

## Asbestos on Locomotives & Work Equipment

### What is Asbestos?

Asbestos is a naturally occurring mineral. It has several properties which make it useful for certain applications. It is very durable, and is resistant to chemicals and fire. Asbestos is usually incorporated into binders and other substances to add strength and durability. The asbestos is present in the form of small fibers mixed in with the other materials. As the other material age, degrade or become damaged, the asbestos fibers may become released. If they become airborne, you can breathe the fibers into your lungs.

### Where is it found?

Because of its qualities, asbestos has been used in several types of materials. These materials are typically found on older equipment and include:

- Fabric wrap on water and steam lines
- Fabric wrap on compressor and governor lines
- Gaskets
- Brake and clutch linings

Not all insulation, gaskets or brake/clutch linings contain asbestos, but, unfortunately, asbestos containing materials may not be easy to recognize. BNSF does not allow manufacturers to use asbestos any more, but it can still be present on older equipment or in old stocks of replacement gaskets. BNSF is removing the fabric asbestos wrap from locomotive thermal insulation throughout the system.

### What are the Hazards of Asbestos?

Diseases associated with asbestos include asbestosis, lung cancer and mesothelioma. Asbestos is only hazardous if it becomes airborne. Asbestos does not harm the skin, nor can it be absorbed through the skin. Asbestos must be breathed into your lungs before it can cause harm. It has no short-term health effects.

Some studies have shown that persons who work daily with asbestos, without protection, are 5x more likely to get lung cancer than a person who doesn't work with asbestos. A person who smokes is 22x times more likely to get lung cancer. A person who smokes and works with asbestos is 88x more likely to get lung cancer.

### What if asbestos is in the equipment?

Normal operation of locomotives and work equipment does not expose you to asbestos fibers. Only mechanical employees who work directly with asbestos containing gaskets, linings, or wrap may have a potential for exposure. When working with asbestos containing materials, special procedures that keep the asbestos wet will prevent the asbestos from being released to the air. Employees who will work with asbestos-containing materials will receive additional training regarding work and disposal procedures. BNSF has also instituted a program to remove asbestos from locomotives. Several locations have been specially equipped to completely remove asbestos from locomotives. Eventually, the entire locomotive fleet will be asbestos-free.

## **BNSF RR Hazard Communication Safety Briefings**

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### **Summary**

Some BNSF locomotives and work equipment still have asbestos in places. Asbestos fabric wrap is being removed from all locomotives. Until that process is complete, remaining asbestos must be handled properly to prevent fiber release. Asbestos will not cause a problem as long as it is not damaged. The asbestos on this equipment is not a hazard during normal operations.