




COLORADO

Department of
Labor and Employment

Division of Oil and Public Safety

[Home](#) [Petroleum ▼](#) [Amusement Rides ▼](#) [Boilers ▼](#) [Conveyances ▼](#) [Explosives ▼](#) [Rules ▼](#) [Outreach 2019](#)

811 Commission



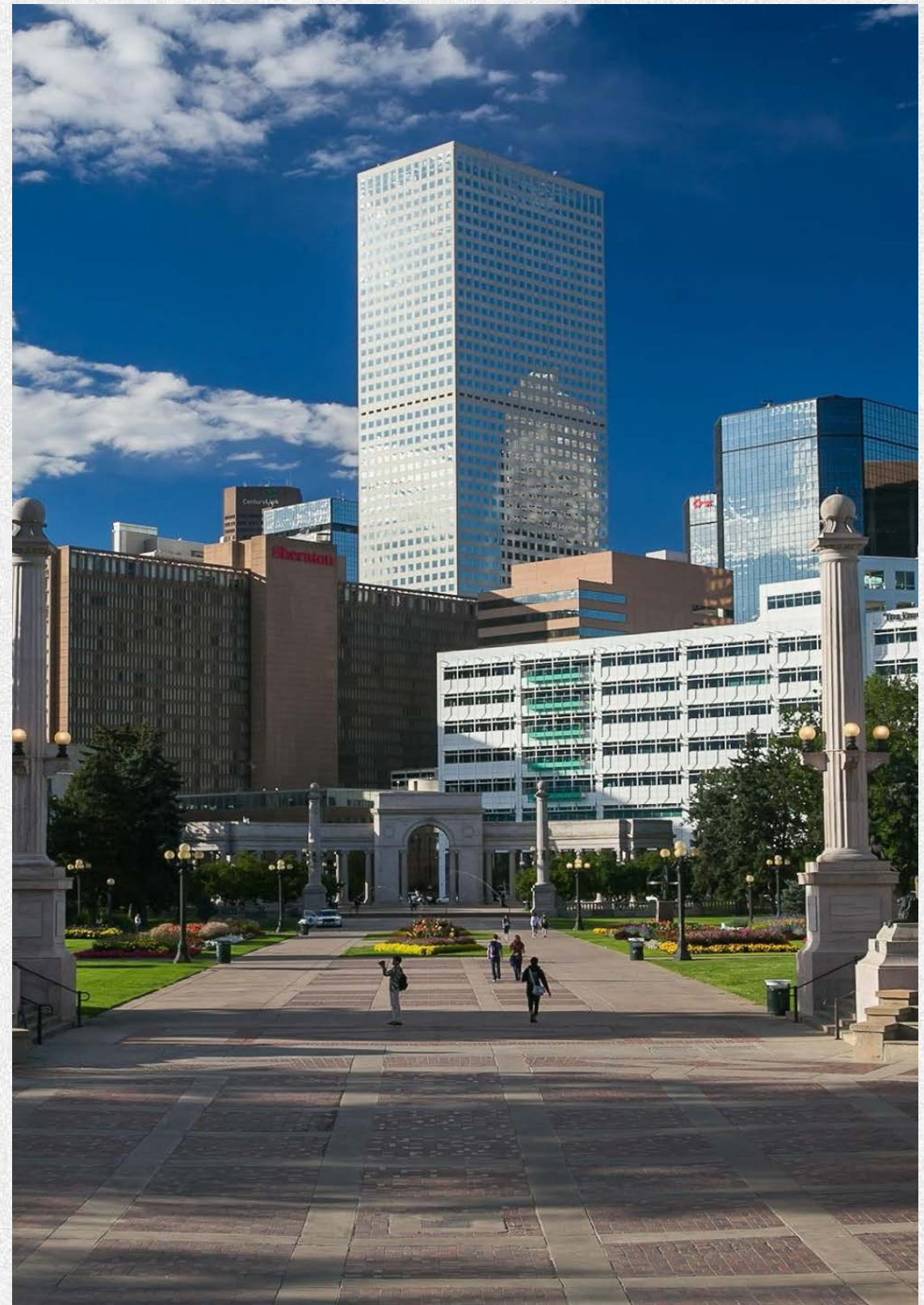
We Protect the Public and the Environment

Division of Oil and Public Safety (OPS)

The Division of Oil and Public Safety regulates those who own or operate amusement rides and devices, commercial boilers, conveyances (elevators and escalators) and retail fueling facilities and those who are permitted to use high explosives.

