Office of the
Pr. Chief Safety Officer
East Coast Railway
Bhubaneswar

No. ECoR/SFY/SC/621

Date06.10.2025

Safety Circular No. 04/2025

Subject: HABD Alerts & Response.

Reference:

1. **RDSO Letter No. MC/RB/GNL dated 20.04.15.**
2. **RB Letter No. MC/CTRB/Defects dated 12.02.25.**
3. **RB Letter No. MW/WAD/CTRB/GEN dated 14.05.25.**

Significant rise is observed in Hot Axle cases reported year-on-year basisfor ECoR based wagons and coaches in ECoR territory and in other railways.ICMS statisticson Hot Axle cases reported in ECoR territory over last 4 years is tabulated below.

2021-22	2022-23	2023-24	2024-25
13	56	68	108

Hot Axle is a potential threat to safe train operation and can cause serious accidents. In view of this a number of Hot Axle Box Detectors (HABD) are installed in various locations over East Coast Railway. It is desirable to ensure proper maintenance and upkeep of all such HABDs to maintain its reliability.

Prompt action after HABD alerts is key for early detection and prevention of probable Hot Axle cases. Following steps are being recommended, which are to be followed on receiving HABD Alerts:

1. As soon as an HABD Alert is received by C&W Control, concerned C&W Controller should identify the train using TL Book available with Section Controller.
2. There after C&W Controller should identify the position of axle in the train for which alert was generated after taking into account number and type of locos & number and type of wagons/coaches.
3. After this C&W Controller should immediately convey the following information, in written, to the Section Controller along with an advice to stop the train at the next station or to allow the train to run with restricted speed limit.
    a. Train No.
    b. Type of Rolling Stock.
    c. HABD Location.
    d. UP/DN Line.
    e. Time of HABD Alert.
    f. Position of Axle from Loco.
    g. Station at which train is to be stopped for checking.
    h. Line at which train is to be stopped for checking.

4. C&W Controller should also arrange for movement of C&W Staff to the station at which train is to be stopped for checking.
5. Adjacent divisions, in the direction of movement of the train, should also be informed about the HABD alert.
6. Section Controller should immediately convey this information to concerned SM along with the advice to stop the train or to allow it with restricted speed.
7. Precaution should be taken by SM to preferably take the affected train in Main Line.
8. SM should enter the information in Station Diary in Red Ink.
9. If train is allowed to run with restricted speed, the SM should issue Emergency Caution Order to the train and inform SMs of enroute stations regarding the situation with clear advice to inform LCs under their respective control to keep a vigil.
10. When the train is on run, station and line staff shall also be advised to sharply look out for the condition and be ready to stop the train, if the condition demands so.
11. All line staff should be advised to not hesitate in stopping the train when they suspect or detect hot axle in train.
12. When train stops at the next station, SM should immediately inform LP and TMR, through memo, regarding the alarm and the position of the axle.
13. LP & TMR should immediately check the axle for symptoms of Hot Axle and give feedback to SM.
14. SM should arrange for measurement of temperature of axle boxes using hand-held infrared thermometer.
15. SM should record such feedback in Station Diary in RED Ink along with temperature recorded using hand-held infrared thermometerand convey it to C&W Controller through Section Controller.
16. C&W Controller to convey advice, based on the temperature recorded using hand-held infrared thermometer, to Section Controller as per following table.

a. For LHB Coaches

S. No.	Axle Box Temperature of Particular Coach	Action
01.	Below 65 °C and temperature difference on axle boxes of same axle is less than 20 °C.	No action is required.
02.	From 65 °C to 80 °C and temperature difference on axle boxes of same axle is less than 20 °C.	Information to next halting station and C&W Control to check the temperature and TXR staff to accompany up to destination.
03.	If temperature difference on axle boxes of same axle is more than 20 °C, in which minimum temperature of any axle box is ≤ 50 °C.	Information to next halting station and C&W Control to check the temperature and TXR staff to accompany up to destination.
04.	If temperature difference on axle boxes of same axle is more than 20 °C, in which minimum temperature of axle boxes are > 50 °C.	Coach should be withdrawn from service.
05.	Above 80 °C.	Coach should be withdrawn from service.

b. For ICF Coaches :

Sl. No.	Axle Box Temperature of Particular Coach	Action
01.	If temperature of axle boxes is found below 65 °C in a coach and temperature difference between any two axle boxes in the coach is up to 10 °C.	No action is required.
02.	If temperature of axle boxes is found below 65 °C in a coach and temperature difference between any two axle boxes in the coach is from 10 °C to 15 °C.	Information to C&W Points and En-Route TXRPoints up to destination for checking.
03.	If temperature of axle boxes is found below 65 °C and temperature difference between two any axle boxes in the coach is from 16 °Cto 20 °C.	Information to next halting station and C&W Control to check the temperature. TXR staff to accompany up to destination.
04.	If temperature of axle box is found above 65 °C but below 80 °C and temperature difference between any two axle boxes in the coach is below 20 °C.	Information to next halting station and C&W Control to check the temperature. TXR staff to accompany up to destination.
05.	If temperature difference on axle boxes in a coach is more than 20 °C.	Coach should be withdrawn from service.
06.	Above 80 °C.	Coach should be withdrawn from service.

c. For Wagons

Sl. No.	Axle Box Temperature of Particular Wagon	Action
01.	If temperature difference on axle boxes of same axle is more than 35 °C.	Wagon should be withdrawn from service.
02.	Above 90 °C.	Wagon should be withdrawn from service.

17. Above tables are for reference only. Condition of axle boxes to be checked for signs of Hot Axle like grease oozing, damaged grease seal, burnt EM Pad, etc. Decision for allowing the rolling stock should be taken after careful examination of the concerned axle.

18. If the high temperature is recorded due to Brake Binding and not due to Hot Axle, LP and TMR should attend the axle for Brake Binding. C&W Control should get such axle checked at next TXR Point.

Following points should be ensured for allowing the above prescribed steps to work out efficiently and effectively:

1. HABDs are to be installed in both UP and DN Lines at regular intervals.

2. HABDs to be calibrated at regular intervals (preferably 12 months). No HABD should be allowed to function without a valid calibration certificate.

3. HABDs to be checked for functionality at least once in every month using ablack body.

4. All stations to be provided with calibrated hand-held infrared thermometer. Calibration of all such hand-help infrared thermometer to be renewed before expiry of the certificate.

Officers and supervisors are advised to counsel staff and monitor the strict adherence of the instructions in letter and in spirit and ensure that no short cuts are allowed under any circumstances. Inspecting officers should cross-check the implementation of above instructions.

Aamode
6/10/25

(A. J. Rathode)
PCSO/ECoR/BBS

Copy To:

1. Secretary to GM/ECoR for information of GM/ECoR, please.
2. Secretary to AGM/ECoR for information of AGM/ECoR, please.
3. All PHODs for information and necessary action, please.
4. DRMs KUR, SBP and WAT for information and necessary action, please.
5. CWM/MCS for information and necessary action, please.
6. Sr. DSOs KUR, SBP and WAT for information and necessary action.

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