

INSIDE A POSSESSION INSIDE A WORKSITE

- Sign in with ES / SWL2

For Safeguarded, Fenced or Separated Protection with Engineering Trains Speed must be at walking pace (5 MPH)

Bear in mind the other lines at site outside the possession which will be at full linespeed. If these adjacent lines are open you can't call it safeguarded. It must be fenced or separated. Then the rules and distances for fenced or separated protection apply.

Technically here (inside a worksite) Engineering trains can go up to 25 MPH, but will have to be at 5 MPH or less for the COSS to call it Safeguarded, Fenced or Separated.

(If above walking pace with Engineering Trains it is not Safeguarded, Fenced or Separated protection, and lookout warnings need to be provided as for open line working.)

Sign Out with ES / SWL2

INSIDE A POSSESSION OUTSIDE A WORKSITE

ALL LINES ARE OPEN – OPEN LINE WORKING WITH PICOPS AUTHORITY

ONLY IF PRE PLANNED SIGN IN WITH PICOP

USE POSSESSION ARRANGEMENTS FOR PROTECTION (25 MPH SPEED RESTRICTION NORMALLY)

EXPECT TRAINS FROM EITHER DIRECTION

SIGN OUT WITH PICOP AT END

ALL LINES ARE OPEN - OPEN LINE WORKING WITHOUT PICOPS AUTHORITY

DON'T NEED TO SIGN IN WITH PICOP

SET UP SAFE SYSTEM AT FULL LINESPEED EXPECTING TRAINS FROM EITHER DIRECTION.

DON'T RELY ON POSSESSION ARRANGEMENTS AS POSSESSION CAN BE GIVEN UP

LOOKOUT WORKING

NO WORK AT OVER 125 MPH
RED ZONE PROHIBITED AREAS ARE SHOWN IN <u>HAZARD DIRECTORY</u>
RESTRICTIONS ON NUMBERS OF LOOKOUTS, WARNING TIMES AND THE NUMBER OF
LINES THAT CAN BE CROSSED TO GET TO A POSITION OF SAFETY
COSS CALCULATES WARNING TIME / SIGHTING DISTANCES / NUMBER OF LOOKOUTS
WARNING IS HORN, WHISTLE OR TOUCH (FROM LOOKOUT).
LOOKOUT WARNING GIVEN TO GROUP. GROUP ACKNOWLEDGE AND GO TO A <u>POSITION</u>
OF SAFETY AND MUST BE THERE 10 SECONDS BEFORE THE ARRIVAL OF A TRAIN.
POSITION OF SAFETY IS <u>1.25M</u> (0-100 MPH) / 2M (101-125 MPH). (TOOLS 2M AWAY).
GROUP ONLY RETURN TO WORK WHEN THE COSS SAYS

LOOKOUTS AT NIGHT

SIGHTING DISTANCE CAN BE OBTAINED WITH SITE LOOKOUT ALONE WITH <u>SPEED RESTRICTION OF 20 MPH</u>, (AS HE WOULD NOT SEE A FLAG WAVED FROM A DISTANT LOOKOUT IN THE DARK), OR PEE WEE / LOWS IS USED, OR YOU ARE IN A WORKSITE (WITH A 20 MPH SPEED RESTRICTION) IN A POSSESSION.

SEPARATED PROTECTION

- COSS PLUS SITE WARDEN AND GROUP 2M AWAY
- COSS WITHOUT SITE WARDEN ASSISTANCE
 - ON HIS OWN 2M
 - COSS WITH ONE OTHER 2M
 - COSS WITH MORE THAN ONE OTHER 3M

FENCES

- RIGID / VORTOK 1.25M (0-125 MPH)
- NETLON / TAPE 1.25M (0-40 MPH)

2M (41 MPH UPWARDS)

- GAPS EVERY 40M WHEN NO WORK TAKING PLACE. AND THE FENCE IS LEFT IN PLACE.
- ERECTED BY A COMPETENT PERSON

LINE BLOCKAGES

- With Signal Only Protection COSS COMPLETES LINE BLOCKAGE FORM (NR3180)
 - NO RESTRICTION ON TIME OR NUMBER OF PEOPLE YOU CAN HAVE IN YOUR GROUP
 - CHANGE OF COSS ALLOWED

