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AMENDMENT No.4 TO FINAL SPEED CERTIFICATE FOR OPERATION OF BCNHL OVER IR

No.	MW / SPD /BG / BCNHL/22.9t	Date	11.09.2020

(I) महाप्रबंधक (इंजी),

1. मध्य रेलवे, छत्रपति शिवाजी टर्मिनस, मुम्बई– 400 001.
2. पूर्व रेलवे, फेयरली प्लेस, कोलकाता – 700 001.
3. उत्तर रेलवे, बड़ौदा हाउस, नई दिल्ली – 110 001.
4. दक्षिण रेलवे, पार्क टाउन, चेन्नई – 600 003.
5. दक्षिण मध्य रेलवे, रेल निलायम, सिकन्दराबाद – 500 071.
6. दक्षिण पूर्व रेलवे, गार्डेन रीच, कोलकाता – 700 043.
7. पूर्वोत्तर रेलवे, गोरखपुर – 273 012.
8. पूर्वोत्तर सीमान्त रेलवे, मालीगॉव, गुवाहाटी – 781 011.
9. पश्चिम रेलवे, चर्चगेट, मुम्बई – 400 020.
10. पूर्व मध्य रेलवे, हाजीपुर – 844 101.
11. पूर्व तटीय रेलवे, बीडीए रेंटल कालोनी, रेलवे काम्पलेक्स, चन्द्रशेखरपुरा, भुवनेश्वर,–751 016.
12. उत्तर मध्य रेलवे, प्रयागराज – 211 011.
13. उत्तर पश्चिम रेलवे, जयपुर – 302 006.
14. दक्षिण पश्चिम रेलवे, हुबली – 580 023.
15. पश्चिम मध्य रेलवे, जबलपुर – 482 001.
16. दक्षिण पूर्व मध्य रेलवे, आर ई आफिस काम्पलेक्स, बिलासपुर – 495 004.

(II) प्रबन्ध निदेशक, डेडीकेटेड फ्रेट कोरीडोर कार्पोरेशन आफ इण्डिया लि0, पॉचवा तल, प्रगति मैदान मैट्रो स्टेशन बिल्डिंग काम्पलेक्स, नई दिल्ली–110 001

Sub:	**Amendment No.4 to final speed certificate of Broad Gauge Bogie Covered wagon type 'BCNHL' with maximum axle load of 22.9t for operation at 75 kmph in loaded condition and 70 kmph in empty condition over Indian Railway B.G route.**
Ref:	(i) Final speed certificate No. MW/SPD/BG/BCNHL/22.9t dated 04-10-2011 of BCNHL followed by Amendment No.1 dated 29-02-2012, Amendment No.2 dated 07-10-2016 &Amendment No.3 dated 21.10.2017. (ii) Director Civil Engg. (Plg.) Railway Board's letter No. 2020/CE-II/TS/22.9 dated 20-08-2020.

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1.0	Vide reference (i) above, final speed certificate followed by amendments no.1,2 & 3 of Broad Gauge Bogie Covered wagon type 'BCNHL' with maximum axle load of 22.9t for operation over Indian Railway B.G route, have been issued.

1.1	Railway Board vide letter no 2009/CEDO/SR/51 dated 27.11.2009 issued sanction for operation of BCNHL wagons with maximum axle load of 22.9t with provisional validity for two years. Further, Railway Board vide letter no -2017/CEDO/SR/15 dated 14.03.2018 has issued sanction for operation of 22.9t axle load BCNHL wagons at 60 kmph in loaded condition and 70 kmph in empty condition.
2.0	Now, Railway Board, vide letter under reference (ii), has permitted operation of 22.9 t axle load wagons at maximum speed of 75 kmph in loaded condition on 60 kg (90 UTS) rail of Indian Railway routes and advised to issue amendment to the final speed certificate.
3.0	In view of above, **Amendment No.4** with following modifications to the referred final speed certificate of BCNHL is being issued: - **(i)** Additional **Para 1.3** added before para 2.0 as below: "**1.3** General Manager of Zonal Railway shall identify the route for operation of (CC+8+2)t/ (CC+6+2)t axle load wagon at 75kmph in terms of Railway Board letter No. 2020/CE-II/TS/22.9 dt 20.08.2020. **(ii)** **Para 2.1** of the referred final speed certificate and of amendment no. 2 of BCNHL shall be read as below: "**2.1 Track** 2.1.1 **For Empty condition** (a) Minimum standard of 52kg (72UTS) rail, PSC sleeper with 1540 Nos/Km on ballast cushion below sleeper of 250mm, which may consist of at least 100mm clean and rest in caked up condition on compacted and stable formation for speed up to 60 kmph. (b) The track shall be minimum standard of 52kg (90UTS) rail, PSC sleeper with 1540 Nos/Km on ballast cushion below sleeper of 250 mm, which may consist of at least 100mm clean and rest in caked up condition on compacted and stable formation for speed above 60 kmph and upto 70 kmph. 2.1.2 **For Loaded condition:** 2.1.2.1 **Speed up to 60 kmph** The track shall be to a minimum standard of 52kg (90UTS) rail laid on PSC sleeper with 1540 Nos/Km on 300mm ballast cushion below the sleeper which may consist of 150mm clean and rest in caked up condition, on compacted and stable formation with following conditions: 2.1.2.1.1 Operation of (CC+8+2)t on routes falling in Temperature Zone IV and Zone III as per IRPWM June – 2020 would be as per Railway Board letter no. 2019/CE-II/TSC/88/Puri dated 28.08.2020 with the following conditions for 52kg (90UTS rail) track: (i) De-stressing temperature for LWR in Temperature Zone IV would be reduced by 5^0C (Tm to Tm+5). (ii) USFD testing of rail would be carried out at a higher frequency corresponding to 6 GMT of traffic (present stipulation corresponds to 8 GMT). 2.1.2.2 **Speed above 60 kmph and upto 75 kmph** The track shall be to a minimum standard of 60kg (90UTS) rail laid on PSC sleeper with 1540 Nos/Km on 300mm ballast cushion below the sleeper which may consist of 150mm clean and rest in caked up condition, on compacted and stable formation with the following conditions:

(i) For temperature Zone IV as per IRPWM, de-stressing of LWR at reduced temperature (Tm to Tm+5) shall be completed before onset of winter season. If distressing in Zone IV is not done at lower temperature, loaded wagon will run at 60 kmph during the winter period of 1st November to 28th /29th of February.

