

# Period 4 Safety Cascade



Picture of Waterloo Station in 1902 – Waterloo Station celebrated its 170<sup>th</sup> Birthday this Period



# Welcome

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Welcome to the Wessex Route Health Safety and Environment (HSE) Communications for Period 4,

## Included in this issue:

- **Workforce safety – Safety calendar**
- **Workforce accidents – 1 lost time injury**
- **Workforce accidents – 7 non- lost time injuries**
- **Workforce Safety**
  - **Working with the Live Conductor rail**
  - **Dynamic risk Assessment**
- **Driving News**
  - **Ad Blue**
  - **Enhanced Driving risk 'Dry to Wet'**
- **Safety Bulletins**
- **Safety Notices: Weed Train.**
- **Community Safety Update**
- **Health and wellbeing**
  - **Mental Health**
  - **Respiratory update**
- **Close call of the period**
- **Appreciation.**





# Workforce safety – safety calendar

July  
2018/19  
Period 4

## Wessex Safety Calendar

SUN	MON	TUE	WED	THU	FRI	SAT
24 Week 1	25	26	27	28	X2 29	30
01 Week 2	02	03	04	05	06	07
08 Week 3	09	10	11	12	13	14
15 Week 4	16	17	18	19	20	21

**Key:**

NO Lost Time Injury
Lost Time Injury
NEAR MISS
RTA - No Injury

For more information, please contact your local WHSEA

*A better railway for a better Britain*





# Workforce accidents

## Accident – Lost Time Injury (1)

**OUTER DU –  
Basingstoke S&T  
25<sup>th</sup> June**

Whilst standing in the Up Cess in a position of safety, a member of an S&T team felt a sharp pain in his ankle as a SWR train passed on the Up Slow. This is subject to further investigation but it would appear an object fell off the train and struck the IP on the ankle.

*Accident classification: Struck by Falling/Flying Objects*

For more information, please contact your local WHSEA

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# Workforce accidents

## Minor accident – Non Lost Time Injury (7)

<b>OUTER DU – Salisbury P-way</b> <b>26<sup>th</sup> June</b>	The IP was walking in the cess over uneven ground when an ankle gave way , causing the IP to stumble forward, falling onto ballast. <i>Slip Trip and fall: ballast.</i>
<b>OUTER DU- Havant P-way</b> <b>Station 29<sup>th</sup> June</b>	Whilst using an iron man, the IP released the ratchet, this caused it to spin around and catching the lower part of his right arm.. <i>Use of tools and equipment: this should be completed in a controlled manner.</i>
<b>INNER DU – Guildford P-way</b> <b>29<sup>th</sup> June</b>	A contractor from Ganymede was undertaking lookout duties for the maintenance team when ballast gave way underfoot causing the IP to fall, grazing the IP's left lower shin and the side of his leg. <i>Slip, Trip or fall: ballast.</i>
<b>Outer DU –</b> <b>5<sup>th</sup> July</b>	Whilst cycling to Winchester station a car pulled out in front of the IP on the approach to the station. IP had insufficient time to stop or avoid car, he came into contact with the car and was knocked from the pedal cycle.
<b>INNER DU – Feltham S&amp;T</b> <b>10<sup>th</sup> July</b>	The IP was unloading small tools and meters from the back of the van to place in the storage unit. Whilst doing so he caught his finger on an object and grazed his middle finger causing it to bleed. <i>Consider the use of gloves at all times.</i>
<b>INNER DU – CRE</b> <b>11<sup>th</sup> July</b>	The IP was working in the depot; Wimbledon store. He was stung by a wasp on the lip.
<b>INNER DU- Woking S&amp;T</b> <b>12<sup>th</sup> July</b>	The IP was attending a first aid course and was participating in rolling the 'casualty' over, he felt a slight tweak in his back, which became more uncomfortable later that night. This was reported the following Monday. <i>Please report accidents at the time, however small they seem.</i>

For more information, please contact your local WHSEA



# Safety bulletin

## Significant Accident on South East Route

### Overview

On 12<sup>th</sup> July a Maintenance contractor team were tasked with clearing ballast from the foot of the rail to allow for a PLPR inspection.

The Safe System of Work was open line with lookout protection.

At approximately 1030hrs, upon the approach of a train, the gang were called out to a position of safety.

As the train passed the IP was struck by a piece of ballast which broke his safety glasses and resulted in a large laceration above his right eye needing in 8 stitches.