Boiler Program

Boiler Inspection
Program Outreach
Division of Oil and
Public Safety



Presentation Overview – Helping You Succeed

Session One

- My Responsibilities as a Boiler Owner
- Who is my inspector?
- Inspection process
- What requires an inspection and what does not?
- What do we look for on an inspection?
 - BREAK
- Accidents
- Enforcement



My Responsibilities as a Boiler Owner



Tools to Help You Succeed

- [Boiler Inspection Website](#)
- [Boiler Database](#)
- [Boiler Invoice Payment Portal](#)



Who is my Inspector?



Who is my Inspector?

- Qualifications
- State Inspectors
- Special Insurance Inspectors
- Inspection Process



Inspector Qualifications

- All Inspectors – state or insurance – must have a Colorado Commission, which authorizes them to conduct jurisdictional boiler inspections in the State of Colorado
- All Special Insurance Inspectors are required to have a National Board Commission
- State inspectors will also have, or obtain, a National Board Commission



Colorado Boiler Inspector Contact List

Name	Region Number	Phone Number	Email Address
Wade Distel	1	970-712-7458	wade.Distel@state.co.us
Dave Woodson	2	303-548-4466	david.woodson@state.co.us
Art Boscamp	3	303-619-2827	art.boscamp@state.co.us
Tom Martinez	4	970-215-9539	tom.m.martinez@state.co.us
Rand Rutledge	5	303-378-9970	rand.rutledge@state.co.us
Tom Rogers	6	303-378-6155	tom.rogers@state.co.us
Bob Becker	7	303-514-2140	robert.becker@state.co.us
Jim Giltner	8	303-570-8356	jim.giltner@state.co.us
Gary Hensley	9	303-910-7467	gary.hensley@state.co.us



Inspection Process



The Typical Inspection Process

**OPS sends 30-day courtesy notice
to Responsible Party**



Appointment scheduled



Inspection conducted



Inspector enters results into database



No Deficiencies

Deficiencies identified

OPS sends Invoice to RP

**OPS sends Invoice and
Deficiency Letter to RP**

RP corrects deficiency

**RP signs Deficiency Letter
and returns to OPS**

RP pays Invoice

OPS issues Certificate of Inspection



What is Inspected and What is Not



Which Equipment Requires Inspection?

- All boilers installed in commercial properties, regardless of BTU input
- All commercial domestic water heaters with a BTU input of 200,000 BTU/hr or more or a capacity of 120 gallons or more
- Boilers in multi-family buildings with 6 or more individual living units with the boiler in a common area (boiler room)
- Isolable swimming pool boilers



Which Boilers are Exempt?

- In private residences
- In multi-family dwellings of less than 6 living units
- Owned/operated by the federal government
- Subject to federal locomotive inspection laws
- In any city/town where a comparable boiler inspection program exists (currently none in Colorado)



Inspection



ASME vs. National Board

- **ASME**

- American Society of Mechanical Engineers
- Code used for boiler and pressure vessel fabrication

- **The National Board**

- Organization that promotes boiler safety through inspection
- Colorado is a member jurisdiction