2.1.3 For track maintained to lower standard than that mentioned above, the Chief Engineer shall decide the lower maximum permissible speed on the basis of maintenance condition. In this connection, instructions issued by Railway Board letter no.65/WDO/SR/26 dt 19/20.10.1966 may be seen. When the Chief Engineer considers that the road bed is not compacted or there is improper drainage, he may suitably restrict the maximum permissible speed depending upon the local conditions.

2.1.4 The maximum permissible speed on curves shall be decided on the basis of the existing provisions of the Indian Railways Permanent Way Manual, June 2020. Maximum cant deficiency permitted would be 75mm.

2.1.5 The welds shall be protected by joggled fish plates as per provisions of USFD Manual and AT welding manual and other policy instructions of Railway Board. The maintenance of Rails and Rail joints shall be ensured as per provision of Indian Railways Permanent Way Manual, June - 2020. In addition, wherever condition warrants on account of corrosion on rail/weld collar, wear on rail, cupping of welds etc., necessary precautions shall be taken for fish plating/ joggled fish plating.

2.1.6 Zonal Railway may ensure further detailed examination of track as deemed fit based on age cum condition basis, overdue renewal and condition of formation etc. as per provisions of Indian Railways Permanent Way Manual June- 2020 regarding permanent way renewals and may suitably restrict maximum speed of operation based on such examination.

(iii) **Para 2.2 Bridges-** Clause nos. 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.6 & 2.2.8 of referred final speed certificate and of amendment nos. 1,2 & 3 of BCNHL, as applicable, shall be replaced as below:

"2.2.1 The clearance refers to Bridges "Standard Spans" with standard design of girders, slabs, pipe culverts, piers and abutments etc. issued by RDSO for BGML, RBG and MBG-1987, HM Loading and 25T Loading-2008 Standard. However, the bearings of span 76.2m (clear) designed for BGML standard loading as per RDSO's drawing No. BA-11154 shall be strengthened by providing two additional anchor bolts.

2.2.2 Superstructure & Bearings of "Special Spans" (designed and constructed by Zonal Railways based on site requirements) including all arches and substructure of all bridges (all Standard Spans & Special Spans) are to be examined under the directions of the Chief Bridge Engineer concerned and certified safe with respect to current Indian Railway Standard Codes with up to-date correction slips.

2.2.3

(a) For regular operation in empty condition of BCNHL wagon over Indian Railway B.G. routes, there are no speed restrictions on bridges of BGML/RBG/MBG/25T Loading 2008, loading standards for proposed speed of 70 kmph.

(b) For regular operation in loaded condition of BCNHL wagon with C.G. height 2327 mm, following restrictions shall be applicable:-

(i) All standard spans up to 31.9 m (all effective) of BGML/RBG/MBG loading Standards shall be fit for proposed speed of 75 kmph.

(ii) Standard spans of 47.25 m (all effective) of BGML/RBG/MBG loading Standards shall be fit for speed up to 60 kmph.

(iii) Standard spans of 63.0 m & 78.8m (both effective) of BGML/RBG/MBG loading Standards shall be restricted to 45 kmph.

(iv) All Standard spans of 25T loading 2008, shall be fit for proposed speed of 75 kmph.

(c) Track on bridges and approaches of BGML loading standard spans 31.9m,47.3m, 63.0m & 78.8m (all effective) shall be strengthened or modified in such a way so as to allow for dispersion of longitudinal force as per clause 2.8.3.2 of IRS Bridge rules. In cases where dispersion cannot be allowed as per clause 2.8.3.2 such as due to provision of SEJ in bridges etc., the bridge superstructure including bearings and sub-structure shall be checked for longitudinal force without dispersion and certified safe by the Chief Bridge engineer concerned.

2.2.4 Other specific restrictions are applicable as mentioned in relevant speed certificates of hauling single/multiple locomotives, attached wagons issued by RDSO.

2.2.6 The above clauses have been arrived considering bridges are in physically sound condition. In case the bridges are not in satisfactory physical condition, necessary speed restriction to be imposed by concerned Chief Bridge Engineer of the Zonal Railway.

2.2.8 The directives of RDSO for operation of (CC+8+2)t axle load 22.82t communicated vide RDSO letter no. CBS/Golden/Q/Strength dated 21/27-07-2009 & its amendment dated 25/09/2009 shall also be followed."

(iv) **Para 2.3** 'Signalling' of the referred final speed certificate of BCNHL shall be read as below:

"2.3 Signalling

2.3.1 Provisions of GR, SR, IRSOD, SEM and all extant instructions issued from time to time as applicable shall be complied with.

2.3.2 In case train (having this wagon in its composition)/ rolling stock having EBD of more than 1 Km and non provision of second distant signal/ 4 Aspect automatic signaling in the section, action as per A&C No. 09 of SEM Pt. – I shall be taken."

ENCLOSURES: / संलग्नक:	Nil

(Signed)

(वी. के. अग्रवाल)

कार्यकारी निदेशक मानक/चालन शक्ति

प्रतिलिपि: सूचनार्थ (copy for information)

(1) सचिव (यांत्रिक/इंजी), रेलवे बोर्ड, रेल भवन,नई दिल्ली – 110001

(2) मुख्य रेल संरक्षा आयुक्त, अशोक मार्ग, लखनऊ–226001

(3) महा प्रबंधक (मैकेनिकल/यातायात/संकेत एवं दूरसंचार),

(i) मध्य रेलवे, छत्रपति शिवाजी टर्मिनस, मुम्बई– 400 001.

