



SYSTEM SHUT DOWNS

POOLS R US

Universal Chemical Feed Isolation & Restart Protocol

Purpose: Prevent chemical accumulation in feed lines during shutdown that may discharge concentrated sanitizer or acid upon restart, causing cross-contamination, extreme readings, or unsafe water conditions.

SECTION 1 – Mechanical Room Quick Guide

SHUTDOWN SEQUENCE

- Confirm circulation pump operating normally
- Turn controller to Standby / Service Mode
- Confirm feed indicators are OFF
- Turn OFF primary sanitizer feed pump at power source
- Turn OFF pH control feed pump at power source
- Confirm no manual override or feed test active
- Verify no chemical is dripping at injection point
- Shut down circulation ONLY after feed pumps are OFF

STARTUP SEQUENCE

- Restore circulation pump FIRST
- Verify stable system flow (2–3 minutes minimum)
- Turn controller ON (do not enable feed yet)
- Confirm readings stable
- Enable sanitizer feed first
- Wait 2–3 minutes
- Enable pH feed second
- Manually test Free Chlorine and pH
- Recheck after 15 minutes for stability

SECTION 2 – Full Standard Operating Procedure

A. Pre-Shutdown Chemical Isolation

- Verify system is circulating with proper flow.
- Place controller into Standby or Service Mode.
- Confirm no feed relays are energized.
- Physically shut OFF sanitizer and pH feed pumps.
- Confirm no manual prime or override functions active.
- Inspect injection points for siphoning risk.
- Confirm no chemical remains pressurized in lines.
- Only after all feed systems are OFF, shut down circulation.

B. Restart & Chemical Reactivation

- Restore circulation and confirm steady flow.
- Allow 2–3 minutes of full water turnover before enabling feed.
- Turn controller ON without activating feed immediately.
- Confirm readings (ORP/pH) are stable and reasonable.
- Activate sanitizer feed first.
- Wait minimum 2–3 minutes before enabling pH feed.
- Perform manual water test and compare to controller.
- Re-test after 15 minutes to confirm no spike or instability.

Critical Safety Principles

- Never allow feed pumps to operate without circulation.
- Never shut down circulation while chemical feed is active.
- Always restore circulation before enabling feed.
- Physical pump shutoff is required — do not rely solely on controller.
- Injection points for sanitizer and acid should be separated appropriately.
- Follow Alberta Health Services operational safety standards.