



# Rail Industry Safety Notice



**RISN No. 17**

## **Warning of Potential Locomotive Bonded Asbestos Material**

### **Background**

The Independent Transport Safety and Reliability Regulator (ITSRR) has been advised by Pacific National of potential issues associated with bonded asbestos material on locomotives.

### **Action**

Accredited persons are advised to read the attached information issued by Pacific National and take action as appropriate.

Carolyn Walsh  
**Chief Executive**

# System Safety Notice



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**SSN No: 10/07**

<b>Title</b>	<b>System Safety Notice</b>
<b>Applicable Dates</b>	From 5 April 2007
<b>Approved By</b>	David Edwards General Manager Safety Health & Environment
<b>Issued By</b>	Pacific National Safety, Health & Environment Group
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## Warning of Potential Locomotive Bonded Asbestos Material

For the information of all Australian Rail Safety Regulators and further distribution if appropriate.

As a part of the Pacific National on-going project to remove all rolling stock fibrous wear strip material that has been identified to contain asbestos, it has been further identified that some older locomotive types may contain a bonded asbestos material used in electrical compartments as backing boards and/or contactor arc chutes.

### Bonded Asbestos Material

The asbestos present in the locomotive electrical compartments has been identified as being “bonded asbestos material” (similar to fibro) and does not present a risk to health in a normal operating environment, provided that the material is not subjected to cutting, grinding, drilling or any other activity that may cause breakage or the release of fibres from a component.

### WorkCover Advice

The New South Wales and Victorian WorkCover Authorities have advised of the following, “If these products are maintained in good order they present no significant health risk. However, safety precautions must be taken when working on any product containing asbestos in a way that is likely to generate dust”.

As advised by the WorkCover Authorities, the greatest potential risk of exposure exists where maintenance activities are undertaken on the bonded asbestos material. While additional precautions, instructions, and procedures are being implemented for all maintenance activities involving this bonded material, no additional precautions are required for Locomotive Drivers.

### Bonded vs Friable Material

WorkCover legislation describes material that contains asbestos as being either bonded or friable. The following information provides a more detailed definition of the two forms of material and some examples:

## Definition of Bonded Material

Bonded material is any material that contains asbestos in a bonded matrix. It may consist of cement or various resin/binders and cannot be crushed by hand when dry. Asbestos cement (AC) products and electrical metering boards in good condition are examples of bonded asbestos material.

A large number of products made from asbestos cement are still found in Australian buildings. These products include flat (fibro), corrugated or compressed asbestos cement sheeting, and asbestos cement pipes such as electrical, water, drainage and flue pipes.

## Definition of Friable Material

Friable material is any material that contains asbestos and is in the form of a powder or can be crumbled, pulverized or reduced to powder by hand pressure when dry. Sprayed limpet, millboard, pipe and boiler lagging are examples of friable asbestos.

## Bonded Material on PN Locomotive Classes

The following Pacific National locomotive classes have been identified with components in the electrical compartments that may contain bonded asbestos material:

H, S, T, X, Y, 48 and 80 class locomotives.

## Locomotive Driver Question & Answer Sheet

Please see the attached question and answer sheet that has been prepared for the information of Pacific National employees. This Q&A sheet attempts to identify and answer what has been thought to be the most important questions that Locomotive Drivers will need answered.

The question and answer sheet should not be considered as being exhaustive, so, employees are also being asked to address any additional questions through their manager or supervisor and we will endeavour to provide all the necessary additional information.

## Further Action

Please be assured of Pacific National's best endeavours, as always, to ensure the health and safety of its employees, and to keep the Rail Safety Regulators informed as we work to jointly resolve this important issue.

Thank you for your contribution in making Pacific National a safe and injury free workplace.

**Would a representative of each Rail Safety Regulator please acknowledge receipt of this safety critical information by return e-mail.**

**Document control ranking:** *Safety Critical Document Category C (signature not required)*  
Instruction Expiry Date: 31 December 2007

David Edwards  
General Manager  
**Safety Health and Environment**

## Locomotive Driver Asbestos Question & Answer Sheet

### **1. Do we have asbestos in our working environment?**

Yes, during the last few weeks it has come to Pacific National's attention that there are asbestos containing materials in some wagon components and more recently it has been identified that chrysotile asbestos in a bonded substrate is contained within some components within the electrical compartments and control boards on certain types of locomotives.

