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SAFETY INFORMATION BULLETIN: SB05-01

SUBJECT

Guideline for Maintenance Replacement of Mechanically Assembled Items in Existing Pressure Piping Systems

DEFINITION

Maintenance replacement means the removal of one mechanically assembled item and replacement with another item of the same dimensions and technical specification, with a valid Canadian Registration Number (CRN) where applicable, in a previously registered, completed and tested pressure piping system, without further inspection by TSSA being necessary. Replacement of prefabricated flexible hoses with a CRN, manufactured by a qualified organization is included in this definition. This Information Bulletin applies to pressure piping systems regulated by the Boilers & Pressure Vessels Regulation, of the *Technical Standards & Safety Act*.

GUIDELINE

Mechanically assembled items are those items that are threaded, bolted, clamped, expanded or otherwise mechanically fastened together without any welding or brazing.

Maintenance replacement of mechanically assembled parts in existing pressure piping systems is a maintenance activity that is not a Repair as defined in the *Technical Standards and Safety Act*, Boilers and Pressure Vessels Regulation.

Maintenance replacement activities do not require a Certificate of Authorization from TSSA or the involvement of a TSSA Inspector. However, owners, users and contractors are cautioned that they may require skilled trades and appropriate work procedures to safely perform the tasks involved in maintenance replacement activities and these are the responsibility of the equipment owner, user or contractor.

Maintenance replacement of parts include for example, like for like replacement of gaskets, gland packing, bolting, line valves, safety relief valves, mechanically joined (not welded or brazed) pipe fittings, etc. Replacement is based on the assumption that the item being replaced was correctly specified and only requires a new item of the same dimensions, material, pressure and temperature rating, service conditions, etc. (the same technical specification) for maintenance replacement. Changes to the technical specification of an item are not to be treated as maintenance replacements without the agreement of a TSSA Inspector.

Welding or brazing of maintenance replacement items is to be treated the same as a repair, requiring the involvement of a TSSA inspector.

Assembly, fabrication or erection of new piping parts (pipe spools), systems, or extensions to existing systems, is not maintenance replacement work. A TSSA pressure piping Certificate of Authorization and inspection by a TSSA Inspector is required for these activities.

Note: This guideline is intended to assist organizations in understanding the requirements when performing maintenance replacement work. It is not a substitute for the *Technical Standards and Safety Act* (Act), Boilers and Pressure Vessels Regulation (Regulation). Should this guideline differ from the Act or Regulation then the Act or Regulation shall apply.

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