BEST PRACTICE

LOCATION:	**Asphalt/Coating plant**	**ARTICLE YEAR**	**2016**
ACTIVITY:	**Traffic management**	**COMPANY:**	**Tarmac Ltd**
SUB ACTIVITY:	**On-highway**	**COMPANY LOCATION:**	**Warrington**
BEST PRACTICE No:	**BP1969**	**COMPANY TEL:**	**0000**
COUNTRY OF ORIGIN:	**United Kingdom**		

TITLE

5+2 People and plant segregation

ARTICLE

DESCRIPTION

Over a 12 month period, 3 very experienced employees were treated in hospital following collisions with rollers on Tarmac National Contracting sites.

Tarmac Contracting's senior management team were very concerned about this and implemented a 'People and Plant Segregation' working group, this was a multi-disciplined team of operational staff and surfacing operatives. Its remit was to look at the incidents, determine how to improve the segregation of people and plant and to prevent future incidents and accidents.

The group identified some common themes in all the incidents which were

- Experienced operatives were involved in all incidents
- Roller struck injured person (IP) in every Incident
- IP spent time in hospital and time off work
- Poor Communication of the laying activity plan between gang
- No communication between the roller driver and IP
- People and plant risks in the laying area / process had not been considered in detail
- Operatives did not see dangers of working in and around moving plant

Following a period of development, the working group devised a '5+2' safety campaign which has been implemented on all Tarmac Contracting sites and was launched at the January 2016 safety days with presentations, briefing notes, training pack, test of understanding and '5+2' plant and helmet stickers to all operational staff:

5+2 people and plant safety segregation zones on all sites 5 = 5m Direction of travel plant protection zone, 2 = 2m Side plant protection zone. This is applied to all surfacing plant within the laying zone with the exception of pavers and planers. Delivery wagons passing pavers must be managed and planned to avoid 2m side + 5m forward protection zone in travel mode.

Thumbs Up - If any work is required within the 5+2 zones, the operative must make eye contact with the plant operative and both provide a "thumbs up" to enter the zone after the item of plant has stopped and is in a safe mode. The operative can then approach the plant operator and communicate what activity is being undertaken and approximate duration to complete the operation. On completion of the activity another thumbs up must be given by both parties to indicate the operative is leaving the segregation zone. The Plant operative can only restart his operation when all operatives are safely outside the "5+2"zone.

Use of Horns - Plant horns are also used by drivers when starting to move to warn people. In addition, other aides could be used to separate people and plant: physical barriers such as, cones, cone and bunting, barriers, fencing, pipes are also used to provide segregation between people and plant in the laying zone.

Daily Laying plan - Tarmac has implemented a "Daily Laying plan" which is completed by the foreman and the gang prior to commencing works in a newly created section of the job briefing sheet (JBS). This allows for the whole gang to review the days planned work, identifying where plant and people interactions could occur and what is to be done to ensure their safety, a kind of interactive Vehicle Pedestrian Management Plan. In addition the JBS signature sheet has been adjusted to allow Foreman / plant operatives to be highlighted to team and to remind them on a daily basis to abide by "5+2" safety zones.

The working group is also reviewing the use of plant proximity sensors, gang communication systems and introducing new high risk activity guidelines.

BENEFITS

- Reduced risk of incidents and serious injuries
- Collaborative approach enhanced commitment to improvements
- On-going activity to enhance safety
- Improved communications within operations
- A safer environment for all

ARTICLE IMAGES