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Public Safety Bulletin

RE: Precautions for Equipment at Risk Due to Freezing

With the beginning of the winter season approaching, the Technical Safety Authority of Saskatchewan would like to remind industry to assess their equipment for vulnerability to freeze damage. Any equipment that may be at risk to damage due to freezing should be addressed before the onset of winter conditions.

Particular attention should be directed toward vessels and piping that may contain water and be subject to rupture due to freezing. Piping deadlegs can be of particular concern, especially in large industrial complexes with large amounts of piping, some which may be concealed or seldom used.

A deadleg is defined as components of a piping system that normally have no significant flow. Some examples include blanked branches, lines with normally closed block valves, lines with one end blanked, pressurized dummy support legs, stagnant control valve bypass piping, spare pump piping, level bridles, relief valve inlet and outlet header piping, pump trim bypass lines, high point vents, sample points, drains, bleeders, and instrument connections.

Your early attention to this matter may prevent an unexpected and costly failure.

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