It is clear that the injury could have been significantly more serious had the IP not been wearing his safety glasses.

An internal investigation is currently underway, but it is likely that the incident was caused by the train's shoe gear hitting a high ballast profile.



### Immediate Actions

- Please ensure that you have been issued with the correct eye protection for the task and that they are in good condition, and that they are **worn at all times** (if you are unsure **ASK** your Manager)
- Do not hesitate to **challenge** any individual who is not wearing their safety glasses (or full and correct PPE)
- Your **Safe Work Pack** must contain the task, location and operational risks and control measures. Ensure you are briefed on these prior to starting work
- When carrying out similar tasks please be reminded of the importance of maintaining a ballast profile which is **clear of the conductor rail and of the collector shoes**.
- Remember **Take 5 for safety!** Think about the risk before, during and at the end of the task



everyone  
home safe  
every day



# Safety Advice

## Overview

Following the recent NR Safety Advice issued on 20/07/2018 NRA 18/13 *Prohibition of rail connected speed boards in 3<sup>rd</sup> and 4<sup>th</sup> rail areas*, a review of Network Rail standards and instructions applicable to the activity of erecting an insulated Vortok Speed Board, and a work activity risk assessment has taken place.

Both NR/L3/MTC/EP0152 'Working on or adjacent to the Conductor Rail' and Task Risk Control Sheet (TRCS) GA20 'Working adjacent to DC Electrified Rails Risk Level 1-3' refer. The fitting of the Vortok system requires adherence to the risk controls identified in either Risk Level 2 or 3 depending on the proximity to the conductor rail.

If the erection of the Vortok speed board requires the insulated GRP crossrail part of the equipment to be placed under and within 300mm of the conductor rail Risk Control Level 2 will apply.



## Action to be taken

*The re-introduction of the use of insulated Vortok speed board equipment on 3<sup>rd</sup> rail DC traction areas can re-commence subject to the following:*

- The contents of TRCS GA20 'Working adjacent to the DC Electrified Rail Risk Level 1-3' must be available to all track staff who hold the TK01 and TR11 competence.
- The Person in Charge must have a SWP (or an IRP depending on the circumstances) where the (GA20) Risk Level has been recorded.
- Only staff who are trained and competent in PTS(DC) and the work activity to fit the speed board.
- Sufficient numbers of conductor rail shields must be in place to protect staff and equipment for the duration of the activity; this must also include any adjacent live conductor rails.
- Use only insulated tools are to be used.
- Ballast must be dug-out from the track bed under the rails to a depth of approx. 8" or 200mm to allow ease of movement of the GRP insulated crossbar under the rail.

## Use of speed board equipment.

Wessex Route  
Safety Advice.



### Wessex Route

**Title:** Use of insulated Vortok speed board equipment in 3<sup>rd</sup> Rail areas.



Figure 1. Fitting under the running rail and adjacent conductor rail.



# Workforce Safety

Third rail...Risk Level 1, 2 or 3?

A couple of incidents and accidents across the 3<sup>rd</sup> rail areas recently suggest it's about time we re-visited what the minimum Risk Levels are and what controls should be in place. See attached TRCS for full details.

**Task Risk Control Sheet**

Working Adjacent to DC Electrified Rails Risk Level 1 - 3

Network Rail

Key Risks !		Personnel Involved	
• Electrocution	• Burns	E&P	✓
• Eye damage		S&T	✓
		Track	✓
		Off Track	✓
		Property	✓

Tools / Equipment	Insulated Tools	Non-conducting measuring equipment
	Conductor Rail Shields	Tools and measuring equipment

Plant	None
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**Work Adjacent to Conductor Rails**

- Risk Level 1 = Tasks where isolation of the conductor rail is needed
- Risk Level 2 = Tasks carried out closer than 300mm to the live conductor rail
- Risk Level 3 = Tasks carried more than 300mm from a live conductor rail

What are the increased risk factors for all levels?

- Hot weather
- Damp/wet conditions
- Darkness
- Continued crossing of the live rail



# Workforce Safety

Third rail...Risk Level 1.

