

## BULLETIN 03-2011

June 15, 2011

**TO: OIL COMPANIES  
OIL FIELD SERVICE COMPANIES  
OIL FIELD ENGINE SUPPLY COMPANIES  
LICENSED GAS CONTRACTORS**

**SUBJECT: GENERAL BULLETIN - OILFIELD**

### Permits

- It has come to our attention that engine replacements (engine swaps) on well head sites and catalytic heater installations are being completed without the proper gas installation permits being submitted. All installations where gas is burned requires an installation permit for the gas-fired equipment and assorted piping. This includes stationery engine set-up and catalytic heater installation/replacement. These requirements are set out in Section 12 of *The Gas Inspection Act, 1993*.
- All oilfield installation permits and field approval applications must reference the surface land location, NOT the downhole location.

### Approvals

- All gas fired equipment installed since September 2007 shall be approved or certified for the application. This includes all gas-fired equipment offered for sale [see Section 26(1) of *The Gas Inspection Act, 1993*].
- Upgrading of existing non-compliant sites. Our original guidance was that existing non-approved fuel train applications would be upgraded when the fuel train failed. This guidance included the following:
  - making changes to the burner(s);
  - manifold pressures either increasing or decreasing;
  - upgrading burner management systems;
  - changing the application of the equipment;
  - when upgrading of existing equipment (certified or non-certified) is undertaken; or
  - as per internal risk assessment.
- We are now seeing instances where fire tubes have burnt out and we are now calling for fuel trains to be upgraded when replacing a fire tube.
- Well head leases that have been shut down for more than one year must be upgraded to current B149.3 gas code standards before they are reactivated and be authorized by a reconnection permit.

### Code clarification

- In oilfield applications, CSA B14.93 clause 4.5.3(a) is no longer applicable and all pilot trains with an input equal to or less than 400,000 Btuh (120 kW) shall meet clause 4.5.4 “*be equipped*”

*with two safety shut-off valves piped in series and wired in parallel and certified in accordance with ANSI Z21.21/CSA 6.5, or one safety shut-off valve certified in accordance with ANSI Z21.21/CSA 6.5 and marked C/T”.*

Note: Certain appliances meeting clause 4.5.3(b) and demonstrating operational effectiveness may be approved for oilfield applications that utilize utility-grade fuels.

- Any fuel train which is connected to more than one type of fuel supply (natural gas, propane, casing gas and others) shall be equipped with check valves on each type of fuel supply to prevent the backflow of any type of fuel into the supply piping of another.

#### Gas Distribution Systems

- All gas piping systems that distribute gas from one land location to another shall be designed, constructed and installed in accordance with the latest revision of CSA Z662 Oil and Gas Pipeline Systems. All gas piping systems that distribute gas within a land location, starting from the first manual valve on the incoming pipeline system, or on the propane tank, shall be designed, constructed and installed in accordance with the latest revision of CSA B149.1 Natural Gas and Propane Installation Code. All modification, tie-ins and/or repairs to either type of gas piping system where any portion of the gas shall be used a fuel, shall be conducted under permit by a licensed gas contractor. Only those piping systems transporting 100% sales gas are exempt from this requirement.

#### General Issues

- Non-compliance orders (defects) are not being completed in a timely fashion and returned to our office. Due dates are listed on non-compliance orders.
- Pressure relief valve outlets are being plugged off. PSV outlets must not be plugged off.
- Tampering with low liquid shutdown devices by jamming them open, not allowing the burner to shut down on low liquid situations.
- Removing pressure indicators from approved valve trains is not allowed.
- Propane hoses are not allowed in oil storage containments.
- Brass shut-off valves and brass check valves should not be used on casing gas.
- Vent lines from regulators and reliefs have been reduced in size and not discharged to safe locations or above minimum snow levels.
- Rating plates are missing.
- Change in fuel types not documented properly.

SaskPower Gas Inspections and Alberta Municipal Affairs Safety Services (Gas) have been in discussions concerning a joint deadline date of January 1, 2015 for all gas-burning appliances and equipment in oilfield applications which have not as yet been certified under the applicable code (chiefly CSA B149.3) and are still in operation, to be certified to the latest edition of the applicable code. While no decision on this deadline date has yet been made for Saskatchewan, comments from industry are welcome at this time.

Thank you for your co-operation in the matters of public safety.



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