

General Manager's Office Engineering Department Jabalpur-482 001 (M.P.)

No. W-HQ/W-4/Track-II/Policy/Circular/20

Date: 13.08.2021

CTE PROCEDURE No. 20/2021-22

Sub: Issue of USFD certificate by Divisions before CRS insp. for NL/DL/TL by Const/RVNL/IRCON

- Before any CRS insp., USFD testing certificate by CTE is required to be submitted to CRS in a
 prescribed format. Generally this USFD certificate signed by the executing agency comes to HQ with
 signature of sectional SrDEN & SrDEN/Co. Based on this, USFD certificate is signed by the CTE and
 forward to the CRS. Certain glaring deficiencies were noticed in one of USFD certificate for DRGMMJHL section executed by IRCON
- 2. As per the CTE Procedure order No.07, 11(R) & 15 instructions regarding USFD testing of AT & FB welds by RDSO approved USFD agency (other than the welding agency). Further USFD testing results are required to be shared by Executing agency with the division as per above quoted CTE Procedure Orders.
- 3. All AT welds being the weakest link in the track, are required to be checked 100% by departmental USFD teams. Normally, there should not be any variation in the Echo flaw of third party USFD by the execution agency and departmental USFD team. However, in a sample check of USFD certificate e for one of the IRCON project (DRGM-MJHL section), huge variations in the echo flaw were noticed between IIIrd party outsourced USFD team & Departmental USFD team. (copy of letter dated 11.8.21enclosed).
- 4. Hence forth, Sectional SrDEN and SrDEN/Co before signing USFD testing certificate must examine the **joint wise echo flaw peak** of USFD by third **outsourced party & departmental USFD** team and ensure that variation are very minimal. Wherever variation between above 2 USFD teams is more than 15%, **joint USFD checking** should be got done and appropriate action needs to be taken on the defaulting USFD team. Based on the correct USFD echo flaw peaks, USFD certificate should be signed & processed by the sectional SrDEN & SrDEN/Co. While submitting the USFD certificate to HQ, the details/ report of AT weld USFD testing by execution agency third party & departmental USFD team should be enclosed.

The above safety linked instructions must be followed strictly.

DA: Letter dated 11.8.21 as above

RAJESH ARORA Digitally signed by RAJESH ARORA Date: 2021.08.13 15:31:58 +05'30'

(Rajesh Arora) Chief Track Engineer

Copy to:

- 1. AGM WCR for kind information please
- 2. PCE/WCR & CAO/C/WCR- for kind information please.
- 3. DRM JBP, BPL & KOTA for kind information please.
- 4. CBE, CPDE, CE/TP, CE/G, CE/W, CE/TMC, CPM/RVNL/BPL & KOTA, PD/IRCON/KTE, CE/C-I, II, HQ & CPM/C/Kota-for infor. & necessary action (By WhatsApp only)
- 5. Sr. DEN Co JBP/BPL & KOTA for urgent necessary action as above.

File No. W-HQ/W-4/Track-I/DRGM-MZHL/113

Dated 11.08.2021

PD/IRCON/ KTE Sr. DEN(Co)JBP

Sub.:- USFD certificate of DRGM-MZHL section by IRCON.

- 1. In reference to above subject, USFD testing certificate duly signed by Sr.DEN/Co/JBP & DEN/E/JBP has been send to HQ for the signature on 11.08.2021. This USFD certificate shows "Total 117 welds have been executed/tested by departmental USFD". However on close scrutiny, it is found that only 100 welds have been tested so for. It was not seen by Sr. DEN (Co) of Division before signing & sending to HQ this critical USFD certificate for signature.
- During managerial check of USFD results of 12 sample welds (having maximum peak) by
 departmental and third party test by IRCON, It is found that this is the huge variation in the Echo
 flaw reported by IRCON USFD agency as below:-

Location of testing	RH/LH	Defect by prob. 70°	ECO Flaw		
			USFD by third party(IRCON)	USFD by Dept. team	Remark
1309/26-28	RH	70°	0%	28%	Not OK
1310/2-4	LH	70°	0%	25%	Not OK
1310/2-4	RH	70°	0%	25%	Not OK
1311/28-30	LH	70°	0%	26%	Not OK
1307/16-18	LH	70°	18%	22%	
1311/4-6	LH	70°	12%	28%	Doubtful to be
1312/22-24	LH	70°	10%	28%	OK
1312/32-34	RH	70°	12%	27%	
1310/22-24	RH	70°	27%	28%	OK
1312/6-8	RH	70°	26%	28%	OK
1028-1030	LH	70°	26%	27%	OK
1032-1036	LH	70°	26%	28%	OK

It is not understood why joint USFD checking was not ordered by Div. before signing such safety linked USFD certificate. However, now, such welds should be got jointly checked with IRCON in next 05 days upto 17.08.2021 & report be sent to HQ, with division remarks on it.,

Chief Track Engineer

Copy to:

- (i) Sr. DEN/Co/BPL & Kota for similar action on their.
- (ii) All Sectional Sr.DEN/DEN for similar action on their division (By WhatsApp)