Working on the Conductor rail is an ISOLATION

## SECTION B - RISK LEVEL 1 - MANDATORY ISOLATION

**Electrocution / Burns / Eye Damage - Falling onto/ making contact with live rail**

- Isolate the conductor rail to the requirements detailed in NR/WI/ELP/3091, 27051 or 27052
- Issue a Conductor Rail Permit to the COSS or secure a temporary isolation
- All staff working adjacent to DC electrified rails shall be trained and competent in PTS (DC) as a mandated minimum requirement
- Brief all staff in the working party (including contractors) on the Risk Control Sheet for this activity
- Re-assess the work when a change in work method/scope occurs. Implement additional controls or seek further isolation of the conductor rail as necessary

Defined Competent Person

Authorised Person

Line Manager

Team Leader

Team Leader

## Reminder

- Permits
- Testing
- Conformation for a Temporary Isolation



# Workforce Safety

Third rail...Risk Level 2

Controls for working at Risk Level 2 (<300mm from a Live conductor Rail)

SECTION C - RISK LEVEL 2 - WORKING LIVE < 300MM		
Key Risks	Controls	Implemented By
<b>Electrocution / Burns / Eye Damage -</b> Falling onto live rail	<ul style="list-style-type: none"> <li>All staff working adjacent to DC electrified rails shall be trained and competent in PTS (DC) as a mandated minimum requirement</li> <li>Brief all staff in the working party (including contractors) on the Risk Control Sheet for this activity</li> <li>Consider the actions to be performed and brace against the possibility of falling towards live rail (e.g. tools slipping etc.).</li> <li>Place sufficient Conductor Rail Shields on the live rail adjacent to the site of work. Leave them in place for the duration of the work</li> <li><u>Supervise inexperienced staff closely.</u></li> <li>Staff and contractors shall be competent in the activity under these conditions (working live) and follow the method of work / work instructions. If the method of work changes for any reason stop the work and re-assess. Implement additional controls or request an isolation of the conductor rail</li> </ul>	Line Manager Team Leader Team Leader / Staff Line Manager / Team Leader

## Reminder

- Tools
- Shields
- Clothing



# Workforce Safety

Third rail...Risk Level 3.

Risk Level 3 working more than 300mm from a live conductor rail.

SECTION D - RISK LEVEL 3, WORK >300MM		
Key Risks	Controls	Implemented By
<b>Electrocution / Burns / Eye Damage - Falling onto live rail</b>	<ul style="list-style-type: none"> <li>All staff working adjacent to DC electrified rails shall be trained and competent in PTS (DC) as a mandated minimum requirement</li> <li>Brief all staff in the working party (including contractors) on the Risk Control Sheet for this activity</li> <li>Consider the actions to be performed and brace against the possibility of falling towards live rail (e.g. tools slipping etc.). When the risk cannot be predicted, place Conductor Rail Shields on the live rail. Leave them in place for the duration of the work</li> <li>Re-assess the work when a change in work method occurs. Implement additional controls or seek an isolation of the conductor rail</li> </ul>	Line Manager Team Leader Team Leader / Staff

## Reminder

- Tools
- Shields
- Clothing



# Workforce Safety

*Dynamic Risk Assessment*

## What is Dynamic Risk Assessment?

- Is the practice of mentally observing, assessing and analysing an environment while we work, to identify and remove risk.
- The process allows individuals to identify a hazard on the spot and make quick decisions in regards to their own safety.
- While steps can be taken to reduce and eliminate workplace hazards, there are some risks that are unpredictable and difficult to control. For example, leaving a tool in a daft position in a work site for someone to trip over.

The ability to carry out a dynamic risk assessment allows someone to identify a potentially dangerous environment or situation and take the appropriate steps to leave the environment or remove the risk before it causes an accident or incident.

**The best tool for identifying risk is 'honing your basic survival instinct'.**



# Workforce Safety

*Dynamic Risk Assessment*

What risks can you spot?





# Driving news

## Does Your New Diesel Vehicle Use Ad Blue? What is Ad Blue?

When the fuel is burned by the engine, Ad Blue is injected into the SCR catalyst in order to convert the NOx into a less harmful mixture of nitrogen and water vapour. The solution is stored in its own tank separate from the diesel, and is injected into the outgoing exhaust gas before the SCR catalytic converter, the urea present becomes ammonia when heated, reacting with the NOx in the emissions to convert the pollutants into nitrogen, water, and a small amount of carbon dioxide, elements that are already natural to the air that we breathe.



