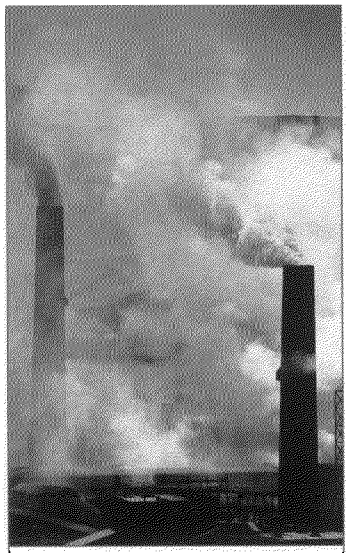
Recycling key to industry's survival

RECYCLING IS a key issue for the future survival of the composites industry warns European association GPRMC.

GPRMC is encouraging all composites manufacturers to participate in the waste management effort. To ensure that the financial burden of this work is equally distributed and that the whole industry participates the association is considering introducing a 'green FRP recycling label' and creating a Composite Recycling Fund on a pan-European basis.

The GPRMC explains that in order to comply with several European Union (EU) waste directives, manufacturers of cars, electric and electronic equipment, and building and construction products will start looking for products for which recycling solutions exist. Pilot plants like Ercom, Mecelec, Lonza and Miljotek have shown that mechanical recycling of fibre reinforced plastic (FRP) is possible but they need profitable markets for the recyclate. Research to develop new applications, recyclate standards, plus reduction of waste during manufacturing, dismantling and collection of end-of-life waste, and building new recycling plants based on better technology, are all areas GPRMC would like to see addressed. There are also legal aspects such as the classification and cross-border transport of FRP waste to recycling plants. EU legislation makes this a pan-European problem and GPRMC wants to coordinate all work at a European and national level. It urges each national association to make companies aware of the problem and to start local composite waste management projects via national working groups.



EU waste legislation could cause problems for the FRP industry.

GPRMC also notes that the styrene risk assessment (SRA) study the UK is carrying out on behalf of the European Community will be completed soon. It warns that because they are in the industry with the highest exposure levels FRP manufacturers should prepare themselves for lower worker exposure levels (20-25 ppm or below). It advises companies to start measuring worker exposure on a regular basis and to take any necessary measures.

It also notes that the use of several brominated flame retardants may soon be banned. Manufacturers of FRP products for use in electric and electronic equipment containing these products and which have tested all possible alternatives without success should inform their national association to try to get their application included in the exception list.

For further details visit GRPMC website: www.gprmc.be.

MACT hits large companies hard

NORTH AMERICAN trade body the Composites Fabricators Association (CFA) says that the proposed 'MACT' environmental legislation is good news for most US composites manufacturers, but warns that large companies may not be able to afford the control measurements required and could be forced out of business.

The proposed National Emission Standards for Hazardous Air Pollutants (NESHAP) for composites manufacturing was published in August and CFA says it includes many favourable provisions requested by the composites industry. The NESHAP will require moulders and fabricators to adopt what the (US) Environmental Protection Agency (EPA) has determined is 'maximum achievable control technology' (MACT). CFA and its industry partners have been working with EPA on the MACT rule since 1993.

CFA believes the proposed composites MACT standard allows most composites fabricators and moulders to use pollution prevention to achieve the requirements of the Clean Air Act. It says EPA has developed a rule that will allow most of the industry to continue to grow, while still achieving significant emission reductions. The CFA says the pollution prevention controls required in the rule provide a flexible and affordable (but still effective) method of achieving emission reductions and that these controls will have added benefits, typically helping to achieve Occupational Health and Safety Administration (OSHA) worker safety requirements, reduce costs and wastes, and improve product quality.

The news is not so good for big companies. CFA's senior director of government affairs John Schweitzer warns that the proposed MACT for larger composites manufacturers will require 95% emission reductions through the use of add-on controls. "These requirements are not technically feasible for most composites operations, because of problems associated with capture of the emissions, and are so expensive that they will force many companies to close," he states. "These add-on control systems may make it more difficult for companies to satisfy OSHA worker protection requirements, and their use will discourage the development of new pollution prevention controls that could be used by the entire industry," he adds. "They also consume large quantities of electricity and natural gas, and emit 30 tons of greenhouse gases for every ton of process emissions controlled."

Schweitzer indicated that CFA will be working with legislators and companies which may be affected to help ensure the fallacy of the control devices' value is considered.

The final rule should be published mid-2002 and firms will then have three years to comply. The composites MACT rule will not apply to boat building or to coatings or adhesives applied to products after removal from the mould.

For information on MACT for composites visit www.cfa-hq.org/mact/. (For the rules for boat building, coatings and adhesives, visit www.cfa-hq.org/regulatory.htm, item 2 or 3.)