It has been agreed to publish interpretations issued by the B31 Committee concerning ASME B31.8 as part of the update service to the Code. The interpretations have been assigned numbers in chronological order. Each interpretation applies either to the latest Edition at the time of issuance of the interpretation or to the Edition or Addenda stated in the reply. Subsequent revisions to the Code may have superseded the reply.

These replies are taken verbatim from the original letters, except for a few typographical and editorial corrections made for improved clarity.

ASME procedures provide for reconsideration of these interpretations when or if additional information that the inquirer believes might affect the interpretation is available. Further, persons aggrieved by an interpretation may appeal to the cognizant ASME committee or subcommittee. As stated in the Statement of Policy in the Code documents, ASME does not “approve,” “certify,” “rate,” or “endorse” any item, construction, proprietary device, or activity.
# B31.8

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Interpretation: 17-1

Subject: ASME B31.8-2010, Para. 841.3.1(c), Replace Hydrostatic Tests by Pneumatic Test (Nitrogen) in Pipelines

Date Issued: October 16, 2012

File: 12-104

Question (1): Does a pneumatic test replace the hydrostatic test to satisfy the testing after construction requirements of the Code?

Reply (1): Yes. See para. 841.3.1(c).

Question (2): Does nitrogen meet the Code requirements to be used as a test medium?

Reply (2): Yes. See para. 841.3.2.

Interpretation: 17-2

Subject: ASME B31.8-2010, Clarification on Para. A842.2.7

Date Issued: October 16, 2012

File: 12-384

Question: Do doubler plates attached to offshore pig launchers and receivers that are designed in accordance with ASME B31.8 require full encirclement welds per para. A842.2.7?

Reply: Yes. See para. A834.

Interpretation: 17-3

Subject: ASME B31.8-2010, Para. 841.3, Pressure Limitation for Onshore Pipeline

Date Issued: January 2, 2013

File: 12-1719

Question: Is there an allowable limit for the hoop stress during hydrotest of an onshore pipeline when the test medium is water?

Reply: No.
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Interpretation: 17-4

Subject: ASME B31.8-2012, Para. 831.4, Reinforcement of Welded Branch Connections, and Para. 841.3, Testing After Construction

Date Issued: July 11, 2013

File: 07-838

Question (1): May ASME B31.8, para. 831.4, Reinforcement of Welded Branch Connection calculation methodology be used to qualify proprietary integrally reinforced branch fittings and their attachment welds, including cover fillet welds?

Reply (1): No.

Question (2): If ASME B31.8 Code piping has been pressure tested in accordance with para. 841.3, Testing After Construction, and subsequent welds or repairs are performed, must the piping be pressure tested again?

Reply (2): The Code does not currently address this circumstance.

Interpretation: 17-5

Subject: ASME B31.8-2010, Para. 812, Low-Temperature Application for Design

Date Issued: July 11, 2013

File: 10-1990

Question (1): Is it acceptable to use materials shown by testing to have adequate ductility at −50°F (−45°C) in a gas pipeline that may experience temperatures between −50°F (−45°C) and −20°F (−29°C)?

Reply (1): Yes, provided all requirements of para. 812 of ASME B31.8-2010 are complied with.

Question (2): Can the criteria stipulated in ASME B31.3, para. 323.2.2(d) and Fig. 323.2.2B (which allows lower temperature than minimum design temperature at maximum design pressure provided it can be documented that stress ratio at lower temperature is less than 1.0) be adopted for a gas pipeline designed according to ASME B31.8 for allowing the pipeline section temperature to occasionally reach below the minimum design temperature?

Reply (2): No. ASME B31.8 defines the minimum design temperature to be “the lowest anticipated material temperature during service.” See para. 805.2.2.

Question (3): Is the new ASME B31T-2010, Standard Toughness Requirements for Piping, applicable for pipelines designed according to ASME B31.8?

Interpretation: 17-6

Subject: ASME B31.8-2010, Para. 825.1, Stress Relieving of Carbon Steels

Date Issued: September 20, 2013

File: 12-368

Question: For welds in carbon steels having a carbon content in excess of 0.32% (ladle analysis) or a carbon equivalent (C + \( \frac{1}{2} \)Mn) in excess of 0.65% (ladle analysis), if stress relieving requirements for the ASME BPV Code, Section VIII, Division 1 allow wall thicknesses exceeding 1\( \frac{1}{4} \) in. (32 mm) without stress relieving, is the wall thickness requirement of para. 825.2 superseded?