- Ad Blue
- is **NOT** a fuel or even a **fuel additive** therefore has its own tank
- A warning light will illuminate on the dash when less than 300 miles supply is left.
- If it runs out the engine **will not** restart.
- A Ford Transit tank for it will hold around 20 litres.
- A tank of it will last about 5000 miles.
- It can be purchased on the normal fuel card as a fuel related product
- It can also be purchased in bulk from I-proc.
- Care should be taken when refilling the tank in order to prevent dirt and contamination entering the vehicle's system.
- Running diesel engines without it or allowing contamination to enter the system will cause expensive damage.



# Driving news

## Driving Conditions following a dry spell

### What are the risks associated with the change in driving conditions when we have rain following a dry spell?

There is scientific data available that concludes that driving in wet conditions immediately following a dry spell has increased risk of an Road Traffic Collision (RTC). The Police acknowledge that there is an increase in RTCs due to the change in stopping distances which catch people out.

As well as peoples behaviour and driving styles that can cause an increase in RTCs, the vehicle itself will need attention such as:

- Windscreen wipers (can become deteriorated in hot weather)
- Tyres
- Grease and fluid top ups



Note: All drivers are reminded that there is a requirement to still complete the log book as well as logging into VSWS.

### Discussion Points:

- Are your vehicles ready for heavy rain?
- How do you change your driving style in different conditions?



# Safety bulletin

## ***Manual handling of steel sleepers***

### **Overview**

Following a previous accident, ORR issued an Improvement Notice requiring a risk assessment of the tasks involved in moving and fine alignment of steel sleepers. This was communicated in safety bulletin [NRB 18/07](#).

Steel sleepers weigh over 80kg each and the weight is increased when supplied with chairs attached (88kg with fast clip chairs attached).



Risk assessments have been carried out as part of the response to the enforcement action by Wales Works Delivery with support from the STE Ergonomics Team.

The final results of the risk assessments will be communicated separately, however there are some important immediate actions required where steel sleepers are used which are detailed below.

These actions shall remain in force until alternatives are proven to be safe and are communicated in an update to this Safety Advice.

### ***Immediate action required***

1. It is prohibited to lift and carry steel sleepers by manual means, apart from fine alignment as described in the text in the right-hand panel.
2. Mechanical means must be used to lift, move and position steel sleepers. Suitable mechanical means are listed in bullet 3 below.
3. Specific machines exist that are designed to lift and place steel sleepers (e.g. from GOS and McCulloch) which should reduce any manual handling to a minimum. If these are not available, an RRV or other mechanical lifting device should be used.

Manual handling may be used for re-positioning the sleepers only over short distances (fine alignment). This requires a four-person co-ordinated team lift with lifting tongs.

Nips designed for concrete sleepers must be used for this task (iStore ref: 0039/068275 or 0039/069333). The existing steel sleeper tongs do not support an upright two-handed posture when lifting and are therefore prohibited from use for this task.

There is currently no safe method for lifting a sleeper off a trolley and this task is therefore prohibited.

Alternative methods or tools for lifting sleepers may only be used if supported by a suitable and sufficient risk assessment.

Copies of Safety Advice are available on [Safety Central](#).



# Safety notice

WESSEX OUTER DU – Live scrap rail

## Overview

At 10:13 on 19<sup>th</sup> July, the team leader of Inspection staff at Havant P-way escalated a safety issue that had been identified following a track patrol where a scrap piece of rail had crept in the warm weather and had eroded away the insulation of a 750v cable causing the rail to become live. Temporary work to make the rail safe was carried at the same day and full repair completed for the damaged cable the same night.



## *Immediate Actions- Subject to investigation*

Re-brief track inspection staff that where we have long sections of CWR in the 4ft or on the ballast shoulder we must spray the rail ends to be able to monitor how much the rails are creeping during the summer months.



# Safety notice

## WEED SPRAYING TRAINS ARE IN OPERATION

Staff on or near the line when a Weed Control Train approaches should take the following action:

- Acknowledge and move to a position of safety
- Remain in the PoS; make yourself visible to the Driver who will suspend spraying as the train passes..
- Do not 'hide' behind bushes in an attempt to avoid being sprayed, the spray jets are specifically designed to penetrate bushes.