LINE BLOCKAGES WITH ADDITIONAL PROTECTION (USED IF WORK AFFECTS THE SAFETY OF THE LINE)

WITH DETONATORS

- 3 DETS 20M APART, 1ST DET AT SIGNAL, OTHERS BEYOND SIGNAL.
- PLB AT FIRST DET AT SIGNAL
- AT BOTH ENDS IF BIDIRECTIONAL
- CLEAR OF ANY POINTS / CROSSOVERS THAT WILL BE USED FOR NORMAL TRAIN MOVEMENTS.

WITH DISCONNECTION

- WHEN ASKED BY COSS, SIGNALLER ARRANGES IT WITH PERSON COMPETENT TO DISCONNECT (IT CAN BE THE COSS IF COMPETENT)
- COMPETENT PERSONS NAME DOING DISCONNECTION RECORDED ON NR3180
- PLACE HAND DANGER SIGNAL
- GET AUTHORITY NUMBER

WITH TCOD

- SHOWS IN SECTIONAL APPENDIX IF ALLOWED IN AREA
- ORANGE TCOD BULLHEAD RAIL / YELLOW TCOD FLAT BOTTOMED RAIL
- SIGNALLING EQUIPMENT MUST BE WORKING PROPERLY
- WORK MUST NOT AFFECT CORRECT OPERATION OF TRACK CIRCUIT.
- SIGNAL ON APPROACH HELD AT DANGER PRIOR TO TCOD PLACEMENT
- VERBALLY CHECK TRACK CIRCUIT SHOWS CLEAR
- ASK PERMISSION TO PLACE
- PLACE TCOD
- VERBALLY CHECK (ASK) THAT TRACK CIRCUIT SHOWS OCCUPIED
- GET AUTHORITY NUMBER
- PLACE HAND DANGER SIGNAL

- WITH TOKEN
- COSS ARRANGES WITH SIGNALLER
- COSS TAKES TOKEN
- COSS RETAINS THE TOKEN
- COSS RECORDS TIME THE TOKEN IS TAKEN ON NR3180
- COSS RETURNS THE TOKEN TO A SIGNAL BOX AT EITHER END OF THE SECTION, OR AN INSTRUMENT WHICH IS NOT AT A SIGNAL BOX
- WITH EPR (ENGINEERING POSSESSION REMINDER)
- AREAS WHERE EPR PROTECTION CAN BE USED ARE SHOWN IN THE SECTIONAL APPENDIX
- COSS ASKS THE SIGNALLER TO APPLY THE EPR TO PROTECT THE LINE
- SIGNALLER TELLS THE COSS THEY HAVE APPLIED THE EPR.
- THEN COSS RECORDS IT ON THE NR3180

HAND DANGER SIGNAL

A HAND DANGER SIGNAL TO BE PLACED WHEN:

- THE WORK AFFECTS THE SAFETY OF TRAINS
- WORK IS BEING CARRIED OUT BY A GROUP AT THE SITE OF WORK

CONSISTS OF A RED FLAG DURING DAYLIGHT OR A RED LIGHT IN DARKNESS

PLACED IN THE FOUR FOOT ON THE APPROACH TO THE SITE OF WORK

OLP

GET FORM C (RT3116) FROM NOMINATED PERSON & BRIEFING FOR PERMIT COMPLETE PART 1

BRIEFINGS TO COSS BY NOMINATED PERSON (ISSUER OF PERMIT)

WORKING LIMITS

DETAILS OF ANY LIVE EQUIPMENT THAT IS ADJACENT TO OR CROSSES OVER EARTHED EQUIPMENT

IF HIGH VOLTAGE RESIDUAL HAZARDS EXISTS WITHIN THE WORKING LIMITS

IF A DEMARCATION HAS BEEN USED AS PART OF THE ISOLATION

WHICH EQUIPMENT IS LIVE AND WHICH IS EARTHED

PERMIT DOES NOT MEAN TRAIN MOVEMENTS HAVE STOPPED

BRIEFING BY COSS TO HIS GROUP

WORKING LIMITS

DETAILS OF ANY LIVE EQUIPMENT THAT IS ADJACENT TO OR CROSSES OVER EARTHED EQUIPMENT

WHERE HIGH VOLTAGE RESIDUAL HAZARDS EXIST WITHIN THE WORKING LIMITS

WHERE A DEMARCATION HAS BEEN USED AS PART OF THE ISOLATION

WHICH EQUIPMENT IS LIVE AND WHICH IS EARTHED.

