

MEMORANDUM

DATE: December 1, 2008

TO: Piping Fabricators, Contractors and Boiler Inspectors

FROM: Mike Verhagen, Chief Boiler Inspector, State of Wisconsin

CC: Rick Merkle, Boiler/Pressure-Vessel Program Section Chief

SUBJECT: Recommend SBD-5204-E for “In and Out of State Pre-Fabricated Power Piping”

Many power piping projects are being completed within the state of Wisconsin that may require initial inspection and registration per Comm 41.16 (2) and 41.41 (2). Power piping constructed at one location and shipped to other destinations have been found questionable with improper welding, threading or material identification and have caused delays with construction timetables. Therefore the intent of this memo is an attempt to assist and expedite the documentation, fabrication, installation, and inspection of in or out of state pre-fab power piping.

To prevent delays and possible confusion between shop and field sites for contractors, installers and inspectors, the Department recommends completion of the POWER PIPING form, SBD-5204-E to assure basic code requirements are met during the entire fabrication process from start to finish. The SBD-5204-E form should be made available upon delivery and accompany shipments of pre-fabricated power piping. The SBD-5204-E when utilized to document inspection activities for materials, welding and other code related issues at the fabrication shop must include the Wisconsin certified inspector signature and the individual’s cert number to indicate his/her acceptance for design items reviewed. In lieu of the WI cert #, a valid National Board commission number may be substituted on the SBD-5204-E for traceability if the inspector has no WI cert # or is not actually working in the state of Wisconsin.

The SBD-5204-E form can be readily downloaded from our website <http://commerce.wi.gov/SB/SB-DivForms.html#Boilers>. The form will provide fabricators a quick and easy method to verify and document a code compliant piping systems fabricated at other than site locations. Be aware, completing this form should not be considered a guarantee that piping will be accepted as code compliant. An inspector has the responsibility to either cause correction of or reject piping not complying with our adopted ASME B31.1, Power Piping or B31.5, Refrigeration Piping codes.

Thanks in advance for your continued cooperation to assure safety in the workplace.

NOTE: The installing or fabricating contractor contact information is provided on the form for your convenience to obtain explanation or questions on a shipment. In addition, the SBD-5204-E may cover spool pieces separately or describe multiple similarly designed spool pieces each of which should be marked for easy identification by a receiving inspector.

Attachments: Comm 41.16 & 41.41 Power Piping requirements (Below)
[Copy SBD-5204-E: Piping Registration form](#)

POWER PIPING CODE SECTIONS

Comm 41.16 Initial inspections. (2) POWER PIPING INSPECTIONS.

(a) Except as provided in par. (b), all power piping systems not covered by ASME code section I and required to be constructed in accordance with ANSI/ASME B31.1, shall receive an initial inspection by a certified inspector.

(b) The inspections specified in par. (a) are not required for:

1. Power piping of 2 inches nominal pipe size and smaller;
2. Power piping replacements, modifications and alterations to existing systems and for new installations, any of which do not exceed 50 feet in length; and
3. Underground power piping systems which are not located in a walk-in tunnel.

(c) The installer shall notify the certified inspector prior to the start of construction of the power piping system so that inspections may be arranged. The certified inspector shall be given a minimum of 5 business days notice to arrange for inspection.

(d) A power piping inspection shall be made after the piping material is delivered to the job site and prior to the start of construction of the power piping system. The installer shall complete form SBD-5204 and retain it at the job site prior to the power piping inspection. The certified inspector shall indicate acceptance of the power piping system design by signing form SBD-5204. Power piping systems may not be insulated or placed in service without receiving an inspection.

(e) Prefabricated piping that is part of a power piping system shall be inspected by a certified inspector or an active National Board commissioned inspector for out-of-state manufacturers at the fabrication shop. The shop fabricator shall provide a copy of the certified inspector's report or a copy of the completed department form SBD-5204 to the installer at the job site verifying that the prefabricated piping complies with ANSI/ASME B31.1. The owner or installer shall provide design calculations of the prefabricated piping if requested by an inspector.

(f) The owner of the power piping system may request power piping inspections in addition to the minimum inspections.

(g) Inspection fees for the power piping inspections shall be assessed by the department or by the city of the first class.

Comm 41.41 Installation registration. (2) POWER PIPING INSTALLATION REGISTRATION.

(a) Except as provided in par. (b), the installation of any power piping system shall be registered with the department by the installer before the operation of the piping system. Registration shall be in writing on form SB-5204.

(b) Registration is not required for:

1. Power piping of 2 inches nominal pipe size and smaller;
2. Installations in cities of the first class if an installation registration form has been filed with the appropriate city official;
3. Underground power piping systems which are not located in a walk-in tunnel; and
4. Replacements, modifications and alterations to existing systems and for new installations, any of which do not exceed 50 feet in length.
5. Installations at one-or 2-family dwellings.

(c) The piping installer shall notify the certified inspector prior to the start of construction of the power piping system to schedule an inspection. The certified inspector shall be given a minimum of 5 business days notice to arrange for an inspection.