The herbicides deployed by the Weed Control Train are biodegradable, non irritant and non harmful at the low concentrations used. In the unlikely event that staff are sprayed accidentally it is recommended that they take the following actions:

- If the eyes have been sprayed, rinse immediately with clean, water for 15 minutes and obtain medical aid if any discomfort is felt thereafter.
- Rinse any exposed skin with clean water and wash with soap and water afterwards.
- Avoid eating, drinking, or smoking until this procedure has been carried out.
- Change any sprayed clothing at the earliest convenient time and retain in a plastic bag for collection.
- Report the incident to the Route Operations Control.
- Should any member of staff be sprayed they may obtain advice from SCO 24:7 Seasonal Controller 01908 723500 (Option 8)

Should any member of staff require any further information or advice please contact:



# Community safety

Rail Safety sessions have now been delivered to over 20,000 children and adults on Wessex



Children from Thomson House School designed their interpretation of 'Waterloo station for the future' for the 170th anniversary of Waterloo. The children also met Mark Carne and Becky Lumlock.

Basingstoke Campus was opened to 70, 11-12 year olds for our first rail safety community event we have ran in our own facilities. The event included a theatre show, level crossing awareness, BTP introduction and the children designed their own safety campaign.



A group of Beavers followed their rail safety session with a train trip from Basingstoke Station and a visit to the Signallers – thank you to all those who supported!

For more information or if you would like to become a volunteer please contact our Community Safety Manager- [Marcia.Burnett@networkrail.co.uk](mailto:Marcia.Burnett@networkrail.co.uk)



# Community safety

A thank you to:

Southampton P-Way team who noticed a children's camp near tracks and reported the risk, identifying name of the school. We contacted the school and delivered safety sessions to over 700 students. The school have asked us to return each year to deliver the safety message to the incoming year 7 students.

A primary school teacher contacted us to ask for a rail safety assembly, as she previously taught in a school where a child died, she commented;

*“breaking the news to a class of 8 and 9 year olds that one of their school friends would never be coming back. The sadness was overwhelming, she was just a child, with what should have been her whole life ahead of her. She was 10 years old and had been playing conkers down by the track in Staines with her twin brother and another friend the night before, she had accidentally stepped on a live rail track and been electrocuted. Breaking the news was horrendous”*

Following the sessions she wrote:

*“Thank you so much for coming and delivering such engaging and valuable workshops to year 5. The response has been overwhelming, speaking to parents the children went straight home and engaged in discussions with them about how to stay safe and making the right choices. We would really appreciate it if we could make you coming in a regular event in the academic year. The impact you’ve had on promoting discussions inside and outside the classroom has been invaluable.”*

For more information or if you would like to become a volunteer please contact our Community Safety Manager- [Marcia.Burnett@networkrail.co.uk](mailto:Marcia.Burnett@networkrail.co.uk)

# Health News - Mental Health

## TAKE 10 TOGETHER

### Starting the conversation

We believe talking about mental health can help you and those around you to be happier and healthier. Mental Health First Aid (MHFA) England is calling on everyone to 'Take 10 Together' and take 10 minutes to start a meaningful conversation with a friend, a family member, a colleague or student about their mental health.

Mental Health First Aid teaches people the skills and confidence to recognise the signs and symptoms of common mental health issues and effectively guide a person towards the right support. Having a 10 minute chat is the first step on that journey.



We don't often talk about our mental health so it might seem a little daunting to start a conversation about it but it's important to remember you don't have to be an expert. MHFA England has put together some ideas for how you can start the conversation.