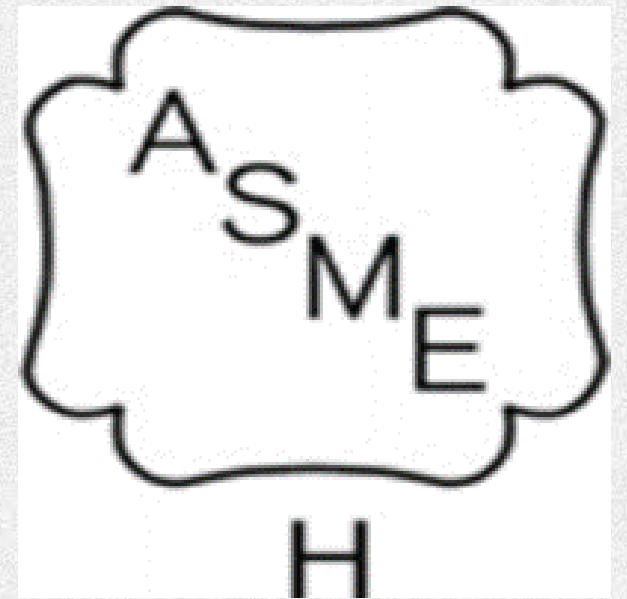
- **NBIC**

- National Board Inspection Code
- Code used for installation, inspection, repairs and alterations



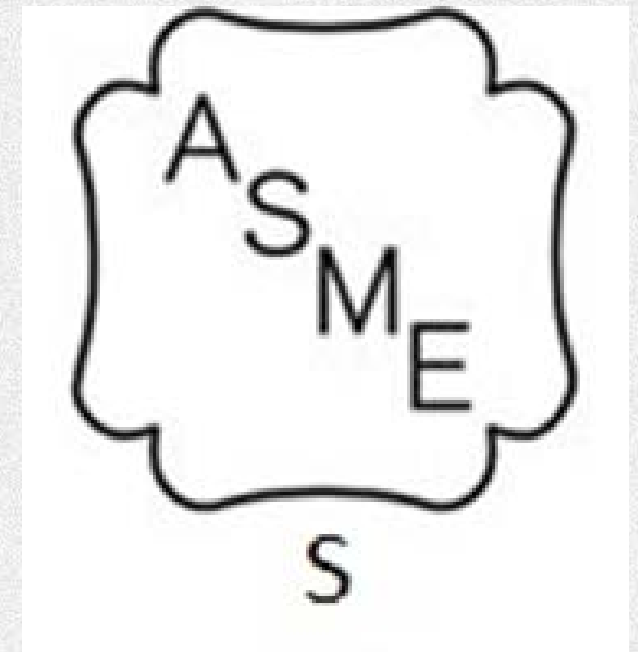
Section IV Boilers and Water Heaters

- Most common boiler found in Colorado
- Heating boilers and domestic water heaters
- Inspected every two years
- Certificates valid for two years
- Found in apartment buildings, office buildings, schools and churches