(ii) पूर्व रेलवे, फेयरली प्लेस, कोलकाता – 700 001.

(iii) उत्तर रेलवे, बड़ौदा हाउस, नई दिल्ली – 110 001.

(iv) दक्षिण रेलवे, पार्क टाउन, चेन्नई – 600 003.
(v) दक्षिण मध्य रेलवे, रेल निलायम, सिकन्दराबाद – 500 071.
(vi) दक्षिण पूर्व रेलवे, गार्डेन रीच, कोलकाता – 700 043.
(vii) पूर्वोत्तर रेलवे, गोरखपुर – 273 012.
(viii) पूर्वोत्तर सीमान्त रेलवे, मालीगॉव, गुवाहाटी – 781 011.
(ix) पश्चिम रेलवे, चर्चगेट, मुम्बई – 400 020.
(x) पूर्व मध्य रेलवे, हाजीपुर – 844 101.
(xi) पूर्व तटीय रेलवे, बीडीए रेंटल कालोनी, रेलवे काम्पलेक्स, चन्द्रशेखरपुरा, भुवनेश्वर,–751 016.
(xii) उत्तर मध्य रेलवे, प्रयागराज – 211 011.
(xiii) उत्तर पश्चिम रेलवे, जयपुर – 302 006.
(xiv) दक्षिण पश्चिम रेलवे, हुबली – 580 023.
(xv) पश्चिम मध्य रेलवे, जबलपुर – 482 001.
(xvi) दक्षिण पूर्व मध्य रेलवे, आर ई आफिस काम्पलेक्स, बिलासपुर – 495 004.

(4) अध्यक्ष एवं प्रबंध निदेशक, कोंकण रेलवे कार्पोरेशन लिमिटेड, पोस्ट बाक्स नं0 9, बेलापुर भवन, सेक्टर –11, सीबीडी बेलापुर,नवी मुम्बई – 400614

ENCLOSURES: / संलग्नक:	Nil

Digitally signed by VINAY KUMAR AGARWAL
Date:Fri Sep 11 18:22:24 IST 2020
Reason: Approved

(वी. के. अग्रवाल)
कार्यकारी निदेशक मानक/चालन शक्ति

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सत्यमेव जयते

भारत सरकार –रेल मंत्रालय
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लखनऊ – 226011

Government of India - Ministry of Railways
Research Designs & Standards Organisation
Lucknow – 226011

No. MW/SPD/BG/BCNHL/22.9t

Dated : 04.10.2011

महा प्रबंधक (इंजी),

1. मध्य रेलवे, छत्रपति शिवाजी टर्मिनस, मुम्बई– 400 001.
2. पूर्व रेलवे, फेयरली प्लेस, कोलकाता – 700 001.
3. उत्तर रेलवे, बड़ौदा हाउस, नई दिल्ली – 110 001.
4. दक्षिण रेलवे, पार्क टाउन, चेन्नई – 600 003.
5. दक्षिण मध्य रेलवे, रेल निलायम, सिकन्दराबाद – 500 071.
6. दक्षिण पूर्व रेलवे, गार्डेन रीच, कोलकाता – 700 043.
7. पूर्वोत्तर रेलवे, गोरखपुर – 273 012.
8. पूर्वोत्तर सीमान्त रेलवे, मालीगॉव, गुवाहाटी – 781 011.
9. पश्चिम रेलवे, चर्चगेट, मुम्बई – 400 020.
10. पूर्व मध्य रेलवे, हाजीपुर – 844 101.
11. पूर्व तटीय रेलवे, बीडीए रेंटल कालोनी, रेलवे काम्पलेक्स, चन्द्रशेखरपुरा, भुवनेश्वर,–751 016.
12. उत्तर मध्य रेलवे, हास्टिंग रोड ,इलाहाबाद – 211 001.
13. उत्तर पश्चिम रेलवे, जयपुर – 302 006.
14. दक्षिण पश्चिम रेलवे, हुबली – 580 023.
15. पश्चिम मध्य रेलवे, जबलपुर – 482 001.
16. दक्षिण पूर्व मध्य रेलवे, आर ई आफिस काम्पलेक्स, बिलासपुर – 495 004.
17. कोंकण रेलवे कार्पोरेशन लिमिटेड, पोस्ट बाक्स नं0 9, बेलापुर भवन, सेक्टर –11, सीबीडी बेलापुर, नवी मुम्बई – 400614

Sub: Final Maximum permissible Speed Certificate for operation of 22.9t axle load Broad Gauge Bogie Covered Wagon type BCNHL.

1.0 Broad Gauge bogie Covered wagon type BCNHL having maximum axle load of 22.9t has been designed by RDSO to increase the throughput over the existing BCNAHSM1 design (axle load 22.32t). The payload to tare ratio for BCNHL wagon is 3.4 as compared to 2.63 for existing BCNAHSM1 wagon. BCNHL wagon is useful for the transportation of bagged commodities of Cement, Fertilizer, Foodgrain etc. The design incorporates fitment of Casnub 22HS Bogies, High tensile (non transition type centre buffer coupler) and air brake system. The leading particulars of the BCNHL wagon are indicated in RDSO drg.No. WD-06076-S-02 Alt 3.

1.1 In order to assess the riding quality and stability of BCNHL wagon, detailed oscillation trials on BCNHL wagon in empty and loaded condition with axle load of 22.9t, have been conducted on Moradabad-Bareilly section of

Northern Railway upto a test speed of 110 kmph and the results of the trials are contained in RDSO's report No. MT-1007/F/Rev.0 of Feb 2010.

1.2 The oscillation trial results indicate that BCNHL wagon has exhibited satisfactory riding and stability behavior upto a test speed of 80 kmph in empty and 85 kmph in loaded condition on track maintained to other than C&M-I Vol.-I standard.

