

This was an accompanied visit to site for the purpose of observing a Sidewinder machine in operation.

The weather on the day was overcast but dry. A full road closure was in operation throughout South Ings Lane, a minor road in Hogsthorpe near Skegness.

I was met at the road closure by Colin and escorted to a parking area. Colin briefed me on the site and the nature of the work being done. He explained that the site is under the control of Tarmac as the Principal Contractor. Sidewinder were operating as a contractor on the project. Tarmac remained responsible for general site control.

Welfare facilities including WC and hand washing were available at the parking area.

I was introduced to the Tarmac site supervisor and received an induction from him. I noticed that the Sidewinder staff had also been through the induction process.

Colin took me to the area where the machine was operating. He explained that the road edges had been planed off and that the Sidewinder machine was being used to reinstate the road.

Equipment being used.

The equipment being used was a Sidewinder machine. This consists of a tractor unit with the material hopper and laying machinery attached to the front. In operation, the machine clamps onto the delivering tipper truck and pushed the truck at slow speed along the area to be filled. The truck driver is only required to steer a straight line during the process. Direction and movement are under the control of the machine operator with guidance from the banksman.

The Principal Contractor follows the process with a vibrating roller to treat the newly laid tarmac but this process is under their control.

Personnel

The Sidewinder personnel involved in the process were the machine operator (regarded as being the supervisor under the Sidewinder H&S Policy) and the banksman. These two staff appeared to be fully competent. They maintained good situational awareness, eye contact and communication throughout the operation. Appropriate hi vis was being worn.

Tarmac staff operated to the rear of the Sidewinder but did not interact directly with the equipment and did not enter the 'danger area' at any time.

Processes

The essential process was laying tarmac. The tipper truck was clamped to the Sidewinder and tipped its material into the Sidewinder hopper. From there it was carried by a conveyor and laid. Once the lorry had deposited its load it was separated from the Sidewinder and moved off. The Sidewinder essentially then became an independent piece of mobile plant. At this stage the hopper was cleaned out – **this represent an additional operation which should be considered in risk assessment/ method statement (RAMS) – see below.**

Once this had been done, another lorry was reversed onto the Sidewinder. Once again, this process was observed to be well controlled by the banksman.

Hazard Identification and Risk Controls

Colin provided me with a copy of the RAMS for the work. This seems to adequately cover the risks involved during the operation of the Sidewinder when laying materials. The design of the Sidewinder appears to make it safe 'in use' with good all-round visibility for the operator and any machinery hazard being minimal (the conveyor in the hopper has good edge protection and in-running nip/entanglement is, therefore, very unlikely – and, in any case, the hopper is protected by the tipper lorry during operation; the machine moves at slow walking pace and even in the event that a person were to be struck by the moving machine/lorry combination, serious injury is unlikely).

I understand that, in normal circumstances during operation, the tipper driver is required to stay off of the brakes. However, I assume that, in an emergency (e.g. a person appearing in from of the lorry) the driver could apply his brakes if required without this creating danger to others?

Further consideration should be given to the hazards present during the cleaning out of the hopper. During this operation it was necessary for the banksman to enter the hopper and shovel material to the conveyor.

Hazards observed included:

- Machinery hazards (falling ramp, conveyor);
- Slip, trip and fall on the level;
- Fall from height (when standing on material in the hopper, near the edge);
- Contact with hazardous substances (tarmac, cleaning fluids, diesel if used);
- Ergonomic/manual handling;
- Mobile plant hazard (prior to entry and if operator were to move with banksman in hopper).

These hazards should be addressed in risk assessment and I also recommended that a safe system of work should be written for the operation, particularly where hazards cannot be eliminated or controlled by other means. The safe system of work should include that the machinery operations during this phase (start/stop of the conveyor, dropping the front ramp, etc) are under the control of the banksman. If possible to the danger area to the front of the front ramp should be guarded. If not a safe system of work should address the crush hazard.

Other Observations

I did not observe any operation relating to changing the hand of the machinery, or work in relation to servicing or maintaining the equipment on site. These operations should, of course, be covered by risk assessment as required.

As we discussed, safe operation on site does depend largely on competence, communication, co-ordination and control, particularly between the machine operator and the banksman.

Do ensure that you consider site-specific hazards for each project and adjust the RAMS as required.