

2026 Prairie Facility: "Insurance-Ready" Safety & Integrity Checklist

(This is only a general guide and does not purport to be an all-inclusive list)

Focus: Industrial Compliance, Structural Integrity, and Machinery Safeguarding.

I. Machinery Safeguarding (CSA Z432-23 Compliance)

- **Fixed Guarding:** Are all belt drives, chains, and rotating shafts enclosed in guards that require a **tool** (wrench/screwdriver) to remove? (Finger-tight wing nuts are no longer compliant).
- **In-Running Nip Points:** Are intake points on conveyors and rollers physically unreachable during operation?
- **Emergency Stops (E-Stops):** Are E-stops mushroom-style, red on a yellow background, and unobstructed? Do they require a manual reset?
- **Interlock Verification:** Do gates on high-risk machinery (e.g., pellet mills, crushers) physically cut power to the motor when opened?
- **Distance Guarding:** If "guarding by distance" is used, does the barrier height and distance meet the new 2026 reach-over/reach-under safety tables?

II. Structural Integrity & Vibration

- **Mounting Bolt Tension:** Have motor mounts and gearbox anchors been checked for "loosening by vibration" in the last 6 months?
- **Weld Inspection:** Are there visible hairline cracks or "rust bleeding" on the load-bearing welds of gantries or bin supports?
- **Thermal Expansion Gaps:** For facilities over 100ft in length, are expansion joints moving freely, or has the Saskatchewan winter/summer cycle caused structural "binding"?
- **Harmonic Vibration:** Is there a "rattle" or "hum" in the floorboards or catwalks near heavy motors? (This indicates a misalignment that is fatiguing your steel).

III. Operational & Environmental Safety

- **Thermal Stress Mitigation:** Are motors and high-heat components shielded or insulated to prevent ambient temperature spikes in the work zone (Federal SOR/2026-10 compliance)?
- **Abrasive Dust Management:** Is there visible "dust piling" on top of horizontal structural beams? (This is both a fire hazard and a hidden weight load that can lead to collapse).

- **Access & Egress:** Are all catwalks and stairs free of corrosion-related "soft spots"? Is the grating secured, or has it shifted?

IV. Documentation & Audit Trail

- **Maintenance Logs:** Is there a date-stamped record of the last professional alignment and vibration analysis?
- **Modification Certification:** For any machine modified in the last 24 months, do you have a record showing it meets current CSA standards?
- **Lockout/Tagout (LOTO) Stations:** Are LOTO points clearly marked, and are they specific to the mechanical energy of the machine?