2.0 Based on the above it is certified that BCNHL wagon to RDSO Drg. No. WD-06076-S-02 Alt 3 with axle load of 22.9t, may be permitted to run at maximum speed of 70 kmph in empty and 75 kmph in loaded condition, subject to the following conditions.

2.1 Track

2.1.1 (a) The track shall be to a minimum standard of 60Kg rail (90UTS) on sleeper with M+7 density and minimum depth of ballast cushion below sleeper of 300mm, which may consist of at least 150mm clean and the rest in caked up condition on compact and stable formation.

(b) For track to a minimum standard of 52Kg rail (72UTS) on sleeper with M+7 density and minimum depth of ballast cushion below sleeper of 250mm, which may consist of at least 100mm clean and the rest in caked up condition on compact and stable formation- the maximum permissible speed shall be restricted to 70 kmph in empty condition and 60 kmph in loaded condition.

2.1.2 Wherever condition warrant on account of corrosion on rail/weld collar, wear of rail, cupping in the welds necessary precautions should be taken for fish plating/ joggle fish plating of the rail/weld.

2.1.3 Zonal Railways may impose such further restrictions of speed as deemed fit, based on the age and condition of track and the extent of rail fractures/weld failures/defect generation rate occurring in the sections.

2.1.4 The maximum permissible speed on curves to be decided on the basis of the existing provision of Indian Railway Permanent Way Manual Reprint-2004.

2.1.5 For track maintained to lower standard than that mentioned above, the Chief Engineer shall decide the lower maximum permissible speed on the basis of maintenance condition. In this connection, Railway Board's letter No. 65/WDO/SR/26 dated 19/20-10-1966 may be seen. When the Chief Engineer considers that the road bed is not compacted or there is improper drainage, he may suitably restrict the maximum permissible speed depending upon the local conditions.

2.2 Bridges

2.2.1 The clearance refers to bridges with standard design of girders, slabs, pipe culverts, piers and abutments etc, issued by RDSO for BGML, RBG and MBG-1987 standard loadings. However, the bearings of span 78.8 m (effective) designed for BGML standard loading as per RDSO's drawing No. BA-11154 should be strengthened by providing two additional anchor bolts.

2.2.2 Superstructures & bearings of non-standard spans including Arches and sub-structures of all bridges are to be examined under the direction of the Chief Bridge Engineer concerned and certified safe with respect to current Indian Railway Standards codes with up-to-date correction slips.

2.2.3 In loaded condition, the following restrictions are applicable :

(i) For single headed operation, track on bridges and approaches of BGML spans 78.8m (effective) shall be strengthened or modified in such a way so as to allow for dispersion of longitudinal force as per clause 2.8.3.2 of IRS Bridge Rules. In cases where dispersion cannot be allowed as per clause 2.8.3.2 such as due to provision of SEJ in bridges etc., the bridge superstructure including bearings and sub-structure shall be checked for longitudinal force without dispersion and certified safe by the Chief Bridge Engineer concerned.

(ii) For double headed operation, track on bridges and approaches of BGML spans 47.3m, 63.0m and 78.8m (all effective) shall be strengthened or modified in such a way so as to allow for dispersion of longitudinal force as per clause 2.8.3.2 of IRS Bridge Rules. In cases where dispersion cannot be allowed as per clause 2.8.3.2 such as due to provision of SEJ in bridges etc., the bridge superstructure including bearings and sub-structure shall be checked for longitudinal force without dispersion and certified safe by the Chief Bridge Engineer concerned.

(iii) a. RBG/MBG/BGML span 47.25m (effective) is restricted to 60 kmph.

b. RBG/MBG/BGML span 63.0m (effective) is restricted for 45 kmph.

c. RBG/MBG/BGML span 78.8m (effective) is restricted for 45 kmph.

2.2.4 Other specific restrictions are applicable which are indicated in relevant Speed Certificates of hauling single/multiple locomotives issued by RDSO.

2.2.5 The clearance is subject to the following parameters of BCNHL wagon.

(i) Maximum axle load (loaded) - 22.9 t.
(ii) Maximum axle load (Empty) - 5.2 t
(iii) Maximum C.G height from Rail level (loaded) - 2327mm
(iv) Maximum C.G height from Rail level (Empty) - 1134mm
(v) Maximum braking force at rail level - 10 % of axle load

2.2.6 Zonal Railways shall certify, the adequacy of existing bridges for permitting rolling stock based on physical condition of bridges by keeping them under observations considered necessary by the Chief Bridge Engineer of Railway.

2.2.7 Location of Bridges on which speed restrictions have been imposed shall be notified by the Railways and incorporated in the working timetable.

2.2.8 The directives of RDSO for operation of CC+8t+2t, axle load 22.82t communicated vide RDSO letter no. CBS/Golden/Q/Strength dated 21/27-07-2009 shall also be followed.

2.3 Signalling

2.3.1 Provision of GR, SR, SEM and all extent instructions issued from time to time shall be complied with.

2.3.2 The condonation regarding infringements in schedule of dimensions shall be obtained in accordance with local conditions before movement.

2.3.3 On the sections where EBD of more than 1Km. is to be catered for, second distant signal or automatic signalling should be available, failing which suitable speed restriction is to be imposed.

2.4 Rolling Stock

2.4.1 Before initiating the operation, CME of the Railway shall certify the track worthiness and safety of the rolling stock. He shall also ensure the proper maintenance of the stock.

2.4.2 For movement of wagon on any private or assisted siding for loading or unloading the consignments, the Chief Engineer of Railway shall be referred to.

2.5 General

2.5.1 All the permanent and temporary speed restrictions enforced and those that may be imposed from time to time due to track, bridges, curves, signalling and interlocking etc shall be observed.

2.5.2 The Bogie covered wagon type BCNHL to RDSO Drg. WD-06076-S-02 Alt. 3 infringes Clause No. 26 and 29 of Chapter IV(A) Schedule of Dimension BG, Revised 2004. These infringements have been condoned vide Railway Board's letter no. 2007/CEDO/SR/23 dated 23-04-2009.

