



## ASSOCIATION OF TOURIST & HERITAGE RAIL AUSTRALIA

ABN 19 755 744 868

### ATHRA ALERT #33 – April 2007

## Older Diesel Locomotives Warning of Possible Presence of Bonded Asbestos Materials

Pacific National has recently reported the identification in their older diesel locomotives of bonded asbestos material. The material is chrysotile asbestos in a bonded substrate and has been used in electrical compartments such as backing boards and/or contactor arc chutes. The particular classes of Pacific National locomotives affected are H, S, T, X, Y, 48 and 80 class locomotives.

#### **Examples of bonded asbestos materials** (Courtesy of Pacific National)



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



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

Pacific National has determined that the asbestos found in locomotive 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 by drilling or grinding or appears to be damaged. Pacific National has determined that no additional precautions are required for Locomotive Drivers when accessing electrical compartments and control boards under normal operating conditions.

Pacific National is developing a program to remove all bonded asbestos material that is identified in the arc chutes across its locomotive fleet. Pacific National has also determined that the material present in the electrical backing boards in electrical compartments is of a bonded asbestos type and unless obviously damaged or mechanically disturbed, does not require systematic replacement.

### **Work Cover Advice**

The New South Wales and Victorian Work Cover Authorities have advised Pacific National 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.*

Thus a health risk should not be present with the asbestos containing materials that are present within locomotive electrical compartments and control boards in normal locomotive operation. However appropriate precautions and procedures are required for all maintenance activities involving this bonded material.

### **Key Message**

Asbestos containing materials have been used extensively throughout industry in a variety of applications. Bonded asbestos materials have been used extensively for backing boards in electrical switchboards in a wide variety of settings. Although the Pacific National report is specific to H, S, T, X, Y, 48 and 80 class locomotives, it is likely that bonded asbestos materials have been used for the same purposes in locomotives of similar vintage.

### **Recommended Actions:**

- Make this Alert available to your locomotive maintenance crews and drivers.
- Ensure your procedures for identifying, working with and removing asbestos and asbestos containing materials comply with the requirements of your State regulations.
- Ensure your locomotive maintenance crews understand the appropriate procedures for working with asbestos containing materials and the health risks of not following the required procedures.
- Establish a procedure to identify and record the types of backing boards and contactor arc chutes in your locomotives and to record the removal of asbestos containing materials if found.
- Undertake a risk assessment of all identified bonded asbestos materials to determine if it can be safely maintained in-situ or if a program of replacement is required.