Alberta Municipal Affairs

ABSA
the pressure equipment safety authority

Information Bulletin IB21-018 **December 1, 2021**

INTERPRETATION
Registration of Pressure Equipment Alteration Design Based on Fitness for Service Assessment

This Information Bulletin supersedes IB20-022 issued December 22, 2020 which is hereby withdrawn.

This Information Bulletin establishes that a fitness for service assessment used to justify the continued use of pressure equipment that has been damaged or contains flaws and which no longer conforms to the original code of construction is deemed to be a type of alteration; and establishes implementation requirements to be met to obtain registration for an alteration design based on a fitness for service assessment for an item of pressure equipment.

Interpretations Pressure Equipment Safety Regulation

Section 1(1)(d)

(d) "alteration" means any change to an item of pressure equipment as described in the original manufacturer's data report that requires a change of design calculations or otherwise affects the pressure-containing capability of the item of pressure equipment

Section 40(4) Repairs and Alterations

(4) An owner of pressure equipment that is to be altered must ensure that the alteration design is registered by the Administrator, in accordance with section 14, prior to the commencement of the alteration.

The use of fitness for service assessment procedures to justify the continued use of pressure equipment that has been damaged in-service, contains flaws, or otherwise does not conform strictly to the code of construction, is hereby deemed to be a type of alteration, the design of which, except as noted below, requires registration in accordance with Section 40(4) of the Pressure Equipment Safety Regulation.

Fitness for service assessments performed by qualified inspectors in accordance with API 510 *FFS Analysis of Corroded Regions,* or NB-23 *Evaluating Pressure-retaining*

Items Containing Local Thin Areas do not require registration in accordance with Section 40(4).

Implementation

This Information Bulletin establishes that ABSA Document AB-535, *Requirements for Alteration Design Registration based on Fitness for Service Assessments*, Edition 2, Revision 2 issued on December 1, 2021, specifies requirements that must be met to comply with Section 40 of the Pressure Equipment Safety Regulation for registration of an alteration design based on fitness for service assessment. AB-535 also establishes general requirements for fitness for service assessment and monitoring that must be met in order to obtain registration for an alteration design based on fitness for service assessment. This revision of AB-535 includes editorial revisions throughout the document.

Background

AB-535 provides information to assist industry in the development of registration submission for an alteration design based on fitness for service assessment. AB-535 requirements are based on fitness for service assessments completed in accordance API 579-1/ASME FFS-1 Fitness-For-Service. API 579-1/ASME FFS-1 is a consensus industry recognized engineering practice that provides assessment procedures for certain types of damage and flaws in in-service pressure equipment.

Other methods of fitness for service engineering assessment may be considered as a means of justifying continued use of pressure equipment with damage and flaws not covered by API 579-1/ASME FFS-1, or as alternatives to the procedures covered therein. FFS alteration design registration submissions based on other methods shall conform to the administrative requirements of AB-535 and shall include verifiable evidence the method selected provides an equivalent standard of safety as API 579-1/ASME FFS-1.

<original signed by>

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TYPE: INTERPRETATION	DESCRIPTION: REGISTRATION OF PRESSURE EQUIPMENT ALTERATION DESIGN BASED ON FFS ASSESSMENT	REGULATION: PESR