**ASME B31.9 Component Evaluation**

**Evaluation per 904.7.2\***

Does the pressure system meet the requirement of NASME-2, B31.9 Equivalent Safety Evaluation? If yes, go to page 2 and evaluate per NASME-2.

Provide information for ASME B31.9 compliance per item 1, 2, or 3:

|  |  |  |
| --- | --- | --- |
| **Item** | **Requirement** | **Completed (attached)** |
| 1 | Engineering calculations |  |
| 2 | Experimental stress analysis such as described in Part 5 in Section VIII, Division 2 of the ASME BPV Code |  |
| 3 | Proof test in accordance with UG-101 in Section VIII, Division 1 of the ASME BPV Code |  |

If differences in size and proportion are small, components may be designed by interpolation between similar configurations that have been proven by one of the procedures described above, or that conform to a listed standard.

\* Note: Code references herein are based on the 2014 edition. Modify as necessary to align with newer editions.

Evaluated By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_

CPSO/SMPO Designee: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_

From NASME-2, 902.2.1:

Listed components shall be the first component selected for the application.

Listed: for the purposes of this equivalency, describes a material or component that conforms to a specification in at least one of the following: Table 926.1, Table I-1, Table I-2, Table I-3, Table I-4, or Table II-1.

Items listed in ASME B31.1 may also be used.

Additional approved components are located in the file “Allowed Unlisted Components Listing per ADMIN-2, Article Z -- Unlisted, Specialty, or Unique Components, para 2 (xls)” on <http://engstandards.lanl.gov/unlisted_components.shtml>

Unlisted components may be used as long as they are listed on the reputable manufacturer’s list.

A reputable manufacturers listing will be maintained on the Engineering Services website.

NOTE: Institutional Evaluation Suppliers List (IESL) is not necessarily a listing of reputable manufacturers.

The Commercial Grade Designation (CGD) qualifies ML-3 & 4 equipment from non-IESL suppliers for use in ML-1 & 2 service, but does not qualify equipment for ASME B31.9 code equivalency to code concerns.

Listing on a reputable manufacturer’s list requires ratings that are acceptable for the service conditions of temperature, pressure, compatibility, for service and ratings.

or

Engineering calculations showing a factor of safety of 4:1 (this item would then be entered onto the reputable manufacturer’s list as well).

Items being placed on this list need final approval by the CPSO or Designee.

The “Reputable Manufacturer’s List” is available at the following address:

<http://int.lanl.gov/org/padops/adnhho/engineering-services/pressure-protection-program/_assets/docs/reputable-manufacturers.xlsx>

The following information is required for entry in the “Reputable Manufacturer’s List” and an electronic Excel format is preferred for quick entry.

Component Type

Manufacturer

Specification

Model Number

MAWP

Recommending User

Pressure System ID

Pressure System Fluid as Used

Size or Range

Comments

Date

Code Stamp