

4.1.8 When repair operations are complete, if the pipe must be reinsulated, asbestos containing products are not to be used for two reasons: (a) cutting and fitting of asbestos-containing insulation can generate significant amounts of airborne asbestos fiber even though it cannot be seen, and (b) asbestos may be banned from use completely except where suitable substitutes are not available.

4.1.9 Currently, there is not any one material on the market which can be substituted for asbestos in all of its applications. It is expected that manufacturers will produce substitute materials. There are insulation substitutes currently on the market and some are listed in "Mechanical Design and Equipment Standards" (Plant Engineering Office, Manufacturing Staff, Page M4-1, January 1976). Typical substitutes are listed below:

4.1.10 Steam Piping

Inside Boilerhouses

<u>Manufacturer</u>	<u>Acceptable Material</u>
Certain-Teed Saint Gobain (CSG)	Snap-On (to 450 F)
Johns-Manville	Calcium Silicate
Owens-Corning	Kaylo
Celotex Corporation	Careytemp Expanded Silica (1/2")
Pabco	Calcium Silicate

Inside Manufacturing and Office Building

<u>Manufacturer</u>	<u>Acceptable Material</u>
Certain-Teed Saint Gobain (CSG)	Snap-On (to 450 F)
Johns-Manville	Flame Safe
Owens-Corning	Heavy Density Sectional
Pabco	Calcium Silicate

4.1.11 Condensate Piping - (Inside Building)

<u>Manufacturer</u>	<u>Acceptable Material</u>
Armstrong Cork Co.	FR/Armaflex
Certain-Teed Saint Gobain (CSG)	Snap-On (to 450 F)
Johns-Manville	Flame Safe
Owens-Corning	Once Piece

4.2 Brake and Clutch Repair

Brake and clutch mechanisms on vehicles, presses and cranes utilize asbestos friction materials. Exposure to asbestos dust in the air can occur during inspection and repair operations especially if compressed air is used to blow off debris. To minimize the potential for employee exposure, the following work practices must be adhered to:

* If more than three years old, see Manual Index for latest review date.