Notice

Field Approvals, Permits and Variances

This bulletin has been developed by Safety Services to inform owners, designers, engineers, vendors, builders, installers, contractors, equipment rental and leasing companies of the minimum requirements to ensure safe installation of gas appliances in Alberta. A Province-wide variance for non-certified gas-fired process equipment allowing authentication by registered engineering professionals has been issued by the Provincial Gas Administrator (20-GCV-02-Rev1). This variance applies to all non-certified gas-fired equipment used in process applications at production facilities such as petroleum refineries, petrochemical plants and upstream oil and gas sites.

| | Oil and Gas Industry REV 1 | | | | | | | |
|------|--|---|------------------------|---------------------------|--------------|-----------------------|---------------------------|-----------------------------|
| ITEM | SCOPE | PRESSURE psig (kPag) | ACT | CODE | REGISTRATION | GAS FIELD APPROVAL | GAS PERMIT REQUIRED | GAS VARIANCE REQUIRED |
| 1 | Process gas piping | not less than 15(103) />1/2M ³ | Safety Codes Act | ASME B31.3 | ABSA | N/A | NO | NO |
| 2 | Fuel/process gas piping supplying gas to fuel burning equipment | not less than 15(103) />1/2M ³ | Safety Codes Act | ASME B31.3 | ABSA | N/A | NO | NO |
| 3 | Fuel/process gas piping supplying gas to fuel burning equipment | less than 15(103) /<1/2M ³ | Safety Codes Act | ASME B31.3 | N/A | N/A | NO | NO |
| 4 | New fuel gas piping | not more than 66 (455) | Safety Codes Act | CSA B149.1 CSA B149.2 | N/A | N/A | YES | NO |
| 5 | Existing fuel gas piping | not more than 66 (455) | Safety Codes Act | CSA B149.1 CSA B149.2 | N/A | N/A | NO | NO |
| 6 | New fuel gas piping | more than 66 (455) | Safety Codes Act | B149.1 and | N/A | N/A | YES | NO |
| 7 | New fuel gas piping in a building | more than 66 (455) | Safety Codes Act | Engineering | N/A | N/A | YES | NO |
| 8 | Existing fuel gas piping | more than 66 (455) | Safety Codes Act | B149.1 and Engineering | N/A | N/A | NO | NO |



| 9 | Existing fuel gas piping in a building | more than 66 (455) | Safety Codes Act | B149.1 and Engineering | N/A | N/A | NO | NO |
|----|---|-----------------------|------------------------|--|-----|--------|-----------|-----------|
| 10 | New non-certified equipment and appliance | ANY | Safety Codes Act | CSA B149.1 CSA B149.2 Variance | N/A | IB | NO YES | NO YES |
| | | | | 20-GCV-02- Rev1 | | P.Eng. | YES | YES |
| | Existing non- certified equipment | | Safety | CSA B149.1 CSA B149.2 | | IB | NO | NO |
| 11 | and appliance modification or upgrade | ANY | Codes Act | Variance 20-GCV-02- Rev1 | N/A | P.Eng. | YES | YES |
| 12 | Existing Certified fuel burning equipment installations | ANY | Safety Codes Act | CSA B149.1 CSA B149.2 | N/A | N/A | YES | NO |
| | Existing certified equipment and | | Safety | CSA B149.1 CSA B149.2 Variance 20-GCV-02- Rev1 | | IB | NO | NO |
| 13 | appliance modification or upgrade | ANY | Codes Act | | N/A | P.Eng. | YES | YES |
| 14 | New certified equipment and appliance installation | ANY | Safety Codes Act | CSA B149.1 CSA B149.2 | N/A | N/A | YES | NO |

