

Task Risk Control Sheet



**Working Adjacent to DC Electrified
Rails Risk Level 1 - 3**

**RCS No: NR/L3/MTC/RCS0216/GA20
Issue: 3**

	• Electrocution • Burns • Eye damage	Personnel Involved	E&P	✓
			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**

SECTION A - ALL RISK LEVELS

Key Risks	Controls	Implemented By
Struck by train	• See Risk Control Sheets NR/L3/MTC/RCS0216/GA01 – Work on or Near the Line	All Staff
Slips, Trips & Falls	• See Risk Control Sheet NR/L3/MTC/RCS0216/GH02 – Underfoot Conditions	All Staff

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	Defined Competent Person
	• Issue a Conductor Rail Permit to the COSS or secure a temporary isolation	Authorised Person
	• All staff working adjacent to DC electrified rails shall be trained and competent in PTS (DC) as a mandated minimum requirement	Line Manager
	• Brief all staff in the working party (including contractors) on the Risk Control Sheet for this activity	Team Leader
	• 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	Team Leader

Task Risk Control Sheet



SECTION C - RISK LEVEL 2 - WORKING LIVE < 300MM		
Key Risks	Controls	Implemented By
Electrocution / Burns / Eye Damage - Falling onto live rail	All staff working adjacent to DC electrified rails shall be trained and competent in PTS (DC) as a mandated minimum requirement	Line Manager
	Brief all staff in the working party (including contractors) on the Risk Control Sheet for this activity	Team Leader
	- Consider the actions to be performed and brace against the possibility of falling towards live rail (e.g. tools slipping etc.). - 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 - Supervise inexperienced staff closely.	Team Leader / Staff
	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	Line Manager / Team Leader
Electrocution / Burns / Eye Damage – Contact with live rail with tools, work equipment or parts of the body	- Confirm that tools greater than 300mm in length shall be insulated to BS 8020. - Use Insulated tools (Unless specifically excepted by the DU WHS&EA) - 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 - Do not use metal (conducting) measuring equipment or tapes. Their use is prohibited	Team Leader / Staff
	All above controls apply at guard board locations. Seek advice if guarding prohibits correct fitting of conductor rail shield	Line Manager / Team Leader
Electrocution / Burns / Eye Damage - Defective tools and equipment	Check tools and equipment prior to use. Replace if damaged, particularly the insulation of the tools and Conductor Rail Shields	Line Manager / Team Leader / Staff

Task Risk Control Sheet



Key Risks	Controls	Implemented By
Electrocution / Burns / Eye Damage - Losing control of materials e.g. long strip heaters.	- Plan work beforehand to minimise work in close proximity to conductor rail. - Handle heavy or long items with the appropriate number of people in a pre-planned move	Team Leader
Electrocution / Burns / Eye Damage – Walking into flooded areas	You must not step into flood water which may be in contact with the CRE	Team Leader
INCREASED RISK EXISTS IF:-		
Icy conditions exist	Assess underfoot conditions and postpone work if ice remains a risk at the site of work	Team Leader
Continued crossing of live rail is necessary	Plan and conduct work to minimise the number of times the live rail is crossed	Team Leader / Staff
In darkness	- Provide site lighting if working live during the hours of darkness. Use lighting suitable for the task performed (refer to NR/L3/MTC/RCS0216/SP16 - Use of Site Lights) - Wear and use headlamps	Team Leader
You are sweating and partially clothed due to hot weather	Cover upper and lower body with clothing	Team Leader
During very heavy (Torrential) rain	The insulation properties of shields and tools can be compromised during very heavy (torrential) rain. Therefore if the work is to be completed, elevate risk controls to risk level 1	Staff

Task Risk Control Sheet



SECTION D - RISK LEVEL 3, WORK >300MM		
Key Risks	Controls	Implemented By
Electrocution / Burns / Eye Damage - Falling onto live rail	All staff working adjacent to DC electrified rails shall be trained and competent in PTS (DC) as a mandated minimum requirement	Line Manager
	Brief all staff in the working party (including contractors) on the Risk Control Sheet for this activity	Team Leader
	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	Team Leader / Staff
	Re-assess the work when a change in work method occurs. Implement additional controls or seek an isolation of the conductor rail	
Electrocution / Burns / Eye Damage – Contact with live rail with tools or work equipment	- Where there is a possibility that tools could contact the conductor rail, confirm that tools greater than 300mm in length shall be insulated to BS 8020 (Unless specifically excepted by the DU WHS&EA) - If necessary, 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 - Do not use metal (conducting) measuring equipment or tapes. Their use is prohibited - All above controls apply at guard board locations. Seek advice if guarding prohibits correct fitting of conductor rail shield	Team Leader
Electrocution / Burns / Eye Damage - Defective tools and equipment	Check tools and equipment prior to use. Replace if damaged, particularly the insulation of the tools and Conductor Rail Shields	Line Manager / Team Leader / Staff
Electrocution / Burns / Eye Damage - Losing control of materials e.g. long strip heaters.	Plan work beforehand to minimise work in close proximity to conductor rail.	Team Leader
	Handle heavy or long items with the appropriate number of people in a pre-planned move	Team Leader
Electrocution / Burns / Eye Damage – Flooded areas	You must not step into flood water which may be in contact with the CRE	Team Leader

Task Risk Control Sheet

INCREASED RISK EXISTS IF:-

Icy conditions exist	Assess underfoot conditions and postpone work if ice remains a risk at the site of work	Team Leader
Continued crossing of live rail is necessary	Plan and conduct work to minimise the number of times the live rail is crossed	Team Leader / Staff
In darkness	- USE adequate lighting– refer to NR/L3/MTC/RCS0216/SP16 - Use of Site Lights - Wear and use headlamps	Team Leader
Hot weather / sweating	Cover upper and lower body with clothing	Staff
During very heavy (Torrential) rain	The insulation properties of shields and tools can be compromised during very heavy (torrential) rain. Therefore if the work is to be done, elevate risk controls to risk level 1 <i>Note: In normal circumstances it is expected that work would be stopped in any case during very heavy (torrential) rain. It is likely therefore that work which is to be completed in this situation shall be of an emergency nature.</i>	Team Leader

PPE Required by NR / Maintenance Policy

 Wear Head Protection	 Wear Foot Protection	 Wear Hi Visibility Clothing	 Wear Safety Glasses to BS EN166.F	If safety glasses introduce a risk (ie weather conditions) then the Team Leader shall assess the risk. The outcome of the assessment shall be recorded on the SSOWPS pack and safety glasses may be removed. This does not supersede the requirements for eye protection detailed on relevant Task Risk Control Sheets.
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Additional PPE Required by Task Risk Control Sheet

 Wear Hand Protection	 Wear Safety Glasses to BS EN166.F					
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