2.5.3 Where the dimensions are permitted as per schedule – II of IRSOD revised 2004, the wagon shall be run as per appropriate class of ODC.

2.5.4 In case of curves, the lateral clearances shall be worked out taking into account extra clearance on the curves calculated as per appendix in the Schedule of Dimensions B.G -2004. The extra vertical clearance in case of curves shall be worked out as under:-

Extra vertical clearance in mm= 1.971x Super elevation of curve in mm

2.5.5 Wagon shall be operated at a maximum speed of 15 kmph on lines with Goods platform.

2.5.6 The wagon shall be painted with "Phirozi" colour (IS colour shade no. 176), to RDSO Spec.No. M&C/PCN/109/88 to make it stand out amongst other wagons.

2.5.7 Suitable precautions for safety of passengers standing on the platform such as provision of strip marking beyond which passengers will not stand and the drivers blowing their horn while passing through platform lines to warn the passengers standing close to the platform have to be taken by the Railways.

2.5.8 Before operation of the wagon on any route, a campaign of education of the line staff will be carried out to warn them about additional width of these wagons.

2.5.9 Wagons are fitted with compressed air brakes. These wagons shall not be moved in a mixed train formation with wagons having other type of brake system.

2.5.10 The maximum permissible speed of the empty and loaded wagon in the siding at originating point and destination shall be decided by the Chief Engineer Concerned.

2.5.11 All doors of BCNHL wagons during running shall be in closed condition.

संलग्नक: Drg. No. WD-06076-S-02 Alt 3.

(राजीव विश्नोई)
वरि0 कार्यकारी निदेशक मानक/चालन शक्ति

प्रतिलिपि:

(1) सचिव (यांत्रिक/इंजी), रेलवे बोर्ड, रेल भवन,नई दिल्ली – 110001

(2) मुख्य रेल संरक्षा आयुक्त, अशोक मार्ग, लखनऊ–226001

(3) महा प्रबंधक (यांत्रिक/यातायात/सिगनल एवं टेलीकॉम),

(i) मध्य रेलवे, छत्रपति शिवाजी टर्मिनस, मुम्बई– 400 001.
(ii) पूर्व रेलवे, फेयरली प्लेस, कोलकाता – 700 001.
(iii) उत्तर रेलवे, बड़ौदा हाउस, नई दिल्ली – 110 001.
(iv) दक्षिण रेलवे, पार्क टाउन, चेन्नई – 600 003.

(v) दक्षिण मध्य रेलवे, रेल निलायम, सिकन्दराबाद – 500 071.
(vi) दक्षिण पूर्व रेलवे, गार्डेन रीच, कोलकाता – 700 043.
(vii) पूर्वोत्तर रेलवे, गोरखपुर – 273 012.
(viii) पूर्वोत्तर सीमान्त रेलवे, मालीगॉव, गुवाहाटी – 781 011.
(ix) पश्चिम रेलवे, चर्चगेट, मुम्बई – 400 020.
(x) पूर्व मध्य रेलवे, हाजीपुर – 844 101.
(xi) पूर्व तटीय रेलवे, बीडीए रेंटल कालोनी, रेलवे काम्पलेक्स, चन्द्रशेखरपुरा, भुवनेश्वर,–751 016.
(xii) उत्तर मध्य रेलवे, हास्टिंग रोड ,इलाहाबाद – 211 001.
(xiii) उत्तर पश्चिम रेलवे, जयपुर – 302 006.
(xiv) दक्षिण पश्चिम रेलवे, हुबली – 580 023.
(xv) पश्चिम मध्य रेलवे, जबलपुर – 482 001.
(xvi) दक्षिण पूर्व मध्य रेलवे, आर ई आफिस काम्पलेक्स, बिलासपुर – 495 004.
(xvii) कोंकण रेलवे कार्पोरेशन लिमिटेड, पोस्ट बाक्स नं0 9, बेलापुर भवन, सेक्टर –11, सीबीडी बेलापुर, नवी मुम्बई – 400614

संलग्नक: Drg. No. WD-06076-S-02 Alt 3.

(राजीव विश्नोई)
वरि0 कार्यकारी निदेशक मानक/चालन शक्ति

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Government of India-Ministry of Railways
Research Designs & Standards Organisation
Lucknow - 226 011
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Fax No. 0522-2453916

No. MW/SPD/BG/BCNHL/22.9t

Dated 21.02.2012

महा प्रबंधक (इंजी),

1. मध्य रेलवे, छत्रपति शिवाजी टर्मिनस, मुम्बई– 400 001.
2. पूर्व रेलवे, फेयरली प्लेस, कोलकाता – 700 001.
3. उत्तर रेलवे, बड़ौदा हाउस, नई दिल्ली – 110 001.
4. दक्षिण रेलवे, पार्क टाउन, चेन्नई – 600 003.
5. दक्षिण मध्य रेलवे, रेल निलायम, सिकन्दराबाद – 500 071.
6. दक्षिण पूर्व रेलवे, गार्डेन रीच, कोलकाता – 700 043.
7. पूर्वोत्तर रेलवे, गोरखपुर – 273 012.
8. पूर्वोत्तर सीमान्त रेलवे, मालीगॉव, गुवाहाटी – 781 011.
9. पश्चिम रेलवे, चर्चगेट, मुम्बई – 400 020.
10. पूर्व मध्य रेलवे, हाजीपुर – 844 101.
11. पूर्व तटीय रेलवे, बीडीए रेंटल कालोनी, रेलवे काम्पलेक्स, चन्द्रशेखरपुरा, भुवनेश्वर,–751 016.
12. उत्तर मध्य रेलवे, हास्टिंग रोड ,इलाहाबाद – 211 001.
13. उत्तर पश्चिम रेलवे, जयपुर – 302 006.
14. दक्षिण पश्चिम रेलवे, हुबली – 580 023.
15. पश्चिम मध्य रेलवे, जबलपुर – 482 001.
16. दक्षिण पूर्व मध्य रेलवे, आर ई आफिस काम्पलेक्स, बिलासपुर – 495 004.
17. कोंकण रेलवे कार्पोरेशन लिमिटेड, पोस्ट बाक्स नं0 9, बेलापुर भवन, सेक्टर –11, सीबीडी बेलापुर, नवी मुम्बई – 400614

Sub: Amendment No.1 to Final maximum permissible Speed certificate for operation of 22.9t axle load Broad Gauge Bogie Covered wagon type BCNHL.