| | Other Industrial and Commercial Users | | | | | | | |
|------|--|--|------------------------|--|------------------|-----------------------|---------------------------|-----------------------------|
| ITEM | SCOPE | PRESSURE psig (kPag) | ACT | CODE | REGISTRATI ON | GAS FIELD APPROVAL | GAS PERMIT REQUIRED | GAS VARIANCE REQUIRED |
| 1 | Process piping | not less than 15(103) />1/2M ³ | Safety Codes Act | ASME B31.3 | ABSA | N/A | NO | NO |
| 2 | Fuel/process gas piping supplying gas to fuel burning equipment | not less than 15(103) />1/2M ³ | Safety Codes Act | ASME B31.3 | ABSA | N/A | NO | NO |
| 3 | Fuel/process gas piping supplying gas to fuel burning equipment | less than 15(103) /<1/2M ³ | Safety Codes Act | ASME B31.3 | N/A | N/A | NO | NO |
| 4 | New fuel gas piping | not more than 66 (455) | Safety Codes Act | CSA B149.1 CSA B149.2 CSA B149.6 | N/A | N/A | YES | NO |



| 5 | Existing fuel gas piping | not more than 66 (455) | Safety Codes Act | CSA B149.1 CSA B149.2 CSA B149.6 | N/A | N/A | NO | NO |
|----|--|------------------------------|------------------------|---|-----|-----|-----|----|
| 6 | New fuel gas piping | more than 66 (455) | Safety Codes Act | B149.1 and Engineering Standata 20-GCB-10- Rev3 | N/A | N/A | YES | NO |
| 7 | Existing fuel gas piping | more than 66 (455) | Safety Codes Act | B149.1 and Engineering Standata 20-GCB-10- Rev3 | N/A | N/A | NO | NO |
| 8 | New non-certified equipment and appliance | ANY | Safety Codes Act | CSA B149.1 CSA B149.2 CSA B149.3 CSA B149.6 | N/A | IB | NO | NO |
| 9 | Existing non- certified equipment and appliance modification, upgrade or relocation | ANY | Safety Codes Act | CSA B149.1 CSA B149.2 CSA B149.3 CSA B149.6 | N/A | IB | NO | NO |
| 10 | Certified equipment and appliance installation or relocation | ANY | Safety Codes Act | CSA B149.1 CSA B149.2 | N/A | N/A | YES | NO |
| 11 | Existing certified equipment and appliance modification or upgrade | ANY | Safety Codes Act | CSA B149.1 CSA B149.2 CSA B149.3 CSA B149.6 | N/A | IB | NO | NO |

| Pathways to Compliance | | | | | | | |
|------------------------|--|--|--|--|--|--|--|
| Certification Body | A Certification Body (CB), accredited by the Standards Council of Canada, may test and certify any appliance or equipment related to gas systems for which there is a recognized standard. A gas permit is required for the installation of the appliance or equipment through the AHJ. A permit is not required for the certified appliance portion of the system that is within the scope of the CB. | | | | | | |
| Inspection Body | An Inspection Body (IB), accredited by the Standards Council of Canada, may inspect and accept one-of-a-kind and site specific or portable installations. Site-specific appliances and equipment will need a third party Inspection Body for testing and approval every time it is installed or relocated. A gas permit is required for the installation of the appliance or equipment through the AHJ. A permit is not required for the uncertified appliance portion of the system that is within the scope of the IB. http://municipalaffairs.gov.ab.ca/documents/G-02-01a-Rev1-UncertifiedAppliancesSpecialInspections.pdf | | | | | | |



| Existing non- compliant installations | All existing appliances, piping and equipment that are non-compliant require compliance to current regulation, codes or documentation showing a variance was used. Appliances and equipment that did not require a permit were those installations exempted from the code, such as petroleum refineries and chemical plants or a properly utilized province wide variance that did not require a permit. |
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| Accredited Corporations | The requirement for permits in this document does not apply at locations specified within an Accredited Corporations scope of their quality management plan (QMP) with the Safety Codes Council (SCC). |
| Variance Application | Where non-certified gas-fired equipment used in process applications at production facilities such as petroleum refineries, petrochemical plants and upstream oil and gas sites is authenticated by a professional engineer or permit holder authorized to engage in the practice of engineering under the Alberta Engineering and Geoscience Professions Act, the authenticated thing, process or activity is considered to provide approximately equivalent or greater safety performance. |

Permits can be obtained through the Authority Having Jurisdiction.

To determine who the AHJ may be, go to: http://www.safetycodes.ab.ca/Public/Pages/Find-Where-to-Get-Permit.aspx

For further information, contact Municipal Affairs, Technical and Corporate Services Division toll-free at 1-866-421-6929.

