

Response the Coroners Regulation 28 ref. GARETH JAMES JONES (deceased)

Purpose of this paper

The purpose of this paper is to explain the policy background for highway maintenance activities in relation skidding incidents on highways (both prevailing at the time of the incident in 2018 and currently), to outline technical remedial work dealing with skid locations, and to explain the actions that have been taken at this location following the tragic incident. Finally, it explains application to other sites.

Policy background

Highway authorities have in place highway maintenance policies. These are framed in the light of national codes of best practice.

WCC has in place a Transport Asset Management Plan, part of which was the *Highways Skid Resistance Management Policy* (“the Policy”).

The Policy follows the national Highways Agency standard in relation to skid resistance on trunk roads (HD28/04). HD28/04 has been replaced by HD28/15 but there is no significant difference between the versions.

The Policy places reliance on “SCRIM” testing (Sideway-force Coefficient Routine Investigation Machine) in which a lorry-based machine incorporating a test wheel is driven along the road, wets the road to ensure a wet skid, skids the test wheel along the road, and measures the skid resistance.

At the time of the accident the policy stated that if the CSC falls below a set level, known as an “Investigatory Level”, that triggers further action dependent upon the extent to which the CSC falls below the Investigatory Level. The Policy at the time was consistent with national guidance.

There are various investigatory levels corresponding to the specific attributes of the particular section of carriageway.

Deficiencies are classed in order of magnitude between 1 and 4. 1 being most deficient and 4 the least.

In respect of class 1 and class 2 deficiencies, and in respect of class 3 and class 4 deficiencies in situations in which there *had been* one or more wet skidding accident in the previous 3 years, action would be taken, that action being, in the first instance, to erect signs warning motorists of a potentially slippery road.

Neither a CSC deficiency falling into class 1 or class 2, nor a CSC deficiency falling into class 3 or 4 with any skidding accidents in the previous 3 years, would automatically lead to remedial measures being undertaken to the Carriageway surface.

The CSC level is an investigatory level triggering, in appropriate circumstances, the taking of some action.

Remedial Action

Road surfaces are sometimes surface dressed (a treatment involving the application of bitumen and aggregate chippings). This is frequently a preventative measure used to extend the life of road surfaces, but also increases surface texture, increasing resistance to cars skidding, so can be used in response to skidding locations.

It is neither necessary nor reasonable to surface dress all sections of highway in which the CSC level falls below investigatory level, whether with or without previous skidding accidents. Rather it is necessary to consider all relevant circumstances to identify whether surface dressing would be beneficial in any event.

Such action over and above warning signage would be undertaken if there had been more than one wet skidding KSI accident.

The usual remedy for deficiency in SCRIM value would be to Surface Dress the section of Carriageway. Surface Dressing is a seasonal operation; the season being dictated by a national guidance document called Road Note 29.

Should there be further wet skidding accidents, prior the Surface Dressing treatment being available, consideration might be given whether it would be appropriate to take measures to improve the surface texture of the road on a temporary basis. All such techniques provide only temporary benefit.

In 2017 the use of other surfacing materials such as Hot rolled Asphalt or Bitumen Macadams that could be used all year round were precluded from use in the SCRIM deficiency situations. At that time it was deemed as a matter of national policy by the DfT (Department for Transport) that until the binder that coats the aggregate on the running surface was worn away by traffic, it would not realise its true skid resistance and could therefore make the situation worse. When we used such materials at this time 'slippery road' signs had to be erected at either end of the surfaced section until the required skid resistance was achieved.

This could lead to delays in treating a SCRIM deficient road section, leaving it protected only by warning signs and road markings etc.

Action taken at this location

The section of road in question was surface dressed as soon as possible following the accident thus restoring the skid resistance. We can therefore confirm that following the accident, a remedial measure to improve skid resistance was carried out. The exact timing of the works was governed by the DfT guidance over the time of year when this could be done.

Application to other skid locations

There are two main ways in which WCC can endeavour to ensure that the tragic fatality scenario referred to doesn't happen again.

Firstly, the asset Management team will receive details off and take into account all skidding accidents, not just serious wet skidding accidents, meaning trends can be spotted earlier.

Secondly, it is the decision by the DfT that Asphalts and Macadams do not actually have deficient skid resistance when first laid and can therefore be used to treat carriageways and immediately enhance the skid resistance that will enable situations to be remedied all year round and with relatively immediate effect that will ensure that should an accident trend develop action can be taken at any time of year. In other words, a national guidance change enabling greater flexibility in using these materials at all times in response to locations identified as needing action.