

Ref: 5-2018 Injury: Chemical burn to skin

INVESTIGATION LESSONS SUMMARY

Type of Incident

Injury

Business Unit/ Location

RSK Response/ Eshott Farm, Northumberland

Brief Account of Incident

An RSK employee was decontaminating an oil spill from a transformer. The operation involved the dispersing of an industrial degreaser, via a spray pump, to remove oil contamination. Suitable personal protective equipment (PPE) was being worn, including waterproof trousers, a chemical retardant hi-vis coat, and nitrile gloves.

The work commenced at midnight and initially involved the spraying of trees and high branches, which meant that the nozzle of the spray pump was pointed in an upwards position for a sustained period of time. At 0100hrs, the employee took a short break and travelled to a nearby café. Upon removing his coat on arrival, the employee noted an injury to their lower right arm, which was immediately placed under cold running water, before seeking further medical advice. A cream was prescribed for application to the affected area.

What Went Wrong?

The upward positioning of the spray pump meant that the degreaser was able to drip down the nozzle and seep through the cuffs of the jacket sleeve, before making contact with the employee's skin. The absence of a point of work risk assessment meant that the need for a secure seal between the gloves and the jacket sleeves was not identified.

Furthermore, although not related to the injury, the employee also admitted to not wearing safety goggles during the task (the substance can cause serious damage to the eyes); this was because of possible restrictions to vision caused by wet weather conditions.



Burn sustained to the employees lower right arm.

Lessons Learned

1. Risk assessments shall always be reviewed prior to works commencing so that any changes in site conditions (such as those associated with the weather) or task activity, do not compromise the effectiveness of existing control measures. Where this does occur, revised controls (that do not introduce new hazards) shall be established before works proceed. This shall always consider the risk assessment hierarchy of control:
 1. Eliminate the hazard/associated risk
 2. Substitute the hazard
 3. Engineer controls to remove a hazard or place a permanent engineered barrier
 4. Isolate hazard by containing the work environment/process
 5. Apply administrative controls to confirm capability of workforce
 6. Use PPE (e.g. gloves, goggles etc.)
2. Where protective clothing, such as safety goggles, is required to be worn in order to ensure the safe delivery of a task, then this shall be worn at all times, without fail. Where circumstances, such as weather conditions, prevent the effectiveness of PPE, then suitable alternatives shall be agreed (such as gauntlets), or work postponed, until such time that it is safe to use existing controls.
3. Check equipment prior to use, and ensure it is fit for purpose. For example, checking for nozzle leak or failures on spray pumps.

How is the item to be cascaded and implemented?

Toolbox talk Team briefing SHEQ notice board Process change Supply chain
SHE induction Other