BEST PRACTICE

LOCATION:	**Asphalt/Coating plant**	**ARTICLE YEAR**	**2016**
ACTIVITY:	**Manual handling and storage**	**COMPANY:**	**Colas Ltd**
SUB ACTIVITY:	**Bitumen**	**COMPANY LOCATION:**	**Warrington**
BEST PRACTICE No:	**BP1968**	**COMPANY TEL:**	**0000**
COUNTRY OF ORIGIN:	**United Kingdom**		

TITLE

Ground based pumps for unloading bitumen

ARTICLE

DESCRIPTION

Colas Ltd.'s Warrington works receives numerous daily deliveries of bitumen. These were traditionally discharged into the tanks by the use of air pressure from either a compressor on the vehicle or located in the works. This method was very noisy for the drivers, the operatives nearby and a nuisance noise for the residents of a new housing estate next door to the site.

The traditional method also created manual handling issues for the drivers, they had to remove the delivery hoses from the vehicle rack and connect them to the discharge point. The delivery hoses had to be connected both to the tanker and the discharge point which gave two areas of potential failure in the delivery.

A further safety and environmental nuisance was created when blowing the lines at the end of the delivery. The excess of compressed air would overcome the scrubber unit resulting in bitumen fumes and odours being pumped into the atmosphere.

It was decided to install ground based pumps on the site, these became operational in April 2015. The bitumen is now 'sucked off' the tankers using the pumps housed within the works rather than blowing it off with compressed air. The delivery hose is permanently connected to the ground based pump system and is raised and lowered using a winch. The driver lowers the pipe to the correct level and then tightens the connection onto the tanker. Once a delivery is completed, the process is reversed. As the hose is stored almost vertically, any remaining bitumen in the pipes drains into a container within the ground based pump, this is periodically pumped back into storage.

BENEFITS

- Dramatically reduced noise levels both for drivers and other operatives
- Reduced the nuisance noise for local residents
- Reduced manual handling for driver
- Reduced risk of connection failure – only one connection point
- Reduced escape of fumes and odours
- Reduced spillage and wastage of bitumen
- Shell drivers say that the system is the best that they use
- A safer and cleaner environment for all

ARTICLE IMAGES

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