ANY TRAIN MOVEMENTS / OPEN LINES

ONLY ELECTRIC TRAIN MOVEMENTS HAVE STOPPED

ALWAYS NEW COSS INFORMS NOMINATED PERSON WHEN THERE IS A CHANGE OF COSS. (AND BOTH COSSES COMPLETE PART 2)

RETURN FORM C TO NOMINATED PERSON AND COMPLETE PART 3

CRP

GET FORM D FROM <u>ES / AUTHORISED PERSON / NOMINATED PERSON</u> & BRIEFING FOR PERMIT

COMPLETE PART 1

(UNDER PROCEDURE A - ES ISSUES PERMIT

UNDER PROCEDURE B - AUTHORISED PERSON ISSUES PERMIT

UNDER PROCEDURE B IN THE MERSEY RAIL / NORTHERN CITY LINES - THE NOMINATED PERSON ISSUES THE PERMIT)

BRIEFINGS <u>TO COSS BY ES / AUTHORISED PERSON / NOMINATED PERSON</u> (ISSUER OF PERMIT)

WORKING LIMITS

DETAILS OF ANY LIVE EQUIPMENT THAT IS ADJACENT TO OR CROSSES INTO THE ISOLATED EQUIPMENT

WHERE ITS LIVE AND WHERE ITS EARTHED / FLOATERS

ISSUE OF PERMIT DOES NOT MEAN TRAIN MOVEMENTS HAVE STOPPED

BRIEFING BY COSS TO HIS GROUP

WORKING LIMITS

WHERE IT'S LIVE AND WHERE ITS EARTHED.

ANY TRAIN MOVEMENTS / OPEN LINES

ALWAYS NEW COSS INFORMS ES / AUTHORISED PERSON / NOMINATED PERSON WHEN THERE IS A CHANGE OF COSS. (AND BOTH COSSES COMPLETE PART 2)

RETURN FORM D TO ES / AUTHORISED PERSON / NOMINATED PERSON AND COMPLETE PART 3

LINE CLEAR VERIFICATION (LCV)

AXLE COUNTERS PUT IN / INSTALLED TO REPLACE TRACK CIRCUIT IN THESE AREAS (SO NO TRACK CIRCUIT IN THESE AREAS)

LCV AREAS SHOWN IN THE SECTIONAL APPENDIX

MUST HAVE AT LEAST 2 WHEELS FOR THE LCV PROCESS TO APPLY.

LCV PROCESS APPLIES TO SIGNALLER, PICOP, ES, COSS, MC AND CP.

VEHICLE MANAGEMENT FORMS (VMF)

VMF'S HELD BY SIGNALLER, PICOP, ES, COSS AND MC.

FORMS RECORD MOVEMENTS OF VEHICLES

FORM FOR COSS FOR TROLLEYS (MAX 5 TROLLEYS)

COSS AND ES CAN PUT TROLLEYS ON THE LINE.

TO GIVE UP WORKSITE - ES AND PICOP TALLY UP FORMS

TO GIVE UP POSSESSION - PICOP AND SIGNALLER TALLY UP FORMS

These are just some key point notes to help with your revision and are uncontrolled and can soon go out of date especially with things changing as fast as they are. I suggested you could use these to begin your own notes and add to them as you discover new information. You could end up with a word document that had lots of good notes to help you revise.

These are not the be all and end all and just meant to help you with things you had a little trouble remembering. Ideally these could be used in conjunction with other sources of information to revise and to formulate some great notes. But you need to be wary as these can go out of date.