सत्यमेव जयते

VINAY MITTAL

अध्यक्ष, रेलवे बोर्ड
एवं
पदेन प्रमुख सचिव, भारत सरकार
रेल मंत्रालय
नई दिल्ली-110 001
CHAIRMAN, RAILWAY BOARD
&
EX-OFFICIO PRINCIPAL SECRETARY,
GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
NEW DELHI-110001

D.O. No.2005/M(N)/951/41

11-7-2012

My dear

Sub: **Fire prevention in BTPN wagons**

In the recent review meeting held by Railway Board in Mumbai on 15-6-2012, Central Railway pointed out that incidences of fire have been reported in BTPN wagons due to electric sparks emanating from OHE as a result of barrel mounting, like man-hole covers and sealing wires, coming in contact with the OHE wire. Such cases can be avoided if the required level of care is exercised during loading/unloading of these wagons.

Based on the directions of Railway Board, RDSO has issued guidelines to switch over to non-metallic sealing wire to prevent fire in BTPN wagons on 22-6-2012 (Copy of these instructions are enclosed). Please ensure that your officers are deputed to loading points of BTPN wagons to carry out audits to ensure meticulous implementation of these instructions.

A feedback on the audits done should be sent to Railway Board by 31-7-2012.

With best wishes,

Yours sincerely,

Encl: As above

(**Vinay Mittal**)

General Managers
All Zonal Railways

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भारत सरकार –रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन
लखनऊ – 226011
Government of India - Ministry of Railways
Research Designs & Standards Organisation
Lucknow – 226011

No. MW/BTPN

Dated: 22.06.2012

मुख्य यांत्रिक अभियन्ता :

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: Fire prevention in BTPN Wagons

Ref: Railway board's Letter No 2005/M(N)/951/41 Dated 06/06/2012

Railway Board has expressed concern over recent cases of fire in BTPN wagons. The commodities loaded in BTPN wagon are of inflammable and explosive nature and as such, utmost care in maintenance, operation and handling of such stock is to be taken.

RDSO has a documented guideline G-90 (Instructions for Maintenance and operation of Bogie Petrol Tank Wagons Type BTPN) duly amended from time to time. It is expected that Zonal Railways would be meticulously following the provisions of the Document to ensure safe handling, operation and maintenance of BTPN wagons.

Special attention of Zonal Railways is drawn towards clauses 3 through 10 of the said document, which elucidate the care to the exhibited in operation (Loading/ Unloading/ Shunting/ marshaling) and maintenance of these wagons in Open line, ROH and POH Depots. It is imperative that regular self-assessment/audits are carried out by the Zonal Railways as against all the above referred clauses to ensure following of provisions of the G-90 in right earnestness. The results of these Audits may be compiled and corrective and preventive

measures be initiated in case of non- compliances. The records of these Audits may be preserved for future references.

While on the subject, there is a need to hedge against risks of sparks and consequential ignition of fires due to tracking from OHE through Sealing wires. A writeup on the same is covered as Annexure 1 to this Letter. These points may also be ensured in addition to the provisions of G – 90 for fire safety of BTPN Wagons.

