BEST PRACTICE

LOCATION:	**Asphalt/Coating plant**	**ARTICLE YEAR**	**2013**
ACTIVITY:	**Access & Egress & Working at Height**	**COMPANY:**	**CEMEX UK & WG7**
SUB ACTIVITY:	**N/A**	**COMPANY LOCATION:**	**Preston**
BEST PRACTICE No:	**BP859**	**COMPANY TEL:**	**01772 472410**
COUNTRY OF ORIGIN:	**United Kingdom**		

TITLE

High High Level Alarm (HHLA) for storage tanks and kettles

ARTICLE

DESCRIPTION

A High High Level Alarm (HHLA) is the ultimate safety barrier to minimise the potential of overfilling a vessel. It must be accurate, reliable in operation and easy to test. MPA's Working Group 7 involving CEMEX UK, Aggregate Industries, Eurovia, Hanson UK and Lafarge Tarmac, sought to develop a cost effective HHLA that could be easily maintained by site operators and, when tested would confirm that it was operational, not just that an electrical circuit had been made.

To minimise costs, the design, operation and materials selection focussed on simplicity of fabrication and ongoing maintenance. The unit works on the principle of a float. A brass ball is set to just below the maximum level in the bitumen storage tank or kettle. If the bitumen level rises to the point of overflow, the ball floats and releases a limit switch. The switch activates an alarm and turns off the bitumen pump in a kettle, stops a ground based pump or alerts a driver to stop the discharge from a tanker. A ram operated by compressed air is used to test the device as it simulates a bitumen spill by lifting the ball to test the control circuit.

Benefits

The risk of overfill is significantly reduced

The potential for personal injury and damage to equipment are reduced

The risk of lost production and environmental damage are reduced

Low cost, simple and effective system that can be easily retro fitted

Easy to reliably test and maintain.

ARTICLE IMAGES