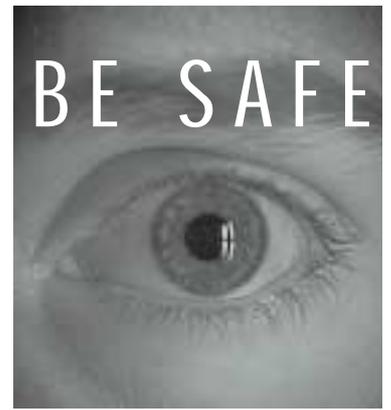


LET DRIVERS SEE AND

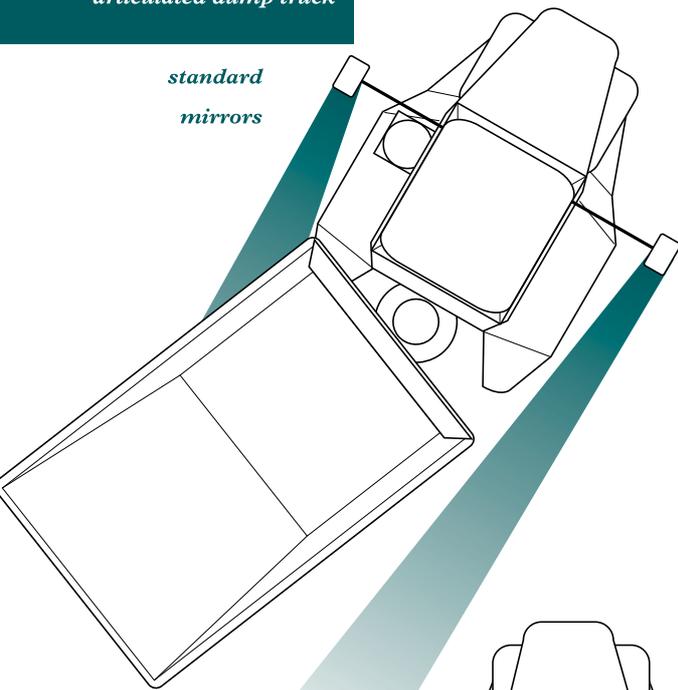
BE SAFE

All-round visibility - the critical piece of the safety jigsaw



VISIBILITY DIAGRAM
articulated dump truck

*standard
mirrors*



The fitting of visibility aids to give all-round vision to the drivers of quarry vehicles is the critical piece of the safety jigsaw.

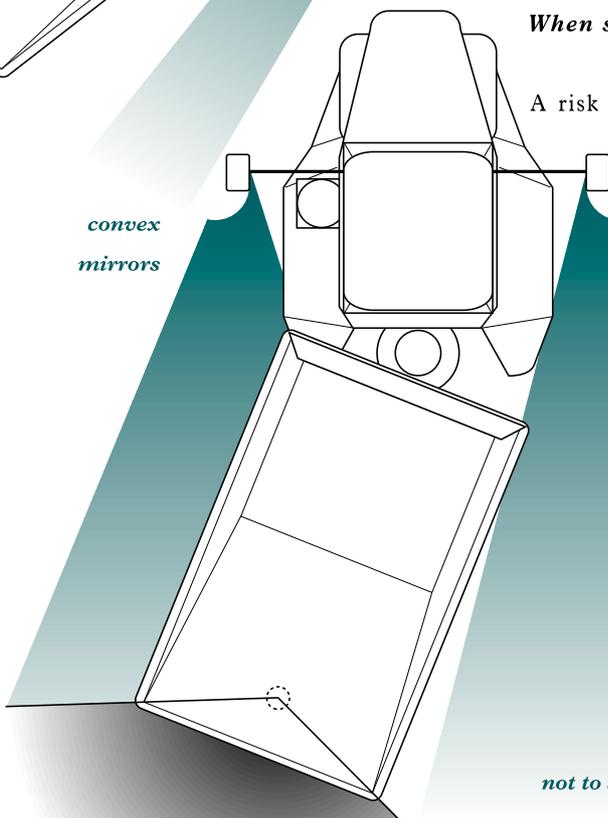
Elfed Rodgers, looseplant operator and instructor at Tarmac's Denbigh Quarry, says of visibility aids: 'Without doubt a big improvement. The 'radar' has proved very reliable. When a camera fault occurs it is like losing a pair of eyes, especially so on dump trucks.'

In every quarry accident where moving vehicles are involved, the lack of all-round visibility for the operator has played a significant part. Until recently, the cost of devices to improve visibility has been relatively high, but now even the most expensive equipment costs less than a tyre. Fitting will bring savings on the running costs of the vehicle as well as improving site safety.

When should they be fitted?

A risk assessment on the vehicle will identify the blind spots around it. You should consider how and where the vehicle is to be used. This will identify who may be at risk and when visibility aids should be fitted (this is not dependent upon the vehicle size).

*convex
mirrors*



Why all-round visibility?