Ref:(i) This office Final Speed Certificate No. MW/SPD/BG/BCNHL/22.9t dated 04-10-2011.
(ii) B&S Directorate letter No. CBS/BOBX dated 29-09-2010.

Vide reference (ii) above, B&S directorate of RDSO has advised to issue an amendment by replacing Para 2.2.3 (iii) (a) of speed certificate referred at (i) above. Accordingly the "Para 2.2.3 (iii) (a)" of the speed certificate has been modified and shall be read as under:-

" 2.2.3 (iii) a. RBG/MBG/BGML span upto 47.25m (effective) is restricted to 60 kmph."

संलग्नक: Nil

(राजीव विश्नोई)
वरि0 कार्यकारी निदेशक मानक/चालन शक्ति

प्रतिलिपि:

(1) सचिव (यांत्रिक/इंजी), रेलवे बोर्ड, रेल भवन,नई दिल्ली – 110001

(2) मुख्य रेल संरक्षा आयुक्त, अशोक मार्ग, लखनऊ–226001

(3) महा प्रबंधक (यांत्रिक/यातायात/संकेत एवं दूरसंचार),

(i) मध्य रेलवे, छत्रपति शिवाजी टर्मिनस, मुम्बई– 400 001.
(ii) पूर्व रेलवे, फेयरली प्लेस, कोलकाता – 700 001.
(iii) उत्तर रेलवे, बड़ौदा हाउस, नई दिल्ली – 110 001.
(iv) दक्षिण रेलवे, पार्क टाउन, चेन्नई – 600 003.
(v) दक्षिण मध्य रेलवे, रेल निलायम, सिकन्दराबाद – 500 071.
(vi) दक्षिण पूर्व रेलवे, गार्डेन रीच, कोलकाता – 700 043.
(vii) पूर्वोत्तर रेलवे, गोरखपुर – 273 012.
(viii) पूर्वोत्तर सीमान्त रेलवे, मालीगॉव, गुवाहाटी – 781 011.
(ix) पश्चिम रेलवे, चर्चगेट, मुम्बई – 400 020.
(x) पूर्व मध्य रेलवे, हाजीपुर – 844 101.
(xi) पूर्व तटीय रेलवे, बीडीए रेंटल कालोनी, रेलवे काम्पलेक्स, चन्द्रशेखरपुरा, भुवनेश्वर,–751 016.
(xii) उत्तर मध्य रेलवे, हास्टिंग रोड ,इलाहाबाद – 211 001.
(xiii) उत्तर पश्चिम रेलवे, जयपुर – 302 006.
(xiv) दक्षिण पश्चिम रेलवे, हुबली – 580 023.
(xv) पश्चिम मध्य रेलवे, जबलपुर – 482 001.
(xvi) दक्षिण पूर्व मध्य रेलवे, आर ई आफिस काम्पलेक्स, बिलासपुर – 495 004.
(xvii) कोंकण रेलवे कार्पोरेशन लिमिटेड, पोस्ट बाक्स नं0 9, बेलापुर भवन, सेक्टर –11, सीबीडी बेलापुर,नवी मुम्बई – 400614

संलग्नक: Nil

(राजीव विश्नोई)
वरि0 कार्यकारी निदेशक मानक/चालन शक्ति

भारत सरकार - रेल मंत्रालय
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अग्रमा संRDSO
रेल अग्रदूत Transforming Railways

Fax No. 0522-2453916

No. MW/SPD/BG/BOXNHL/BCNHL Dated :07.10.2016

महा प्रबंधक (इंजी),

1. मध्य रेलवे, छत्रपति शिवाजी टर्मिनस, मुम्बई– 400 001.
2. पूर्व रेलवे, फेयरली प्लेस, कोलकाता – 700 001.
3. उत्तर रेलवे, बड़ौदा हाउस, नई दिल्ली – 110 001.
4. दक्षिण रेलवे, पार्क टाउन, चेन्नई – 600 003.
5. दक्षिण मध्य रेलवे, रेल निलायम, सिकन्दराबाद – 500 071.
6. दक्षिण पूर्व रेलवे, गार्डेन रीच, कोलकाता – 700 043.
7. पूर्वोत्तर रेलवे, गोरखपुर – 273 012.
8. पूर्वोत्तर सीमान्त रेलवे, मालीगॉव, गुवाहाटी – 781 011.
9. पश्चिम रेलवे, चर्चगेट, मुम्बई – 400 020.
10. पूर्व मध्य रेलवे, हाजीपुर – 844 101.
11. पूर्व तटीय रेलवे, बीडीए रेंटल कालोनी, रेलवे काम्पलेक्स, चन्द्रशेखरपुरा, भुवनेश्वर,–751 016.
12. उत्तर मध्य रेलवे, हास्टिंग रोड ,इलाहाबाद – 211 001.
13. उत्तर पश्चिम रेलवे, जयपुर – 302 006.
14. दक्षिण पश्चिम रेलवे, हुबली – 580 023.
15. पश्चिम मध्य रेलवे, जबलपुर – 482 001.
16. दक्षिण पूर्व मध्य रेलवे, आर ई आफिस काम्पलेक्स, बिलासपुर – 495 004.

Sub: Amendment No.2 to Final maximum permissible speed certificate for operation of 22.9t axle load Broad Gauge Bogie Covered wagon type 'BCNHL'.

