



October 29, 2018

Cliff Dautrich
Bureau Chief
North Carolina Department of Labor
Boiler Safety Bureau
1101 Mail Service Center
Raleigh, NC 27699-1101

Re: Notice of Violation

Dear Mr. Dautrich:

I am writing in response to the October 17, 2018 Notice of Violation letter received by the University of North Carolina at Chapel Hill (UNC-CH) regarding NC337369 (2001 Consolidated Machine Autoclave) located at the Lineberger Cancer Research Center and its inspection by Andrew Gunto on October 16, 2018. As the Notice of Violation requires, please find a written response to each violation and the corrective actions UNC-CH has taken to remedy the issues identified:

- Condition: 031. Pressure Gauges NCAC 13-13.0407: Out of calibration
During the time of the 10/16/18 incident investigation there was no pressure on this vessel. However, the chamber side pressure gauge read 15 PSI and the Jacket side pressure gauge read 8 PSI.
Corrective Action: 031. Recalibrate pressure gauge or replace with a calibrated gauge ranged in accordance with NC Administrative Code, Title 13, Chapter 13, Section .0407.

UNC-CH is removing the autoclave in question from the facility and taking it out of service indefinitely. Since the autoclave unit will be removed, there will be no need to recalibrate pressure gauges.

- Condition: 458. Installation of PRDs NCAC 13-13.0405. The safety valve vent on this vessel is not piped to a safe location.
Corrective Action: 458. Redirect the discharge to a safe point as required in NCAC 13-13.0405.
Add safety valve vent piping so that the vent ends at between 1" and 6" form the floor or into a drain. Support the vent piping so that it puts no force on the safety valve. All repairs

must satisfy the requirements of the Uniform Boiler and Pressure Vessel Act of North Carolina.

UNC-CH is removing the autoclave in question from the facility and taking it out of service indefinitely. Since the autoclave unit will be removed, there will be no need to modify safety valve vent piping. If a new replacement autoclave is installed at this location, measures will be taken to ensure the safety valve vent piping is appropriately plumbed.

3. Condition: 479. *Undefined Pressure Vessels Violations*

This vessel (autoclave) has a quick acting closure, as a part of a door assembly that allows access to the vessels chamber. It was determined during the 10/16/18 incident investigation that the door on this vessel can be open, while there is pressure in the vessels chamber. This vessels door locking mechanism should not allow the door to open, unless there is no pressure in the chamber.

Corrective Action: 479. *Undefined Pressure Vessels Violations*
Using the vessel's manufacture or a qualified agency, repair the doors locking mechanism so that the door can not be open while there is pressure in the vessels chamber. This vessel should not be put back into operation until this repair is complete and had been accepted by Andrew Gunto III.

UNC-CH is removing the autoclave in question from the facility and taking it out of service indefinitely. Since the autoclave unit will be removed, there will be no need to repair the doors locking mechanism. If a new replacement autoclave is installed at this location, the unit will have a safety locking mechanism that does not allow the door to be opened while there is pressure in the vessel chamber.

Please contact me at (919) 843-5331 if you have any questions. Thank you.

Sincerely,



Catherine Brennan
Assistant Director, UNC-CH Environment, Health & Safety

Cc:

David Darr, Assistant Director of Research Operations, Lineberger Comprehensive Cancer Center
Darius Dixon, Executive Director of Facilities Operations, UNC-CH Facilities Services
Greg Driver, Executive Director and University Engineer, UNC-CH Facilities Services
Mary Beth Koza, Executive Director, UNC-CH Environment, Health & Safety/Risk Management



CHERIE K. BERRY
COMMISSIONER

CLIFF DAUTRICH
BUREAU CHIEF
BOILER SAFETY BUREAU

Notice of Violation

ATTN LAWRENCE PEOPLES
UNC CHAPEL HILL GILES HORNEY BLDG 168
103 AIRPORT DR # 1815
CHAPEL HILL NC 27599-5023

Date: 10/17/2018
Location: (UNC-CH) Lineberger Cancer Research Ctr-
100 West Dr
Chapel Hill, NC 27599-0001
Nature of
Business: 140 - College / University

To Whom It May Concern:

An inspection of the boiler/pressure vessel(s) listed below was conducted for the purpose of determining compliance with the North Carolina Uniform Boiler and Pressure Vessel Act and the Administrative Rules found in the North Carolina Administrative Code Title 13 Chapter 13, Boilers and Pressure Vessels. The laws and rules are available for your inspection at this office or online at our Website at <http://www.nclabor.com/boiler/boiler.htm>.

The violations that we found are listed below. Please take the proper corrective action to remove or remedy all listed violations on or before the compliance date(s) and contact the inspector for re-inspection to verify the violations have been corrected.

Failure to comply with the North Carolina Uniform Boiler and Pressure Vessel Act and Administrative Rules Title 13 Chapter 13, will result in refusal or revocation of the inspection certificate.

If you believe that the recommendations of the inspector are not warranted you may request a review by the Chief Inspector within 15 days of the inspection by calling the number below.

Yours truly,

Cliff Dautrich



CHERIE K. BERRY
COMMISSIONER

CLIFF DAUTRICH
BUREAU CHIEF
BOILER SAFETY BUREAU

Notice of Violation

<u>NC Identification #</u>	<u>Equipment</u>	<u>Violation Date</u>	<u>Comply By Date</u>	<u>Inspector</u>
NC337369	Consol Machine / 2001 / Autoclave	10/16/2018	12/15/2018	Andrew Gunto III

Condition:

031. Pressure Gauges NCAC 13-13.0407: Out of calibration.

During the time of the 10/16/18 incident investigation there was no pressure on this vessel. However, the chamber side pressure gauge read 15 PSI and the Jacket side pressure gauge read 8 PSI.

Corrective Action:

031. Recalibrate pressure gauge or replace with a calibrated gauge ranged in accordance with NC Administrative Code, Title 13, Chapter 13, Section .0407.

Condition:

458. Installation of PRDs NCAC 13-13.0405: The safety valve vent on this vessel is not piped to a safe location.

Corrective Action:

458. Redirect the discharge to a safe point as required in NCAC 13-13.0405

Add safety valve vent piping so that the vent ends at between 1" and 6" from the floor or into a drain. Support the vent piping so that it puts no force on the safety valve. All repairs must satisfy the requirements of the Uniform Boiler and Pressure Vessel Act of North Carolina.

Condition:

479. Undefined Pressure Vessels Violations.

This vessel (autoclave) has a quick acting closure, as a part of a door assembly that allows access to the vessels chamber. It was determined during the 10/16/18 incident investigation that the door on this vessel can be open, while there is pressure in the vessels chamber. This vessels door locking mechanism should not allow the door to open, unless there is no pressure in the chamber.

Corrective Action:

479. Undefined Pressure Vessels Violations.

Using the vessel's manufacture or a qualified agency, repair the doors locking mechanism so that the door can not be open while there is pressure in the vessels chamber. This vessel should not be put back into operation until this repair is complete and had been accepted by Andrew Gunto III.