### **2. What class of locomotives are affected and where in the locomotives is the asbestos located?**

The class of locomotives where asbestos containing materials have been identified include 48, 80, X, S, T, Y & H Class locomotives. The material was found in the control boards and arc chutes in some electrical compartments. The photographs below are examples of some of the locomotive components that contain these materials.



Cabin fuse & battery knife switch backing board in a Y class locomotive



Engine room arc chute in an X class Locomotive. The black coloured arc chutes to the left were found to contain bonded asbestos.

### **3. Is the asbestos in the locomotive electrical compartments & control boards in a stable form?**

The asbestos found in the locomotive's electrical compartments and control boards is in a bonded form, meaning that the asbestos fibres are bound in the material and will not be released into the air unless the component is mechanically disturbed such as drilling or grinding or appears to be damaged. Examples of bonded asbestos containing materials in the general environment include older style vinyl floor tiles, asbestos cement sheeting, and mastic glues.

**4. Are all asbestos containing materials a health risk?**

No. A health risk exists only when asbestos fibres are released from the material or product in such a manner as to become airborne with the potential to be inhaled. This should not be the case with the asbestos containing materials that are present within the electrical compartments and control boards in normal locomotive operation.

**5. Are there any tasks in my normal duties that may bring me in the vicinity of asbestos containing materials?**

No, not directly. However, a driver may be in the vicinity of the material when accessing the electrical compartments and control boards on some locomotives in order to operate the battery knife switch.

**6. If I need to access the electrical cabinets and control boards, how do I do it safely?**

There are no additional protective measures that a driver needs to take when accessing electrical compartments and control boards under normal operating conditions.

**7. What should I do if I identify any asbestos containing materials within the electrical cabinets and control boards that appear to be damaged?**

Close the door of the electrical cabinets and control boards and contact the DCC and advise that the locomotive may contain damaged asbestos containing material. The DCC will notify the appropriate maintenance team to take further action.

**8. Has any testing occurred and what were the results?**

Yes. Some testing has been conducted within the driver's cab of the X, T, Y, and 48 Class locomotives. The results of these tests have identified that there were no measurable levels of airborne asbestos fibres detected under test conditions.

**9. How is Pacific National dealing with the management of the product?**

A program is being developed to remove all asbestos bearing material that is identified in the arc chutes across the locomotive fleet. The material present in the electrical backing boards is of the bonded type, and therefore unless obviously damaged or mechanically disturbed, does not require systematic replacement.

**10. Should I continue to drive locomotives that have asbestos containing materials located in some components?**

Yes, the asbestos containing materials located within the locomotive electrical cabinets and control boards are in a very low risk bonded form and the normal duties that are performed by drivers should not cause any fibres to become airborne.

## **11. What shouldn't I do?**

Drivers must not perform any type of work on the asbestos containing materials that would release fibres into the air, such as trying to remove the suspect components, arc chutes etc. The types of activities performed by drivers as part of their daily duties can still be performed without any restriction.

## **12. Are there any airborne fibres generated from the equipment containing asbestos in the locomotive electrical cabinets and control boards?**

No. The material containing the asbestos has been classified as bonded and therefore is relatively low risk. As long as the asbestos containing materials are not damaged or mechanically disturbed the components in their current form should not release any fibres.

## **13. What do I do if I believe that I have been exposed to asbestos?**

The Pacific National Integrated Safety Management System contains a **Hazardous Substances Exposure Form** that employees can fill in and send to the Injury Management Unit to register their concern. This form will be kept on the employee's personal file. Your Supervisor will be able to assist you in obtaining the form from the Intranet. Pacific National encourages all employees to complete this form if they believe that they have been exposed to any hazardous substance.

## **14. Will Pacific National be providing health screening to employees if they believe that they have been exposed to asbestos?**

Yes. If any employee feels that health screening would assist in relieving any personal concerns, on a needs basis, Pacific National will provide the health screening.

## **15. Is Pacific National consulting with any other stakeholders?**

Yes, Pacific National is consulting with the Occupational Health and Safety and Rail Safety Regulator in each jurisdiction, and in particular the Victorian and NSW WorkCover Authorities in relation to their guidelines on handling materials containing asbestos. Pacific National is also consulting with all involved service unions, including the RTBU, ETU and AMWU.

## **16. Where do I go if I want more information?**

If you have any additional questions that haven't been covered, ask your Supervisor or Divisional Safety Risk Manager who will be pleased to provide you with further information as required.

Further advice may also be obtained from Pacific National's Chief Medical Officer or an independent Occupational Hygienist/Specialist who has been engaged by Pacific National.

Any new or additional information related to this issue will be communicated to all employees as it becomes available.