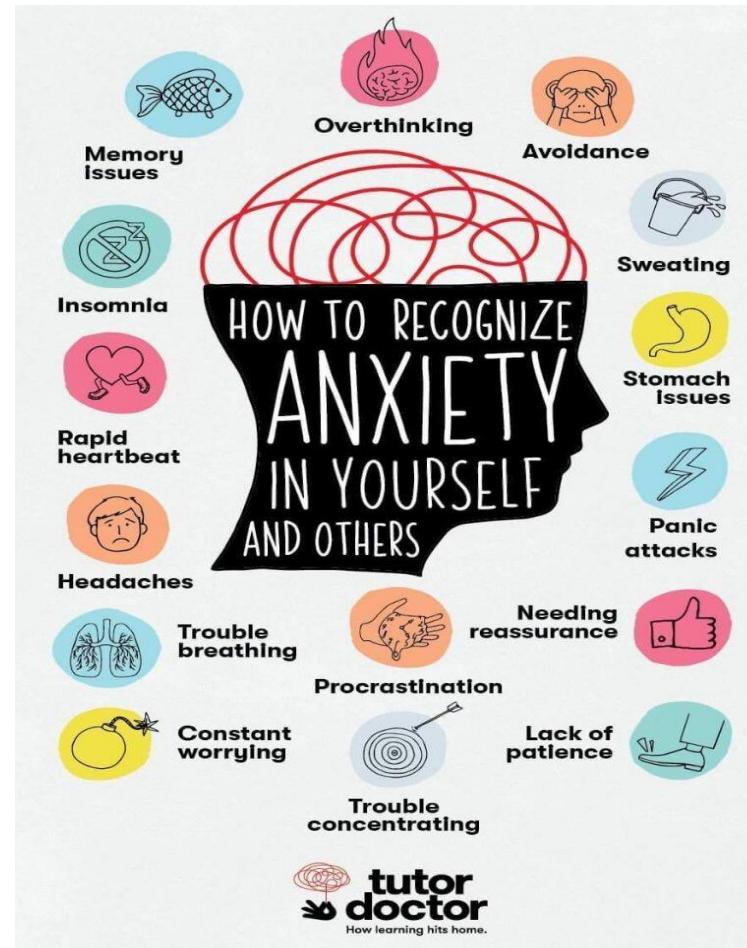
57%

of UK employees say they have experienced mental health issues at work but less than half of that group felt confident to open up about it.



Around 10 million

people will experience a mental health issue each year in the UK.



For more information, please contact our Occupational Health and Wellbeing Manager- [Grazia.Elsehimy@networkrail.co.uk](mailto:Grazia.Elsehimy@networkrail.co.uk)



# Health News - Mental Health

**10 WAYS TO LOOK AFTER YOUR MENTAL HEALTH**



-  Talk about your feelings
-  Keep active
-  Eat well
-  Take a break
-  Drink sensibly
-  Keep in touch
-  Accept who you are
-  Ask for help
-  Care for others
-  Do something you're good at

 Mental Health Foundation  
[mentalhealth.org.uk](http://mentalhealth.org.uk)

For more information, please contact our Occupational Health and Wellbeing Manager- [Grazia.Elsehimy@networkrail.co.uk](mailto:Grazia.Elsehimy@networkrail.co.uk)



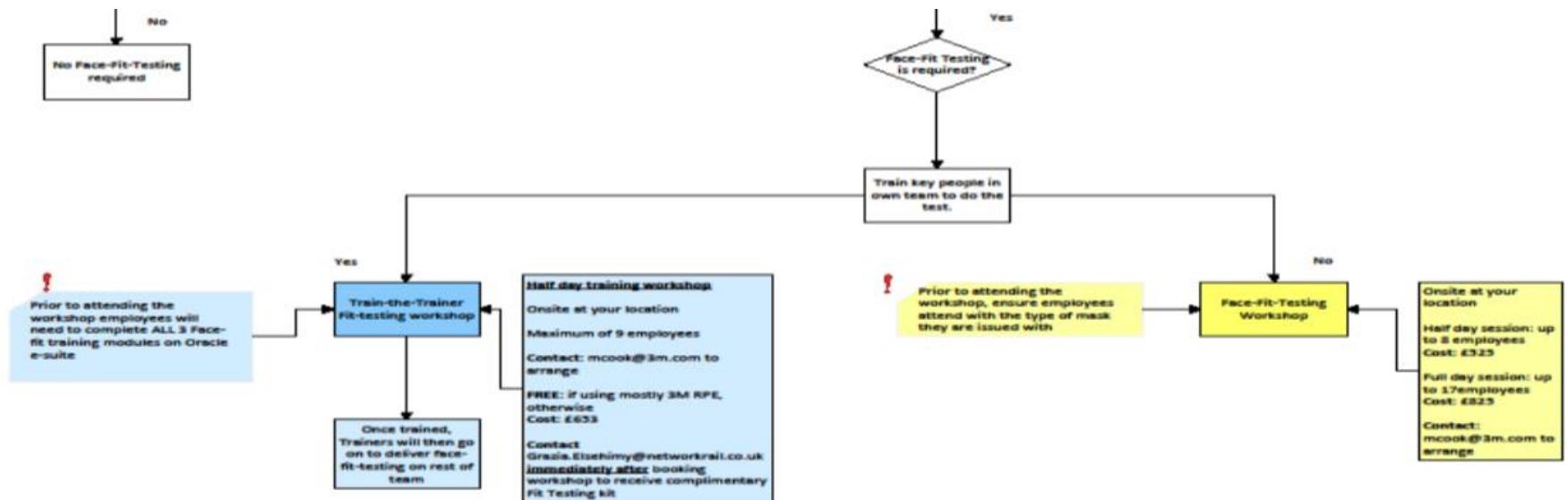
# Health News - Respiratory

On Oracle there are 3 core respiratory modules which depending on your work activity must be completed.

