## EAST COAST RAILWAY

Office of the Pr. Chief Safety Officer Bhubaneswar

No:- ECOR/SFY/Alert advice-40/2024/598

Date: 19.08.2024

To

The Divisional Railway Manager KUR, SBP & WAT

## ALERT MESSAGE-40

Sub: - Rail fractures & Weld failures affecting train operation.

Rail fractures and Weld failures have potential threat to safe train operation. There were 31 Rail fractures, 22 weld failures, 10 rail cracks & 05 weld cracks were detected in the year 2023-24. In current year till 15 AUG there were 04 Rail fractures, 08 Weld failures, 05 Rail cracks & 02 Weld cracks were detected. Some of the early incidence of recent Rail fractures & Weld failures in E.Co.R discussed as under happened due to different reasons. All concern are advised to be alert & sincere on duty to prevent such recurrence:

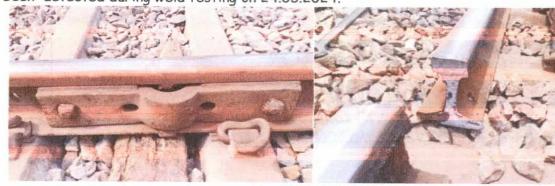
 On 10.08.24 at 00.45 hrs at km 405/10-12 in CBT Yard DN main line of KUR Division a Rail fracture reported by Tech-II(S & T) Sri P.K.Sahu at Charbatia Station. Joggle fish plate was provided at the welding but there were extra holes on rail beyond it. Last USFD done on 20.07.2024 without detection of any flaw. The crack has developed from an outermost bolt hole.

Trains are passed on Speed restriction of 20 Kmph imposed at CBT till rectification.



21.26 batuara Kanada Alaisi D

2. On 19.06.24 at 16:30 hrs on DN line at km 309/24-26 between Kenduapada - Manjuri Road of KUR Div, premature weld failure, detected by Keyman Sri Umesh Chandra Jena. Rolling mark 60 Kg SAIL of 08/2020. Total GMT carried only 31.492. USFD testing of Weld was done on 24.03.2024 & Rail on 10.06.2024. No flaw was detected. Welding date is 27.11.2023. Distressing was done on 11.11.2023. Flaw in flange area is clearly visible which could have been detected during weld testing on 24.03.2024.



3. On 16.07.24 at 06:40 hrs, AT weld failure reported by Keyman Sri R.K. Sharma at Muniguda station on DN line at km 287/0-2 between Doikallu-Muniguda of SBP Division. Weld test was done on 05.11.2023 & Rail test was done on 16.06.2024 and the result was reported good weld. But there was a 'half moon flaw' which could have been detected during weld testing by hand probing. As report in TMS, the year of weld was 2008. At the time of weld failure it crossed 625.5 GMT. That is overage weld. This welded rail was laid after GFTR during May 2022.

Trains are passed on Speed restriction of 30 Kmph at MNGD till rectification.



4. On 12.08.2024 at 01:15 hrs on DN line at km 306/2-4 between Bisamcuttack-Therubali of SBP Division, a Rail fracture was detected by Sri Manmath Panda, Helper-II(S & T). The Rolling mark of Rail is 60 Kg SAIL April 1999 and laid on track in Feb-2000. Date of last USFD testing was on 16.07.2024 and no flaw was detected. The rail has already crossed 813 GMT. Speed restriction of 30 kmph imposed by SSE/P.way/MNGD.



Proper USFD testing, timely removal of overage rail and weld, timely distressing, emphasis on visual examination of bolt hole area and juggle fish plated area, proper maintenance of joints at point crossing area and at bridge approaches etc are essential. Seminars and demonstrations to be conducted involving departmental USFD operators and outsourced staff engaged in USFD testing and to be monitored by HQ Officers at higher level at regular interval to eliminate the limitation in operational skills of USFD operators and maintenance practices of assets impacting Rail/Weld failures.

Pr. Chief Safety Officer(I/c)
Bhubaneswar

## Copy to-

- 1. Secy. to GM for kind information of GM.
- 2. Secy. to AGM for kind information of AGM.
- 3. PCE, PCME, PCOM, PCEE, PCCM, PCSTE, PCSC & CAO (Con) for information.
- 4. Sr.DSO/ KUR, SBP & WAT for information & necessary action.
- 5. Principal MDTC/VSKP & MDZTI/BBS for information & necessary action.