संलग्नकः उपरोक्तानुसार

(विशाल कपूर)
कृते महा निदेशक/माल डिब्बा

प्रतिलिपिः-

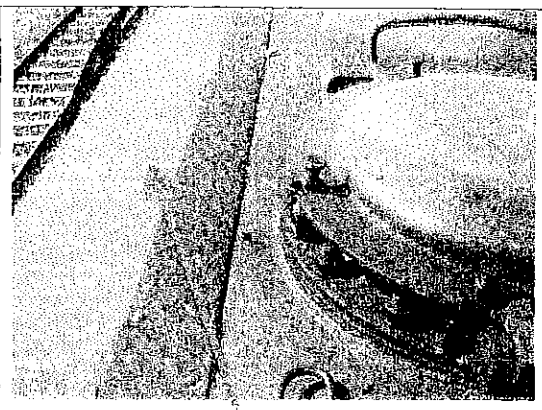
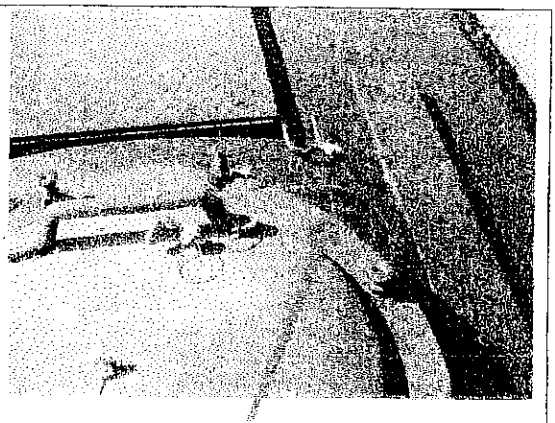
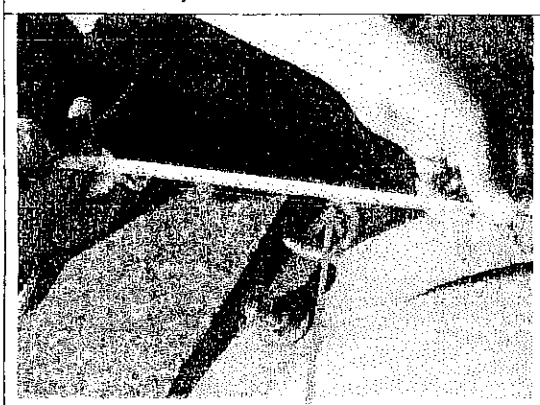
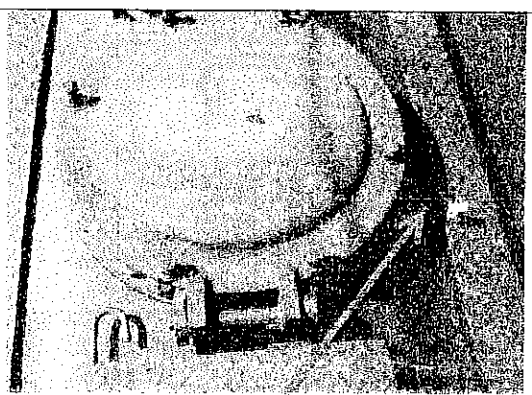
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Annexure 1

Prevention of fire risks due to proximity of sealing wires with Contact wire of OHE

1. Correction Slip 7 of IRSOD 2004 espouses a minimum electrical clearance of 270 mm of Rolling Stock from the Contact wire.
2. Reports from Zonal Railways have been received as regards ad hoc metallic sealing arrangements being adopted by loading parties at loading points.
   2.1. It is reported that long metallic wires are wound around various Eyebolts (With holes for sealing wires) of the dome cover, sometimes crossing the dome cover diagonally.
   2.2. Similarly, it is also reported that at unloading points, the metallic lead seals are left hanging at the Dome cover after the unloading operation.
   2.3. This leads to long uncut and undesirable lengths of metallic sealing wires hanging from the dome covers, which during run, may breach the minimum electrical clearance requirements of IRSOD.
   2.4. Some representative pictures are enclosed as Appendix 1 to this Annexure.
3. The design of the eye bolts as per RDSO Drawing No WD-86081-S-60 and WD-86081-S-61 is such that sealing in even one Bolt is enough to ensure the theft protection as it shall not be possible to open the Dome cover without damaging the seal. At max, sealing on two adjacent bolts, individually, shall suffice to ensure anti-theft protection.
4. The practice of winding the sealing wires all around the dome cover eye bolts, in a loose condition, is not correct. Being a potential cause of fire due to Electrical Tracking, the same should be discontinued.
5. While ensuring the sealing on one / two adjacent bolts, it should be ensured that the uncut length of the Metallic sealing wire in vertically taut condition does not project more than one inch from the centre of the hole provided in the eye bolt for sealing. This shall ensure adequate electrical clearance from the OHE.
6. Similarly, at unloading points, the used Sealing wires must be removed from the Wagon dome covers.
7. Railways may engage with the Oil Loading parties/ Oil companies under their jurisdiction to progressively switch over to non-metallic seals, so that chances of electrical tracking (due to human failures) and consequential fires are reduced.
8. While on the subject, it is imperative to ensure the presence of gasket to RDSO Drawing No W/TF-2169 on the Dome cover, as the same provides a sealing protection to possibility of product vapours emanating from the sampling pipes, filling pipes and vapour extractor cocks.

Appendix 1

	
Hanging sealing wire	Extra length of Sealing Wires
	
Uncut length of Sealing Wire	Hanging sealing Wire

Pictures of Extra Length Sealing Wire used on Dome Cover of BTPN Wagons