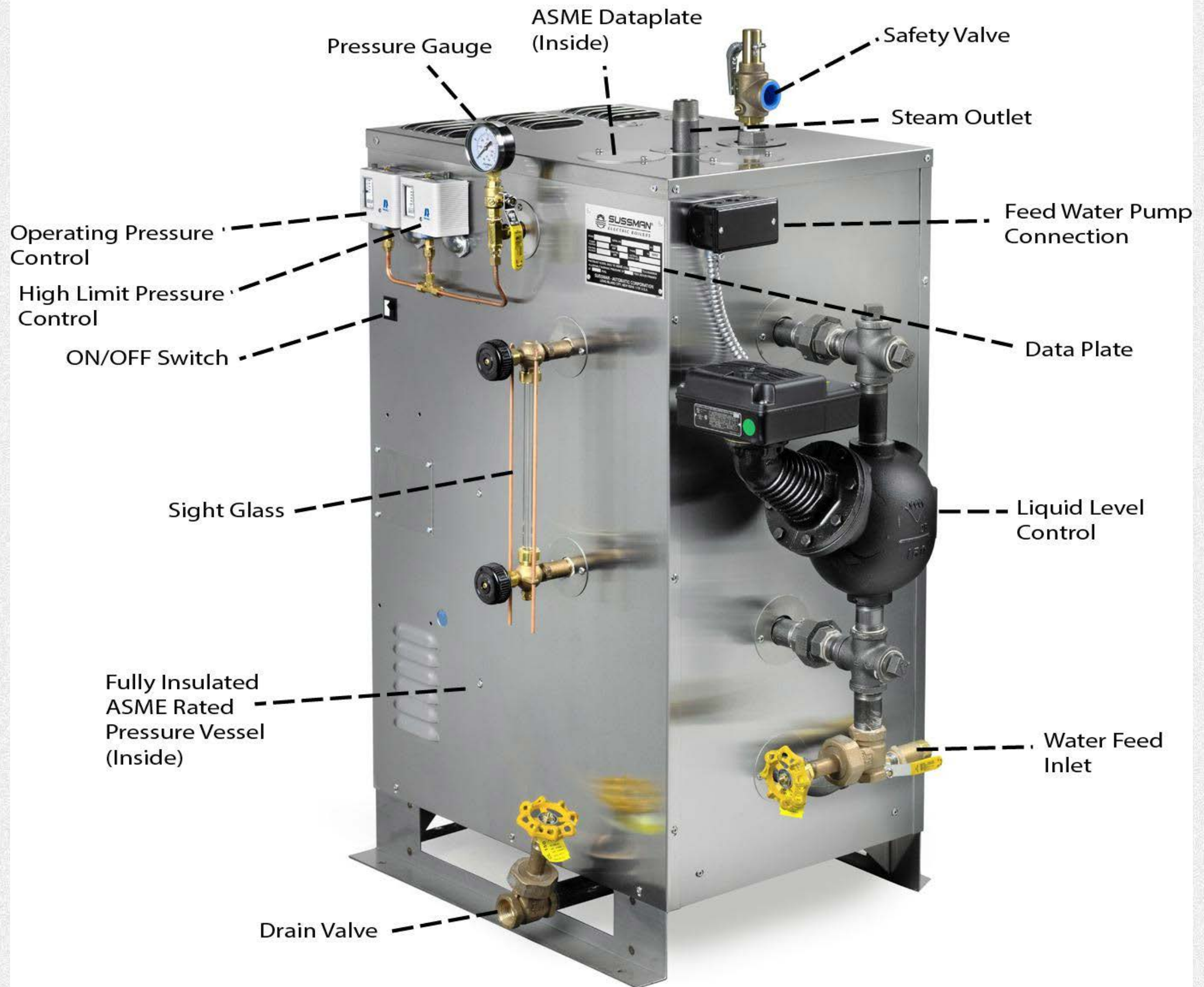


Section I Boilers

- High-pressure steam boilers
- Usually found in hospitals, dry cleaners, process plants, etc.
- Inspected every 6 months
- Certificate issued on the internal (water side) inspection and is valid for 12 months
- Must receive an external in-service (non-certificate) inspection halfway through the certificate term
- ~4000 Section I boilers in Colorado







What we look at on an inspection

- Boiler Data Plate
- Apply Associated Codes
- Overall Boiler Condition
- Fireside and Waterside Internals (if applicable)
- Operation and Placement of Safety Devices
- Vent Stack Condition
- Combustion Air Openings
- Debris or Flammables in Boiler Room



