Date: November 4, 2021

To: Authorized Inspectors, Authorized Inspection Agencies (AIA),
    Deputy Inspectors, Suppliers of bulk liquid CO2

From: Office of the Chief Boiler Inspector

Subject: Carbon Dioxide Bulk Liquid Tanks, Installation requirements and owners’
responsibilities, Inspection requirements, and Noncompliance issues

It is important to note that if there is an AIA that covers pressure vessels for the boiler
owner/User, that AIA is responsible for inspection of the pressure vessels regardless of the
pressure vessel’s location.

If an insurance company has a policy on an object, the special inspector shall inspect all boilers
and unfired pressure vessels insured or all unfired pressure vessels operated by their respective
companies and, when so inspected, the owners and users of such boilers and unfired pressure
vessels shall be exempt from the payment to the State of the inspection fees as provided for in
NBIC Part 1

S3.2.1 GENERAL REQUIREMENTS (ENCLOSED AND UNENCLOSED AREAS)

e) LCDSVs shall be safely supported. Vessel supports, foundations, and settings shall be in accordance with jurisdictional requirements, manufacturer recommendations, and/or other industry standards as applicable.
   • NBIC does not specify anchor chains of any kind directly; therefore, a solid flat surface area will be sufficient.

   g) LCDSV’s installed outdoors in areas in the vicinity of vehicular traffic shall be guarded to prevent accidental impact by vehicles. The guards or bollards shall be installed in accordance with local building codes or to a national recognized standard when no local building code exists.
      • Guard rails will be acceptable.
CO2 vessels are referenced several times in NBIC as pressure vessels and shall adhere to pressure vessel acceptance criteria.

**Inspection requirements**

There has been some confusion regarding agency responsibilities, violation, delinquent requirements, and safety violations communicated during site visits.

**Rule 0800-03-03-.04**

(b) Proper protection shall be provided to prevent injury or damage caused by escaping vapor or fluid from the discharge of safety or safety valves if vented to the atmosphere. The combined discharge capacity of the safety or safety relief valves shall be such that the pressure rating of the lower pressure piping equipment will not be exceeded in case the reducing valve fails in the open position.

**Rule 0800-03-03-.05**

(6) Special Inspectors - Notification of Unsafe Boilers and Pressure Vessels

(b) If, upon inspection, a Special Inspector finds a boiler or pressure vessel to be unsafe for further operation, he shall promptly notify the owner or user and state as to what repairs or other corrective measures are required to bring the boiler or pressure vessel into compliance with this Chapter.

Summary:

- The special inspector shall notify the user, owner, and the State of any violation.
- If the vessel is covered in the insurance policy the vessel coverage cannot be dropped by the insurance company.
Rule 0800-03-03-.06

(1) Insurance Inspectors (Authorized Inspection Agencies).

   (b) An insurance company shall conduct all required inspections for boilers and pressure vessels that are covered in the insurance policy, where premiums for specific inspection requirements are stated.

   (c) If a Special Inspector employed by the insurance company does not perform the inspection required in subparagraph (b) of this rule within ninety (90) days of the expiration date of the certificate of inspection or required external inspection on a power boiler, a Deputy Inspector may be called upon by the Chief Inspector or Chief Inspector’s Designee to perform such inspection to determine the safety compliance of such boiler or pressure vessel. In the event that a Deputy Inspector performs an inspection on an insured boiler or pressure vessel, the insurance company in question shall be assessed a special inspection fee set by the Chief Inspector or Chief Inspector’s Designee in accordance with T.C.A. § 68-122-113.

We encourage our insurance inspecting agencies to report violations that are not being addressed in a timely manner. The following is a time schedule for those notices:

- 1st violation - 30 days to comply.
- 2nd notice on the same violation - 14 days to comply and notify the state.
- 3rd notice on the same violation - 7 days to comply and notify the state.

After the 7-day notice, the state will take over the inspection responsibilities until the written violation has been resolved.

If a vessel is turned over to the state without the above actions being resolved or is delinquent (i.e., more than 90 days delinquent or is delinquent “with violations”), the Chief or his designee will assess a special inspection fee for every subsequent visit a state inspector is required to perform.

**Procedure for requesting assistance from the State for non-compliance**

Email: boiler.info@tn.gov

Include reason(s) for the request with open violation details along with location and contact.

**Procedure for emergency assistance**

Contact the Boiler Unit at 615-741-1900 or the Chief Inspector.
It is the main priority of the Tennessee Boiler Unit to ensure public safety by way of the current edition of the NBIC and any Tennessee Board rule interpretation and Jurisdictional authority recommendations as allowed by the Tennessee Boiler Board.

The NBIC code for pressure vessels and/or CO2 vessels is not subject to interpretation and shall be followed explicitly unless the Tennessee Boiler Board votes to modify existing rules.

Chris O’Guin
Chief Boiler Inspector