The diagrams show the vision fields around quarry vehicles. If there is a blind spot, and the driver may need to see in that area to work the machine safely, then devices should be fitted. Accidents don't just happen going backwards - they frequently happen going forwards, turning right or left, as well as when reversing.

not to scale



Fit curved convex mirrors as well as normal reversing mirrors and you will be able to see to the right and left and to the front of the machine. Fit closed-circuit television (CCTV) or radar as well and you will have the all-round visibility you need.

Do I have to fit a reverse warning system as well?

Provided that the visibility devices are working, there is no need. This will overcome environmental objections. Remember when more than one reversing alarm is operating in an area it may be confusing.

Will these devices have a significant impact on accident prevention?

Yes. Over 40% of all fatal accidents in quarries involve moving quarry vehicles. By fitting these devices, in combination with driver training, high-visibility clothing, good edge protection, brake testing programmes, seat belts, vehicle maintenance and traffic systems, the accident rate can be reduced.

I have a CCTV fitted to my vehicle. Should I use it only when reversing?

No. The CCTV should be used all the time so that you can see when vehicles approach you from the rear and overtake you. Fit the monitor at the same height as your mirrors and it will not distract the driver.

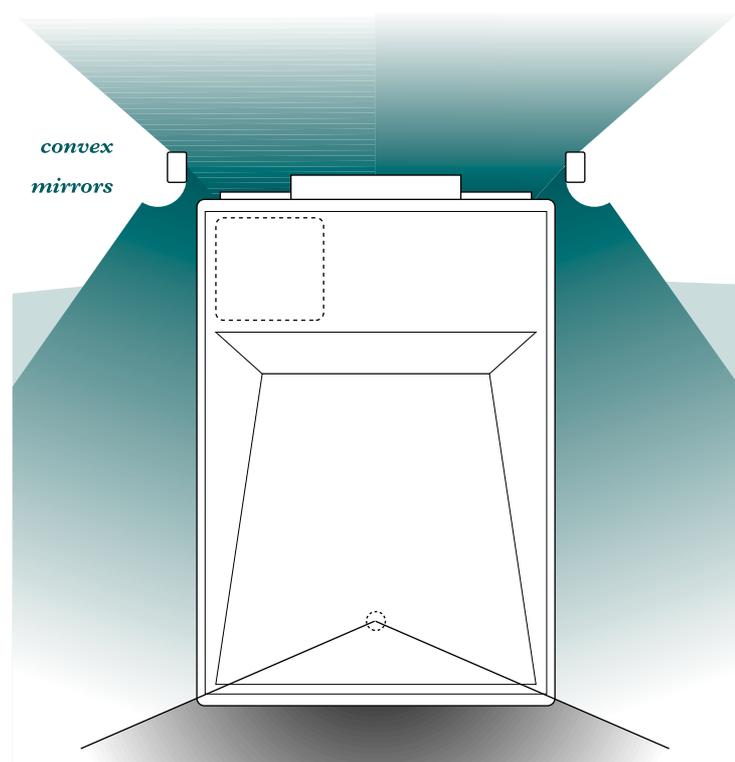
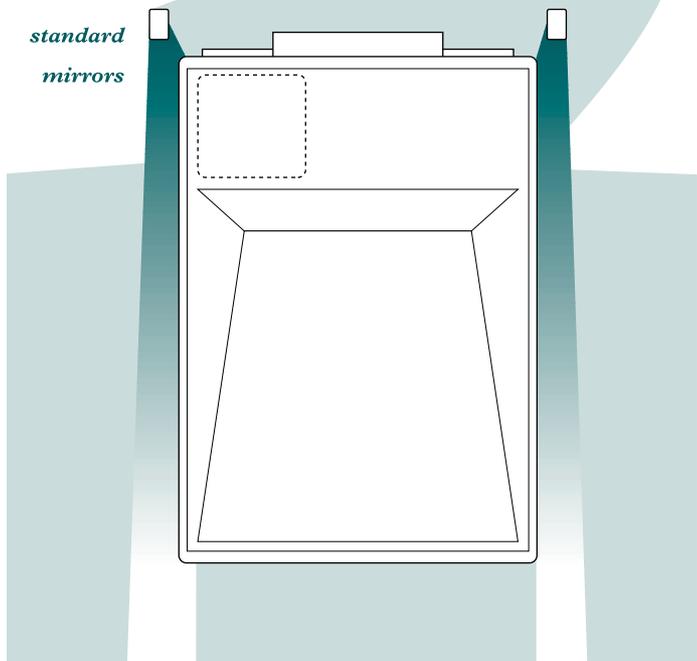
Should these devices only be fitted to dump trucks?

No. They should be fitted to all vehicles with visibility problems. They are currently fitted to wheel loaders, dump trucks, excavators, bulldozers, graders and draglines.

Are there occasions when it is enough just to fit reversing alarms?

It is difficult to envisage any operation of a vehicle which does not have all-round driver visibility, where a proper risk assessment would fail to identify the need for all-round visibility aids. Remember the assessment and fitting of aids, where appropriate, has to be completed by 1 January 1997.

VISIBILITY DIAGRAM
rigid chassis dump truck



-  *blind areas*
-  *areas of view from convex mirrors*
-  *areas of protection using CCTV or radar-type devices*

not to scale