Upon completion of the inspection, a sticker will be affixed to the boiler

**COLORADO BOILER
INSPECTION SECTION
303-318-8484**

Colo. State #: _____

MAWP: _____

Status: ☐ Active ☐ Out-of-Service

Requirements: ☐ No ☐ Yes

Date: _____

Inspector: _____

Agency: _____

Insurance
Inspector

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State
Inspector

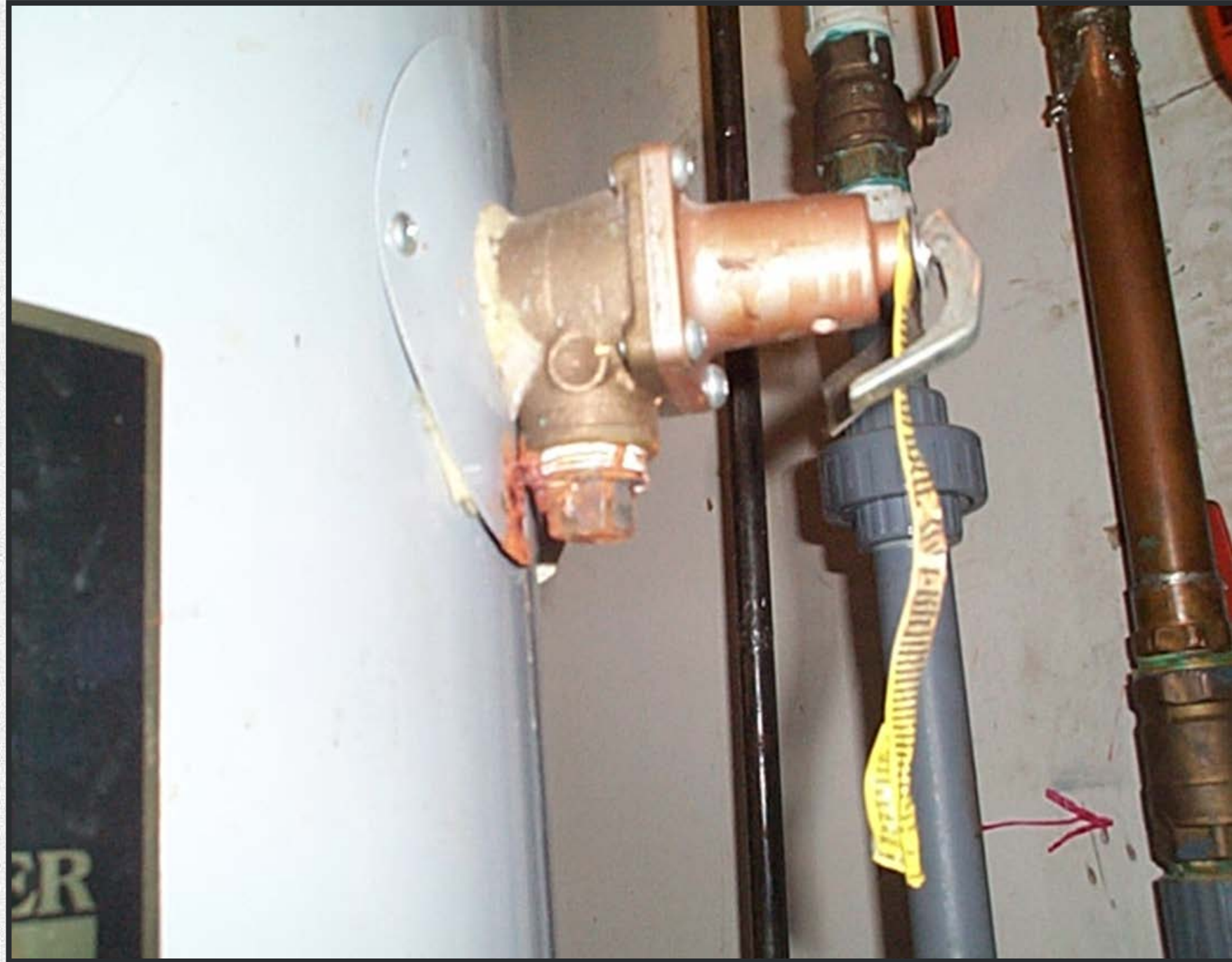


Boiler Rooms We Like to See





Real Life Things Our Inspectors See Every Day



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2. The test is performed by using the different types of the test on the results of the test.

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Boiler Repairs



Presentation Summary – Helping You Succeed

- **My Responsibilities as a Boiler Owner**
- **Who is my inspector?**
 - Qualifications
 - State Inspectors
 - Special Insurance Inspectors
 - Inspection Process
 - Welded repairs



Questions?



