

# Resourcing Solutions' HSQE Briefing: March 2017

#### **Our Safety Vision:**

- Our vision of "preventing harm to all" is at the centre of our Safety Strategy and is synonymous with our commitment to resourcing and working safely.
- We believe that our vision can be achieved if we all develop a safe mind-set, plan our tasks correctly and actively seek ways to prevent incidents. We also believe that behaving in a safe way will also lead to zero accidents. We have devised a set of rules that underpins our vision and are consistent with our mantra. Think safe, act safe and be safe!





# Resourcing Safely

#### In this edition:

- Use of Brush Cutters fitted with a metal blade for de-vegetation works
- Working at Height
- Temporary clamped joints for construction
- Retractable spring loaded craft knives
- Insh Marshes Category 1 Environmental Incident

#### **Action required:**

After reading this briefing, you are required to respond, please click "I have read and understood" or email <a href="mailto:ebeardsley@resourcing-solutions.com">ebeardsley@resourcing-solutions.com</a> with acknowledgement and any questions/suggestions

# Use of brush cutters fitted with metal blade for de-vegetation works

- Accident on 2<sup>nd</sup> July 2016 involved a metal blade brush cutter where a piece of metal shard pierced the inner right thigh of the operator.
- Accident on 21<sup>st</sup> July 2016 where a piece of metal wire hidden in the undergrowth was ejected beyond the 15 metres exclusion zone, inflicting a 3" cut on the left cheek of a COSS at the work site.
- Accident on 14<sup>th</sup> September 2016 at Ouse Valley Viaduct access point where a piece of wire was ejected during de-vegetation works and struck the operator's arm.

The instructions on the next slide have been developed between Network Rail and equipment manufacturers to control the risk of injury so far as reasonably practicable.





Protective guard fitted incorrectly



Protective guard fitted correctly

# Use of metal blades on brush cutters for de-vegetation works shall ONLY be permitted when the control measures below have been put in place.



#### **Equipment and competence**

- The tool and equipment supplier/maintainer must ensure that the brush cutter protective guard is undamaged/untampered with, and correctly fitted (see figure 1) and check that blades are in good condition and fitted correctly. If either of the above is defective, the brush cutter must be quarantined until repaired.
- All operators carrying out de-vegetation works must possess the required level of training and competency. This must be checked and confirmed via the Sentinel system for Network Rail staff or the authority to work card system for Contractors.
- Use of brush cutters for de-vegetation must be considered during the task planning process as a "right handed" operation. This has been confirmed by the manufacturers as the operational design intent. Use in right handed mode offers the optimum protection to the operator during de-vegetation.

# Use of metal blades on brush cutters for de-vegetation works shall ONLY be permitted when the control measures below have been put in place.



### **Equipment and competence (continued)**

 Operators should work their way down into the vegetation in layers enabling operators to identify 'hidden' items inside the brush that were not visible when the original survey was undertaken.

#### **Additional PPE requirements**

Forestry PPE is required in addition to the standard PPE set out in the Task Risk Control Sheet (NR/L3/MTC/0003/SP021 Issue 4). This is to ensure adequate protection for all parts of the body.

- 1. Forestry jacket conforming to EN ISO 20471 GO/RT protection class 3;
- 2. Forestry trousers conforming to ENISO 20471 GO/RT protection class 3;
- Visor faceshield conforming to N254/274000;
- 4. Neck cover protection conforming to N271/252000;
- 5. Forestry gloves conforming to EN388 and EN420.

Use of metal blades on brush cutters for de-vegetation works shall ONLY be permitted when the control measures below have been put in place.



#### **Exclusion Zone**

The minimum exclusion zone shall be extended from 15 metres to 30 metres. Where personnel on site have to work within this 30 metres demarcation they must be fully clothed with the appropriate PPE as detailed above. If anyone on site is not wearing the appropriate PPE comes within 30 metres of the operator the cutting operation should be stopped immediately. The Team Leader/Supervisor shall be responsible for ensuring this exclusion zone is enforced at work sites.

### Working at height

Work at **height** means **working** in a place (except a staircase in a permanent workplace) where a person could be injured by falling from it, even if it is at or below ground level.

The law requires that work at height is planned, supervised and carried out by people who are trained and competent.

