCD and antimony trioxide. There is no reason in principle why it should not be applied to other persistent chemicals which do not fall under direct regulatory control, but where it is important to minimize their release into the environment.

Deca-BDE was recently the subject of an EU risk assessment, which identified no risk to human health or the environment from the use of Deca-BDE after ten years of studies. The need for product stewardship came from the persistent nature of DecaBDE in the environment. To address this users and suppliers of DecaBDE have teamed up in the current programme.

Applications of BFRs



Flame retardants give people up to 15 times more escape time when there is a fire. BFRs are used in textiles for upholstered furniture, seating in transport, public buildings and domestic furniture in some EU Member States. They have saved at

least 1000 lives in the United Kingdom in the last 10 years following the introduction of the UK (1988) Furniture and Furnishings Fire Safety Regulations. Deca-BDE is the main BFR used to increase resistance to fire.

How does this fit in with future obligations for downstream users under REACH?

The EU's overhaul of the legislation governing the management of chemicals; better known as REACH (Registration, Evaluation, Authorisation, and restrictions of Chemicals), will require downstream users to have more information and prepare an assessment of the substances they use for their specific applications. In practice, there will need to be better communication up and down supply chains regarding the properties of substances.

Downstream users can better comply with REACH, and prove that the substances they use are well controlled, if they partner with chemical suppliers and integrate good chemicals management into their processes. VECAP will help REACH implementation as users will understand better the substances they are using and how to minimize their environmental impact.

HOW CAN I FIND OUT IF MY SUPPLIER/SUPPLY CHAIN COMPLIES?

If your supplier, customer or supply chain complies they will have signed a commitment to the Code of Good Practice drawn up by the BFR industry in consultation with users. Ask your supplier, or the organization representing them if they have signed up to the programme.

for further information:

www.bsef.org

www.cefic.org

www.ebfrip.org

www.euratex.org