**Module 1: Awareness of Respiratory Hazards:** All Wessex PTS holders need to complete this brief, to increase their awareness of the respiratory hazards (i.e. diesel fumes; ballast dust; chemical fumes etc.) in the working environment

**Module 2: Face fit requirements and Fit Check:** Everyone issued with tight fitting Respiratory Protective Equipment (RPE) like the below ALSO need to complete this brief in addition to the one above

**Module 3: Face testing:** Employees that want to train to become face-fit-testers need to complete this module as well.





# Health News - Respiratory

Respiratory Protective Equipment (RPE)

## Tight Fitting Face Pieces



Figure 1: (a) disposable filtering face pieces



(b) half face tight fitting masks

- Relies on a tight seal around the face
- This means no facial hair as this would compromise the effectiveness of the seal and subsequently the protection.
- Anyone issued with tight fitting RPE, **must be face-fit-tested.**

## Loose Fitting Face Pieces



Figure 3: Full-face powered system

- Relies on enough clean being provided to the wearer to prevent contaminant leaking in.
- Facial hair has no impact on the effectiveness of this respirator..
- **No requirement for face-fit-testing.**



# Close Call of the period

*While it's a fact close calls remain a centrally set target, Wessex will **not** treat them as a numbers game*

On 2<sup>nd</sup> July the a Reporter raised:

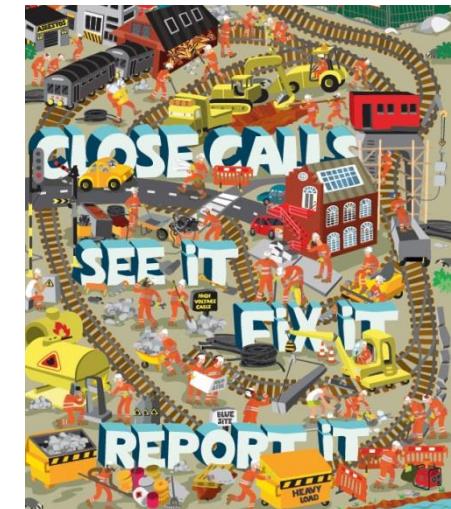
**Description:**

MPV discharging liquid indiscriminately in close proximity to Salisbury S&T office / mess room

**What could have happened:**

Contaminated water discharge and spray onto persons walking past on walking route to and from depot.

**Actions Required:** Review of the maintenance activities and location of these activities for the MPV Responsible Manager.



**On 13<sup>th</sup> July, the Responsible manager provided the following feedback:**

JSD have interviewed there operator and investigated what has happened. Below is a summary of the report:

- The operator stated that when testing the system prior to departure only fresh water from the water tank was used, also it is unlikely that any particles from the tank would have been emitted from the spray head due to the filtering system, which would not allow any foreign particles to be emitted from the spray head.
- The “Fresh” water would have only been present in the tank for up to 24hrs prior to the testing of the spay heads and therefore it is highly unlikely that anything other than fresh water would have been emitted.
- It is possible that as the jets of water were emitted from the spray head, they hit the ground throwing up particles from the ground.
- All operators have been instructed to ensure that testing of the jetting system take place away from any offices, and they have been advised that they should test the system at the furthest point from the road way “Just after entry into the depot” and not alongside the portacabins/offices. This will ensure that testing in an area where persons could be present is do not occur.

JSD have apologised to me for the concerns and issues this incident have caused to people working in the depot and they have committed to ensure that they are more aware of the surroundings when carrying out testing.



# Thank you

**Lewis Smith Team Leader  
Pete Avison Patroller  
Wesley Hubbard  
Paul McGrath  
Robert Chivers**

**from Havant P-way for staying on site when a piece of scrap rail became live after making contact with a 750v cable. They stayed on site to make sure no one was exposed to the 'live rail' until it could be made safe.**