# BEST PRACTICE

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| **LOCATION:** | **Asphalt/Coating plant** | **ARTICLE YEAR** | **2006** |
| **ACTIVITY:** | **Manual handling and storage** | **COMPANY:** | **Aram Resources** |
| **SUB ACTIVITY:** | **N/A** | **COMPANY LOCATION:** | **Carnsew Quarry, Cornwall** |
| **BEST PRACTICE No:** | **BP358** | **COMPANY TEL:** | **01326 375660** |
| **COUNTRY OF ORIGIN:** | **United Kingdom** | | |

## TITLE

**Delivery and storage of bitumen**

## ARTICLE

An incident when a minor bitumen spill occurred led to a comprehensive review of the bitumen delivery and storage procedures. Firstly, the RBA / QPA document Guidance for Safe Bitumen Tank Management and the RBA Code of Practice for The Safe Delivery of Bitumen Products were consulted for best practice guidance.

Two improvements at the delivery point were the installation of vertically slotted delivery point flanges, and lockable safety hoods which hinge down over the flange on the connected pipe. In the event of a damaged gasket or loose connection, any spillage is directed to the floor.

In line with the RBA and QPA documents, further improvements included the initial installation of a new Hycontrol contents and high level alarm system. The specification contained independent ultimate high level alarms with ground level test facility, clear display panels at the fill point and large traffic light indicators for current tank status. The contents gauge provides a signal when the bitumen reaches 90 per cent capacity, triggering an orange flashing beacon, an audible alarm, and the orange traffic light. The system features an ultimate high level, with the signal provided by a separate instrument incase of a failure with the contents measuring equipment.

This ultimate high level triggers a separate red flashing beacon, a different sounding audible alarm and the large red traffic light.

The ground level test facility tests the flashing beacon, the traffic light, the audible alarm and the functionality of the ultimate high level instrument. The display panels and traffic lights were mounted on a purpose built fabrication to provide clear visual indication to the delivery driver.

## ARTICLE IMAGES