BEST PRACTICE

LOCATION:	**Company-wide**	**ARTICLE YEAR**	**2006**
ACTIVITY:	**Transport & Logistics / Delivery**	**COMPANY:**	**Lafarge Aggregates**
SUB ACTIVITY:	**Mobile Plant**	**COMPANY LOCATION:**	**Elstow, Bedfordshire**
BEST PRACTICE No:	**BP336**	**COMPANY TEL:**	**01234 347648**
COUNTRY OF ORIGIN:	**United Kingdom**		

TITLE

Bitumen delivery procedures and delivery point

ARTICLE

During the planning stages of a new asphalt plant at this site, serious consideration was given to the plant layout and associated traffic routing. Particular emphasis was placed on the route the delivery vehicle would take to the storage tank and where it would park to enable the safe discharge of its load.

The bitumen delivery process was also reviewed and now takes place in the following way:
? Bitumen tanker arrives at the site and pulls onto the weighbridge
? Gross weight, grade, quantity and temperature of the bitumen is checked against the order and recorded
? Operator at the appropriate plant is informed
? Once all the checks have been carried out, the delivery tanker driver is issued with a key to a padlock that is attached to the chosen bitumen storage tank delivery pipe connection flange
? Driver proceeds to the plant. A new intercom and CCTV system means that the plant operator can monitor progress and communicate with the driver
? Before discharge, the tanker driver notes the ullage in the selected tank, confirms with the plant operator and records it on the bitumen delivery ticket
? Once it has been established that there is sufficient space within the tank to receive the load, the bitumen is discharged
? On completion, the padlock is re-attached to the storage tank's connection flange
? Tanker returns to the weighbridge where the vehicle's tare weight is recorded
? Delivery ticket is handed to the weighbridge clerk.

In addition, the delivery point for the new plant has been specifically designed and fabricated by the site team. Firstly, the safest place for the location of the point was established, taking into account the Refined Bitumen Association's guidance. Tankers are segregated from other site users by a safety barrier 6 metres from the discharging tanker.

The new plant has four bitumen tanks with room for a fifth with their delivery charge pipes brought together to one tanker delivery point, allowing for the connection flanges to be incorporated into one unit. The connection flanges themselves are specifically designed to reduce the risk of injury while man-handling the connection pipes into place. Security of the locking bolts is ensured by utilising the "Stomes" vertical slot design, instead of the old-style "elephant's foot" flange.

Each connection flange is labelled with the tank number and the grade of bitumen contained within the tank to which it is connected. Close to the connection flanges, gauges display the tonnage of bitumen contained within each tank along with the safe working capacity of each tank. Each tank is also fitted with an ultimate high level probe with a warning light and siren above the connection flange. Any drips from the flanges are contained within a tray incorporated into the discharge point, which is filled with water for cooling and solidifying the bitumen.

Finally, an emergency shower is available at the discharge point which has been protected against frost by insulating all pipe work above ground.

ARTICLE IMAGES

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Bitumen delivery point