BREAK



Other Items

- Accidents
- Violation Statistics
- Enforcement
- Questions





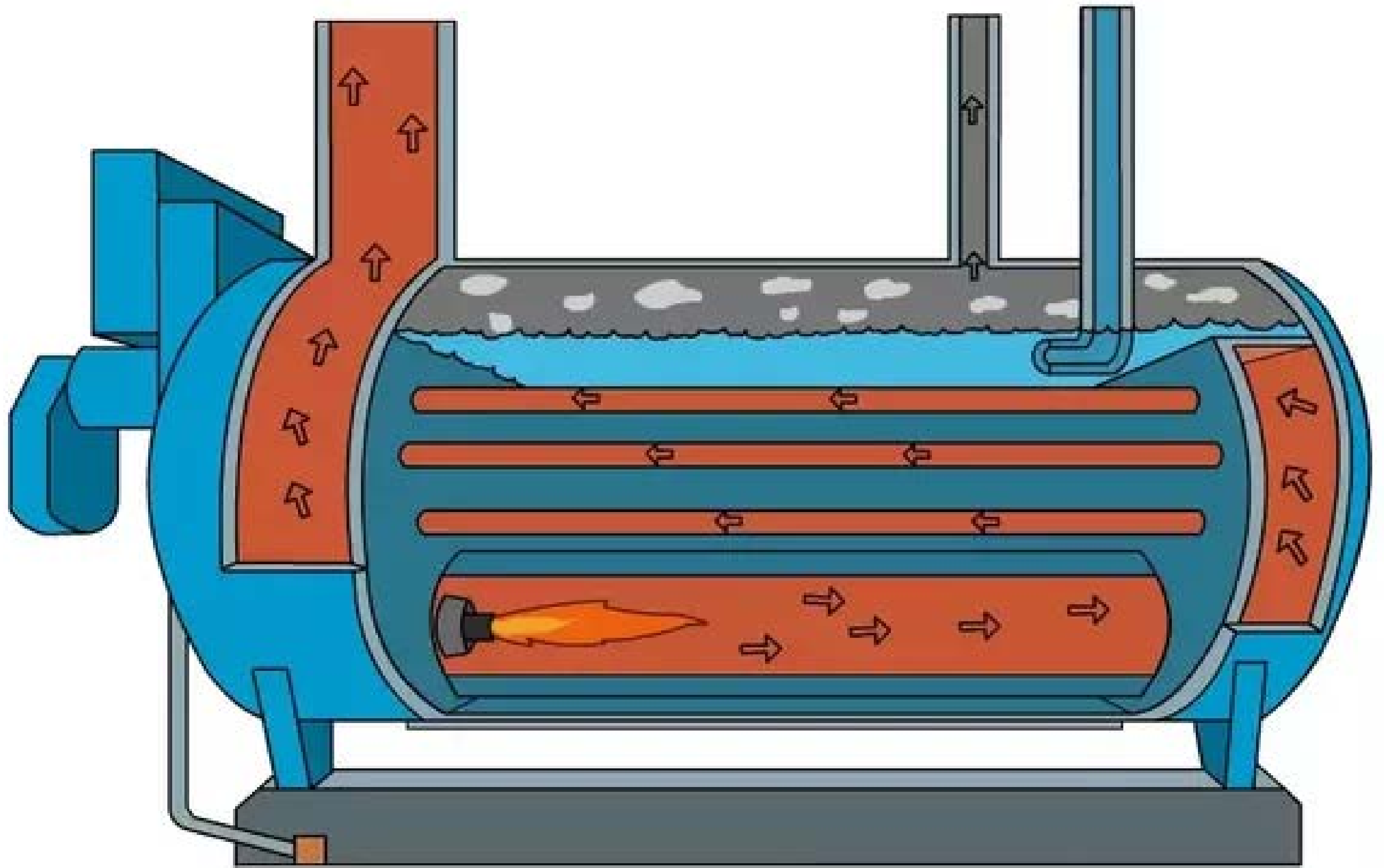


KEEP
WORK
AREAS
CLEAN!