Ref:(i) RDSO's final speed certificate No. MW/SPD/BG/BCNHL/22.9t dated 04-10- 2011 followed by Amendment No.1 dated 29-02-2012.
(ii) CTE/Western Railway letter No. W636/15/12/5(W3) dated 13-05-2013 and CRSE(F&O)/Western Railway letter No. M.120/15-2-BCNHL dated 27-09-2016.
(iii) Track Directorate note no. CT/DG/LW/BCN dated 04-10-2016.

Final speed certificate of BCNHL wagon had been issued vide reference (i) above. Vide letter referred (ii) above, Western Railway wants to know maximum permissible speed of BCNHL wagon on track structure other than mentioned in the final speed certificate. Case was referred to Track Directorate and on the basis of Track Directorate note referred (iii) above, it has been decided to issue an Amendment No. (2) with following modifications to final maximum permissible speed certificate:

" Para 2.1 "Track" of the final speed certificate has been modified and shall be read as under:

2.1 **Track**

2.1.1(a) The track shall be to a minimum standard of 60Kg rail (90UTS) on sleeper with M+7 density and minimum depth of ballast cushion below sleeper of 300mm, which may consist of at least 150mm clean and the rest in caked up condition on compacted and stable formation.

(b) For track to a minimum standard of 52Kg rail (90UTS) on sleeper with M+7 density and minimum depth of ballast cushion below sleeper of 250mm, which may consist of at least 100mm clean and the rest in caked up condition on compacted and stable formation. The maximum permissible speed shall be restricted to 70 kmph in empty condition and 65 kmph in loaded condition.

. (c) For track to a minimum standard of 52Kg rail (72UTS) on sleeper with M+7 density and minimum depth of ballast cushion below sleeper of 250mm, which may consist of at least 100mm clean and the rest in caked up condition on compact and stable formation. The maximum permissible speed shall be restricted to 70 kmph in empty condition and 60 kmph in loaded condition.

2.1.2 The maximum permissible speed on curves to be decided on the basis of the existing provisions of Indian Railway Permanent Way Manual Reprint-2004.

2.1.3 For track maintained to lower standard than that mentioned above, the Chief Engineer shall decide the lower maximum permissible speed on the basis of maintenance condition. In this connection, Railway Board's letter No. 65/WDO/SR/26 dated 19/20-10-1966 may be seen. When the Chief Engineer considers that the road bed is not compacted or there is improper drainage, he shall suitably restrict the maximum permissible speed depending upon the local conditions.

2.1.4 The welds shall be protected by joggled fish plates as per provisions of Para 6.4 and Para 8.14 of USFD Manual and Para 6.3 of AT welding manual and other policy instructions of Railway Board. The maintenance of Rails and Rail joints shall be ensured as per Para 250 & 251 of IRPWM. In addition, wherever condition warrants on account of corrosion on rail/weld collar, wear on rail, cupping of welds etc., necessary precautions shall be taken for fish plating/joggled fish plating.

2.1.5 Zonal Railway shall insure further detailed examination of track as deemed fit, based on age cum condition basis, overdue renewal and condition of formation etc as per provisions of Chapter-III of IRPWM-2004 regarding permanent way renewals.

2.1.6 USFD testing shall be carried out at a frequency, one grade higher than the specified frequency in the USFD manual. On Section with GMT more than 60,

the exiting stipulated frequency of once in one and a half month as per USFD Manual may be continued."

संलग्नक: Nil

(संजय कुमार)
कार्यकारी निदेशक मानक/चालन शक्ति

प्रतिलिपि:

(1) सचिव (मैकेनिकल /इंजी), रेलवे बोर्ड, रेल भवन,नई दिल्ली – 110001
(2) मुख्य रेल संरक्षा आयुक्त, अशोक मार्ग, लखनऊ–226001
(3) महा प्रबंधक (मैकेनिकल/यातायात/संकेत एवं दूरसंचार),
- (i) मध्य रेलवे, छत्रपति शिवाजी टर्मिनस, मुम्बई– 400 001.
- (ii) पूर्व रेलवे, फेयरली प्लेस, कोलकाता – 700 001.
- (iii) उत्तर रेलवे, बड़ौदा हाउस, नई दिल्ली – 110 001.
- (iv) दक्षिण रेलवे, पार्क टाउन, चेन्नई – 600 003.
- (v) दक्षिण मध्य रेलवे, रेल निलायम, सिकन्दराबाद – 500 071.
- (vi) दक्षिण पूर्व रेलवे, गार्डेन रीच, कोलकाता – 700 043.
- (vii) पूर्वोत्तर रेलवे, गोरखपुर – 273 012.
- (viii) पूर्वोत्तर सीमान्त रेलवे, मालीगॉव, गुवाहाटी – 781 011.
- (ix) पश्चिम रेलवे, चर्चगेट, मुम्बई – 400 020.
- (x) पूर्व मध्य रेलवे, हाजीपुर – 844 101.
- (xi) पूर्व तटीय रेलवे, बीडीए रेंटल कालोनी, रेलवे काम्पलेक्स, चन्द्रशेखरपुरा, भुवनेश्वर,–751 016.
- (xii) उत्तर मध्य रेलवे, हास्टिंग रोड ,इलाहाबाद – 211 001.
- (xiii) उत्तर पश्चिम रेलवे, जयपुर – 302 006.
- (xiv) दक्षिण पश्चिम रेलवे, हुबली – 580 023.
- (xv) पश्चिम मध्य रेलवे, जबलपुर – 482 001.
- (xvi) दक्षिण पूर्व मध्य रेलवे, आर ई आफिस काम्पलेक्स, बिलासपुर – 495 004.