Reply: No. Paragraph 825.2, requiring that all carbon steels shall be stress relieved when the nominal wall thickness exceeds 1\( \frac{1}{4} \) in. (32 mm), is still applicable.

Interpretation: 17-7

Subject: ASME B31.8-2012, Para. A842.2.7, Pipe Support Attachments

Date Issued: September 20, 2013

File: 13-1171

Question: On a fixed offshore platform, does a pipe support attachment require a full encircling member when the support is welded directly to the pipe and the pipe stress is less than 50% SMYS?

Reply: Yes. Paragraph A842.2.7 of the Code requires a full encircling member, regardless of the pipe stress.

Interpretation: 17-8

Subject: ASME B31.8-2012, Para. 811, Qualification of Material and Equipment, and Table 841.1.8-1, Temperature Derating Factor, \( T \), for Steel Pipe

Date Issued: October 1, 2013

File: 06-876

Question (1): May ASTM A790 UNS S31803 duplex steel pipe be used under ASME B31.8-2012?

Reply (1): Yes. If the subject pipe does not conform to a listed pipe specification in ASME B31.8, it may be used subject to the requirements of para. 811.

Question (2): If ASTM A790 UNS 31803 duplex steel pipe is used in accordance with para. 811, and it has material specifications extending to \(-60^\circ\)F, may it be used in ASME B31.8 construction at design temperatures colder than \(-20^\circ\)F?

Interpretation: 17-9

Subject: ASME B31.8-2010, Para. A847.4(c), Duration of Pressure Test

Date Issued: November 18, 2013

File: 12-2068

Question (1): Is a subsea pipeline manifold, with valves, pipes, and fittings, considered as prefabricated piping, which would only require a 2-hr pressure test in accordance with the last sentence in para. A847.4(c)?

Reply (1): No. In accordance with para. A842.2.10, a subsea pipeline manifold with valves, pipes, and fittings is a special assembly. This will require an 8-hr pressure test in accordance with para. A847.4(c).

Question (2): In many cases, a subsea pipeline manifold also consists of several other lines, such as chemical lines and hydraulic power supplies, connected to umbilical lines with different pressure ratings. When these lines also are designed according to ASME B31.8, Chapter VIII, shall they be considered as prefabricated piping when determining the duration of the pressure test?

Reply (2): No. See Reply (1).

Interpretation: 17-10

Subject: ASME B31.8-2012, Para. 825, Stress Relieving

Date Issued: February 26, 2014

File: 12-379

Question: Do ASME B31.8-2012, para. 825 stress relieving requirements apply to in-service weld joints?

Reply: Yes.

Interpretation: 17-11

Subject: ASME B31.8-2010, Para. 840.2.2 and Table 841.3.2-1, Minimum Test Pressure for Class 1, Division 2

Date Issued: April 8, 2014

File: 12-1566

Question: Is it the intent, for pipelines operating at a hoop stress at or above 30% SMYS, that the minimum test pressure described in para. 840.2.2(a)(2) for Class 1, Division 2 steel pipelines and mains equals or exceeds the value of 1.25 × MOP given in Table 841.3.2-1?

Reply: Yes.
Interpretation: 17-12

Subject: ASME B31.8-2003, Para. 831.4 and Appendix F, Branch Connections on Full Encirclement Sleeves
Date Issued: April 8, 2014
File: 13-1665

Question (1): Does ASME B31.8-2003, para. 831.4 apply only to full encirclement sleeves?
Reply (1): No. All welded branch connections shall meet the requirements of para. 831.4, including welded branch connections fabricated with full encirclement sleeves.

Question (2): Do the calculations in Appendix F apply only to full encirclement sleeves?
Reply (2): No. All welded branch connections and extruded headers shall meet the requirements of Appendix F, including welded branch connections fabricated with full encirclement sleeves.

Interpretation: 17-13

Subject: ASME B31.8-2003, Para. B841.231, Degrees of Miter Bend in Sour Gas Service
Date Issued: April 8, 2014
File: 13-1667

Question: The last sentence of ASME B31.8-2003, para. B841.231 says, “Neither wrinkle bends nor miter bends are permitted for sour gas lines.” Is a miter bend in this sentence defined as being more than 3 deg, which is the same as for sweet gas?

Reply: Yes. As stated in para. B801, “All provisions of the first six chapters of the Code are also requirements of this Chapter unless specifically modified herein.” Furthermore, para. B801 says, “If a paragraph appearing in Chapters I through VI does not have a corresponding paragraph in this Chapter, the provisions apply to sour gas service without modification.” [Note that para. B841.231 in ASME B31.8-2003 is now para. B841.2.3(b) in ASME B31.8-2012.]