• All work at height must be subject to a task-specific risk assessment which identifies all hazards and risks involved, and sets out the precautions to be taken to do the work safely. Apart from the risk of falling from open edges, other risks include falling through fragile surfaces, such as corrugated cement sheeting, or roof lights made from glass or plastic-type materials. There is also the risk of dropping tools or materials and injuring people in the area below the work, and risks associated with weather such as heavy rain, freezing conditions or high winds. Precautions taken to prevent falls from height must follow the order of priority on the next slide



## **Working at height – Hierarchy of Fall Prevention**

- Work at height should be avoided if reasonably practicable to do so, by using alternative means to get the job done. For example, clearing gutters may be done from ground level using telescopic cleaning systems.
- If work at height is unavoidable, the best safety measure is to work behind a barrier which prevents a fall, such as guardrails fitted around the perimeter of a roof or fitted around the working platform on a tower scaffold or MEWP.
- If working behind guardrails is not reasonably practicable, then the next best thing is to wear a safety harness with a lanyard attached to a secure anchor point. The lanyard must be of a length that prevents the wearer reaching a point from which they could fall, in other words the lanyard must stop the wearer before they reach an open edge.
- If none of the above are reasonably practicable, then fall-arrest
  equipment must be used. Fall-arrest equipment does not prevent a fall,
  but does prevent the user hitting the ground. Examples include safety
  nets, air bags and a safety harness attached to a lanyard with "tear out"
  sections that gradually slow and stop a fall.



# **Temporary Clamped Joints for Construction**

There have been several failures of temporary clamped joint under traffic on S&C North Alliance work sites





# Temporary clamped joints for construction

- An underlying cause of these failures is that the temporary clamped joints were not correctly assembled at the time of initial construction on the work site.
- In essence "Temporary" clamped joints were being formed (an example is shown on the previous slide).
- Reasons given for doing this were to pass rail vehicles in the worksite over the track under construction
- The method shown on the previous slide required the Supervisors to remember to remove or finish the construction of such joints later on prior to hand back.
- However, due to time pressures, the welding or addition work required to finish compliant construction of the joints was not carried out or confirmed to have been done.
- The non-compliant joints were not corrected prior to hand back & failed under traffic. A derailment could have resulted



# Temporary clamped joints - Action to be taken and learning applied

- Any temporary clamped joint that is not assembled in strict accordance with the manufacturer's instructions has a very high risk of failure. This failure can result in a derailment.
- Such joints must be formed in accordance with the manufactures
   assembly instructions. This is to ensure that they comply with Network
   Rails Product acceptance for use on operational railway infrastructure.
   This requirement is regardless of whether the joint is to be removed or
   rechecked during the works.
- If any person is asked to assemble a temporary joint incorrectly they should **apply the 'Worksafe' process** via the Supervisor. You **WILL** be supported.
- Supervisors are required to confirm that all temporary clamped joints are assembled correctly when initially fitted. This includes torqueing all nuts and fitting any locking mechanisms.
- The passing of any engineering train, on track machine (OTM) or on track plant (OTP) over a joint that is not in accordance with the manufactures assembly instructions is not allowed on any S&C North Alliance work sites.



**Siemens Rail Automation projects.** This decision has been made in response to a potentially serious accident sustained by a supply chain colleague of Siemens Rail Automation whilst using a retractable spring loaded craft knife.

The injured person received stitches to his inner left forearm below the elbow and was fortunately able to resume normal duties the following day due to the swift action and core competence of work colleagues.



# **Approved**

# **CK Jokari T10700 Multicore Cable Stripper - 50 to 70mm**

Precise, clean cuts of multicore cables are easy with this cable stripper.

Suitable for use with multicore cables from 50 to 70mm in diameter, the T10700 has a precision blade which automatically repositions itself to ensure a clean cut at all times.

The stripper is made from high grade, wear-resistant polyamide for strong durability and lightweight handling.



# Retractable Spring Loaded Craft Knives have now been banned on all Siemens Rail Automation projects.



## **Approved**



# **Banned**



## **Environment – Insh Marshes Category 1 Environmental incident**

A 70m remedial ditch was recently excavated adjacent to RSPB Insh Marshes nature reserve without legally required consent. This incident was a "Category 1" (most serious category) Environmental incident and whilst enforcement action against Network Rail was not considered necessary, the incident damaged previously good relations with key environmental stakeholders.

#### **Underlying Causes**

**Documentation** – project and specification documents were not adequate, were not internally or externally approved and suggested mitigation was not implemented

**Communication** – Confusion over the process for gaining consent for working in a 3<sup>rd</sup> party owned protected site was evident: both Network Rail and the contractor assumed the other party would apply for and manage the consent.

Competence – Lack of procurement experience amongst Delivery Unit staff and low level of environmental expertise meant that the importance of the consent was overlooked, against a perceived urgency to complete the works.



# **Environment – Insh Marshes Category 1 Environmental incident**



#### **Key Message**

Any work in an environmentally protected area should not proceed without consultation and where appropriate, consent from the appropriate regulator

Any work on 3<sup>rd</sup> party land should have written permission from the land owner before work commences

All staff should be aware of the importance of environmentally protected sites, how to operate in or adjacent to them and the consequences should this not happen





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