(4) कोंकण रेलवे कार्पोरेशन लिमिटेड, पोस्ट बाक्स नं0 9, बेलापुर भवन, सेक्टर –11, सीबीडी बेलापुर,नवी मुम्बई – 400614

संलग्नक: Nil

(संजय कुमार)
कार्यकारी निदेशक मानक/चालन शक्ति

Sno 82

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Fax No. 0522-2453916

No. MW/SPD/BG/BCNHL

Dated :21.12.2017

महा प्रबंधक (इंजी),

1. मध्य रेलवे, छत्रपति शिवाजी टर्मिनस, मुम्बई– 400 001.
2. पूर्व रेलवे, फेयरली प्लेस, कोलकाता – 700 001.
3. उत्तर रेलवे, बड़ौदा हाउस, नई दिल्ली – 110 001.
4. दक्षिण रेलवे, पार्क टाउन, चेन्नई – 600 003.
5. दक्षिण मध्य रेलवे, रेल निलायम, सिकन्दराबाद – 500 071.
6. दक्षिण पूर्व रेलवे, गार्डेन रीच, कोलकाता – 700 043.
7. पूर्वोत्तर रेलवे, गोरखपुर – 273 012.
8. पूर्वोत्तर सीमान्त रेलवे, मालीगॉव, गुवाहाटी – 781 011.
9. पश्चिम रेलवे, चर्चगेट, मुम्बई – 400 020.
10. पूर्व मध्य रेलवे, हाजीपुर – 844 101.
11. पूर्व तटीय रेलवे, बीडीए रेंटल कालोनी, रेलवे काम्पलेक्स, चन्द्रशेखरपुरा, भुवनेश्वर,–751 016.
12. उत्तर मध्य रेलवे, हास्टिंग रोड ,इलाहाबाद – 211 001.
13. उत्तर पश्चिम रेलवे, जयपुर – 302 006.
14. दक्षिण पश्चिम रेलवे, हुबली – 580 023.
15. पश्चिम मध्य रेलवे, जबलपुर – 482 001.
16. दक्षिण पूर्व मध्य रेलवे, आर ई आफिस काम्पलेक्स, बिलासपुर – 495 004.

Sub: Amendment No.3 to Final maximum permissible speed certificate for operation of 22.9t axle load Broad Gauge Bogie Covered wagon type 'BCNHL'.

Ref:(i) RDSO's final speed certificate No. MW/SPD/BG/BCNHL/22.9t dated 04-10- 2011 followed by Amendment No.1 dated 29-02-2012 and Amendment No.2 dated 07-10-2016 .

(ii) CBE/West Central Railway letter No. W-HQ/311/BR/CRS/BCNHL/133(518) dated 10-10-2017 and CRS Central Circle letter No. C-11(222)/2017/844 dated 19/21-09-2017.

(iii) Railway Board's condonation letter No. 2007/CEDO/SR/23 dated 23-04-2009.

Final speed certificate of BCNHL wagon had been issued vide reference (i) above. Vide letter referred (ii) above, West Central Railway wants to know the permissible speed of BCNHL wagon on lines, with goods platforms.

Vide Railway Board's condonation letter referred at (iii) above, speed of BCNHL wagons on lines, with goods platforms is restricted to 10 kmph.

In view of above, it has been decided to issue an Amendment No. (3) with following modifications to final maximum permissible speed certificate of BCNHL dated 04-10-2011:

Para 2.5.5 under "General" of the final speed certificate of BCNHL dated 04-10-2011 has been modified and shall be read as below:

" 2.5.5 Wagon shall be operated at a maximum speed of 10 kmph on lines with Goods Platform."

संलग्नक: Railway Board's condonation letter No. 2007/CEDO/SR/23 dated 23-04-2009.

(सी. मधुसूधन राव)
कार्यकारी निदेशक मानक/चालन शक्ति

प्रतिलिपि:

(1) सचिव (मैकेनिकल /इंजी), रेलवे बोर्ड, रेल भवन,नई दिल्ली – 110001
(2) मुख्य रेल संरक्षा आयुक्त, अशोक मार्ग, लखनऊ–226001
(3) महा प्रबंधक (मैकेनिकल/यातायात/संकेत एवं दूरसंचार),
  (i) मध्य रेलवे, छत्रपति शिवाजी टर्मिनस, मुम्बई– 400 001.
  (ii) पूर्व रेलवे, फेयरली प्लेस, कोलकाता – 700 001.
  (iii) उत्तर रेलवे, बड़ौदा हाउस, नई दिल्ली – 110 001.
  (iv) दक्षिण रेलवे, पार्क टाउन, चेन्नई – 600 003.
  (v) दक्षिण मध्य रेलवे, रेल निलायम, सिकन्दराबाद – 500 071.
  (vi) दक्षिण पूर्व रेलवे, गार्डेन रीच, कोलकाता – 700 043.
  (vii) पूर्वोत्तर रेलवे, गोरखपुर – 273 012.
  (viii) पूर्वोत्तर सीमान्त रेलवे, मालीगॉव, गुवाहाटी – 781 011.
  (ix) पश्चिम रेलवे, चर्चगेट, मुम्बई – 400 020.
  (x) पूर्व मध्य रेलवे, हाजीपुर – 844 101.
  (xi) पूर्व तटीय रेलवे, बीडीए रेंटल कालोनी, रेलवे काम्पलेक्स, चन्द्रशेखरपुरा, भुवनेश्वर,–751 016.
  (xii) उत्तर मध्य रेलवे, हास्टिंग रोड ,इलाहाबाद – 211 001.
  (xiii) उत्तर पश्चिम रेलवे, जयपुर – 302 006.
  (xiv) दक्षिण पश्चिम रेलवे, हुबली – 580 023.
  (xv) पश्चिम मध्य रेलवे, जबलपुर – 482 001.
  (xvi) दक्षिण पूर्व मध्य रेलवे, आर ई आफिस काम्पलेक्स, बिलासपुर – 495 004.
(4) कोंकण रेलवे कार्पोरेशन लिमिटेड, पोस्ट बाक्स नं0 9, बेलापुर भवन, सेक्टर –11, सीबीडी बेलापुर,नवी मुम्बई – 400614

संलग्नक: Railway Board's condonation letter No. 2007/CEDO/SR/23 dated 23-04-2009.

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