PULL-OFF #2

DANA
Quality Policy

ROBOT #1



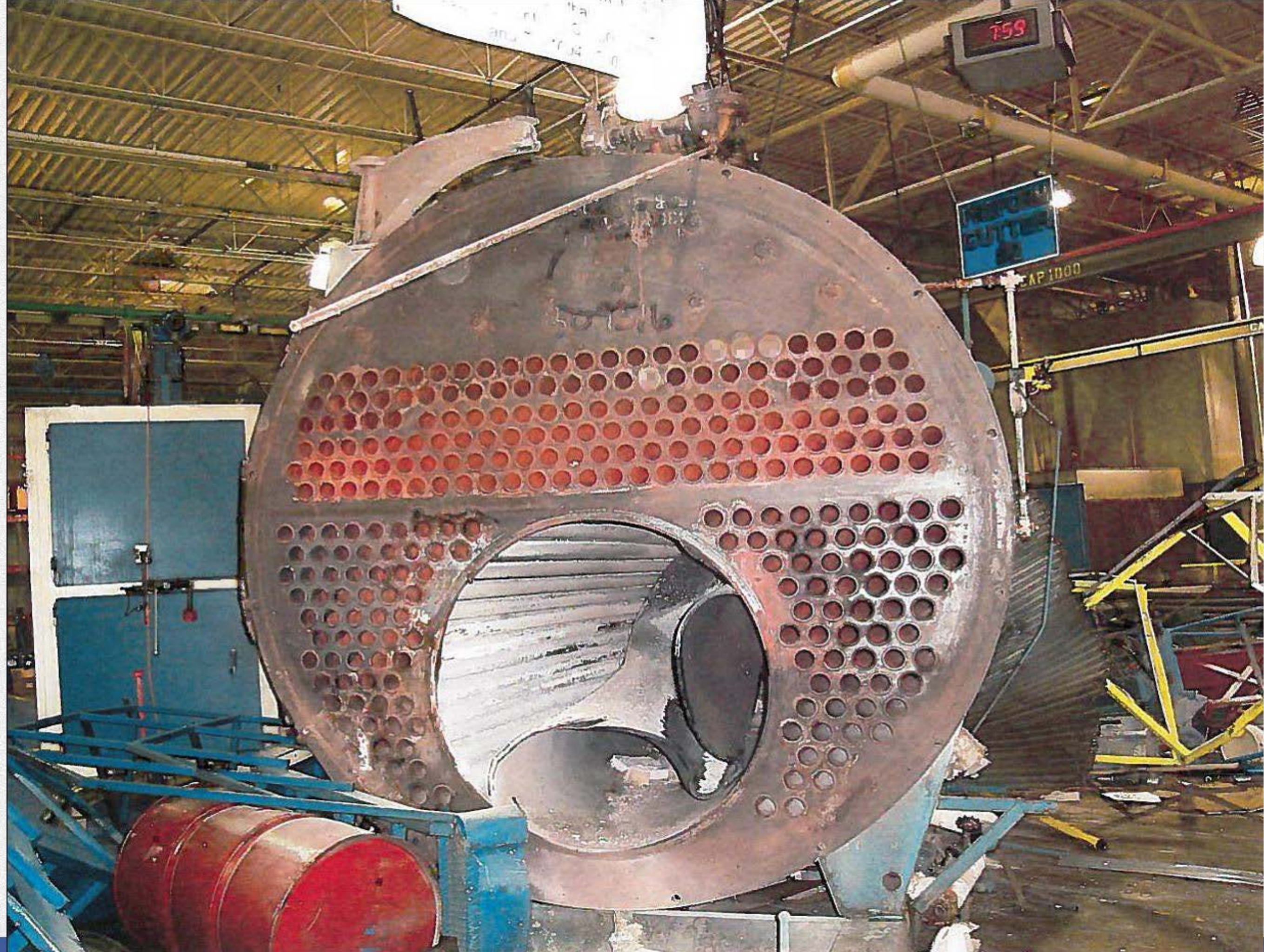




Photo #5 – Knocked Down Exterior Wall Viewed from Inside Boiler Room (East Wall)













