This article gives a short, but hopefully practical, interpretation of the basic duties and requirements for the safe and correct disposal of asbestos waste. Further details can be obtained from either HSE or Asbestos Removal Contractors Association (ARCA).

To dispose of asbestos waste correctly the waste producer, carrier and operator of the wastedisposal facility have to be wary of the specific detailed requirements in at least seven separate pieces of current legislation.

The major applicable regulations include the Hazardous Waste (England and Wales) Regulations 2005, the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2004 and the Asbestos Regulations 2006. If the asbestos waste arises in England or Wales and is disposed off in Scotland – or vice versa – additional regulations will also need to be complied with.

Some of the statutory requirements are weak and others conflicting, and industry-established best practice is such that there are recommendations for a higher level of safe working practice than those required by the enforcing authorities. Having said that, a plea from those operating waste handling and disposal facilities is for everybody involved in the handling, packaging and transport of asbestos waste to be aware of and comply with their respective duties under these regulations.

That significantly reduces the subsequent risks both to employees and to the general public.

Non-domestic waste containing more than 0.1% of asbestos by weight is classified as a hazardous waste (‘special waste’ in Scotland) and can only be disposed of at facilities that have an appropriate permit/ licence to accept asbestos waste. The location(s) of these facilities can be obtained from the offices of the respective Environment Agencies. In the majority of situations the producer of the waste must be registered as a ‘hazardous waste producer’ with the Environment Agency.

For asbestos waste arising from domestic premises local authorities will be able to advise on the best methods of disposal. In some cases a small charge may be incurred.

For asbestos waste comprising, typically, unbroken cement-bonded sheets or similar it is strongly recommended – although not as yet mandatory – for these sheets to be wetted before they are wrapped sheeting) and placed in a secure, covered waste container. That container can (subject to the appropriate paperwork requirements) be taken to a suitably permitted/licensed waste-disposal facility.

Fibrous asbestos waste (and also, significantly, broken-bonded asbestos waste) cannot be transported in bulk, but must be securely wrapped in appropriately-labelled UN-approved packaging.

Custom and practice in the industry is such that it is common for that type of waste to be double-bagged in red plastic bags. That is good practice, but it must be emphasised that at least one of those bags must be UN approved and its appropriate marking and labelling must be visible from the outside of the package. The packages must then be placed either inside a suitable waste container or inside a vehicle with a separate driving compartment.

The marking on the UNapproved packaging is quite specific, and waste producers must take reasonable steps to identify the type of asbestos they are disposing of. There are two types:
• UN 2212 – blue (crocidolite) and brown (amosite) asbestos.
• UN 2590 – white (chrysotile) asbestos.

Only one of those numbers can appear on the package and if there is any doubt UN 2212 should be used.

It is strongly recommended that, if there are any doubts or uncertainties about the packaging, labelling and subsequent transport of asbestos waste, then a dangerous goods safety adviser should be consulted.

From 1 January the driver of any commercial vehicle carrying fibrous asbestos waste which comes under the requirements of the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2004 must have received training as per the requirements of the European Agreement concerning the International Carriage of Dangerous Goods by Road –

commonly referred to as ADR. For asbestos waste it will require an ADR licence for Class 9 dangerous goods.

Unless you transport your own asbestos waste to the disposal facility the operator of the vehicle used for transport must be a ‘registered waste carrier’. Details of how to register as a waste carrier can be obtained from the Environment Agencies. Industry practice is such that it is strongly recommended that registration is advisable even if you transport your own waste.

When asbestos waste, the total weight of which is greater than 333kg (for blue/brown asbestos, UN 2212, or mixed loads of blue/brown and white) or 1,000kg (for white asbestos) is transported, the vehicle used must:
* Display orange panels at the front and rear of the vehicle.
* Carry an emergency information card that has to readily accessible by the driver.
* Carry emergency equipment comprising a wheel chock, two selfstanding warning triangles, a high-visibility vest or coat and appropriate respiratory and personal protective equipment for each member of the crew.

When a bulk waste container is used, the Class 9 danger sign (diamond sign) must be displayed on all four external sides of the waste container. This danger sign is identical but of a larger size to that displayed on each of the individual packages.

Irrespective of the weight of waste, vehicles transporting asbestos waste must carry a 2kg dry-powder fire extinguisher in the cab plus, depending upon the vehicle’s maximum permissible weight, the following items of fighting equipment:
* Vehicles under 3.5 tonnes – total capacity of 4kg dry powder.
* Vehicles between 3.5- 7.5 tonnes – total capacity 8kg dry powder, of which one extinguisher must be at least 6kg capacity.
* Vehicles over 7.5 tonnes – total capacity of 12kg dry powder, of which one extinguisher must be at least 6kg capacity.

During transportation the driver of the vehicle must also carry documentation that includes:
* The proper shipping name (as per the name on the individual UN-approved packages) of the waste being carried, typically blue/brown asbestos or white asbestos.
* The class number for the waste being carried. That will be 9 for asbestos waste.
* The UN number: the word ‘Waste’ followed by either UN 2212 or UN 2590.
* The packing group, which for UN 2212 – blue/ brown asbestos – will be I and for UN 2590 will

be II.
* Appropriate documentation with respect to details of the producer of the hazardous waste (special waste in Scotland), its destination, plus other details required by the respective Environment Agencies.

The actual methods of disposing of asbestos waste do vary slightly and are subject to approval by the Environment Agencies. However, the basic operation is that all asbestos waste is ultimately tipped into a specially prepared area within a cell on an appropriately permitted/ licensed landfill site. That cell is classified as an ‘inert cell’ and by definition can accept only inert waste.

The process of disposal normally takes just a few minutes, after which the asbestos waste is covered by a prescribed layer of inert soils and/or other inert materials. Provided that the waste is packaged and transported correctly, combined with the use of recommended PPE, the risk to persons involved in the disposal process of being exposed to hazardous quantities of asbestos fibres is negligible.

In terms of record keeping, the disposal facility will keep a record of what, when and where the asbestos waste was disposed of on site, and waste producers are advised to keep their official records (Environment Agency documentation) for at least four years.