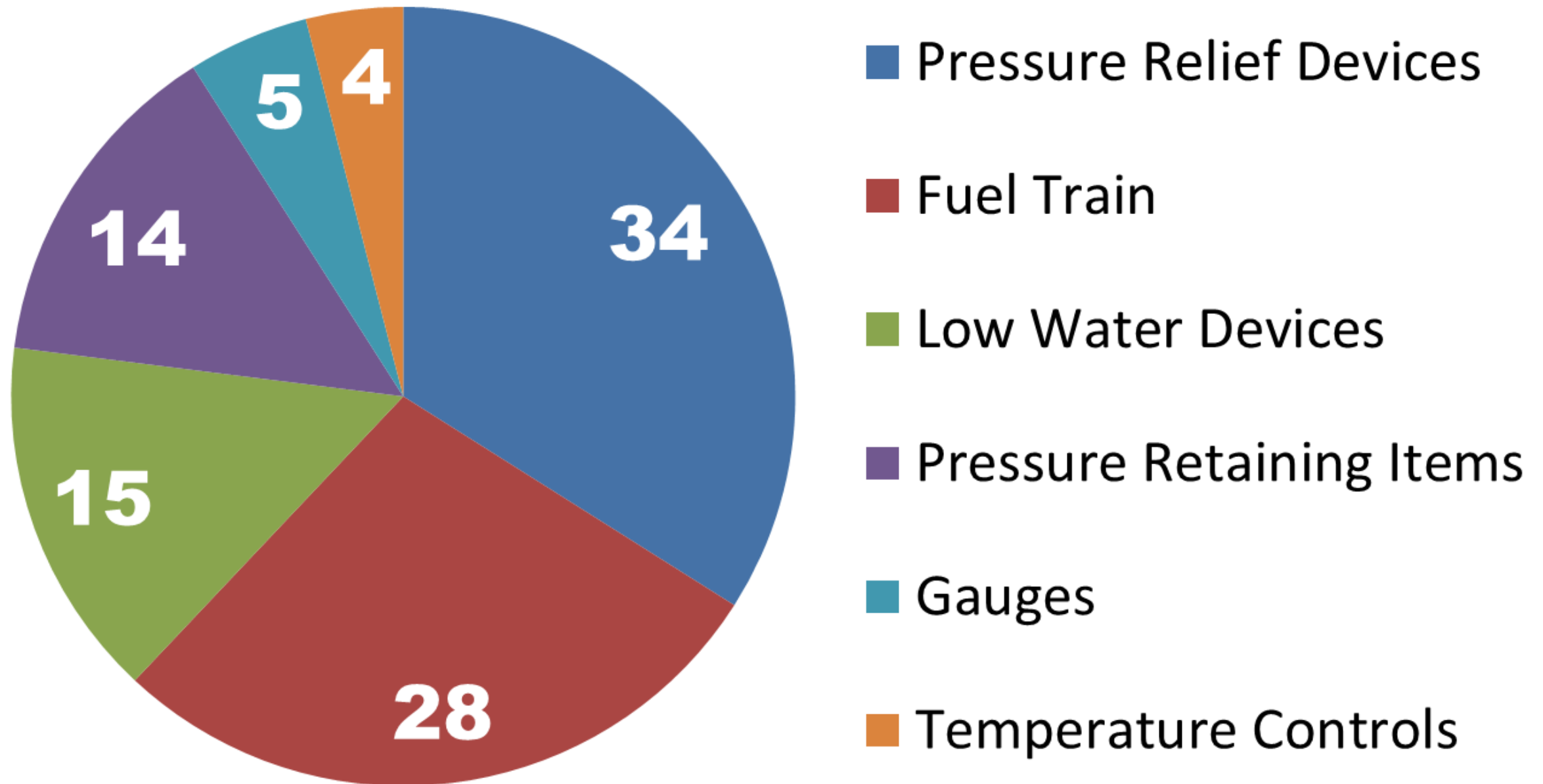
Causes of Explosion

- Lack of Training and Operating Procedures
- Inadequate Boiler Attendance and Record Keeping
- Improper Boiler Maintenance
- Inoperative and Improper Controls and Safety Devices



Violation Statistics

July - December 2018



Pressure Relief Devices July - December 2018

Violation Identified	Percentage of Total
Improper Installation	38%
Device Leaking	22%
Device Inoperable	16%
Incorrect Set Pressure	11%
Incorrect Capacity	8%
Device Missing	3%
Missing Nameplate	2%



Fuel Train and Burner Management

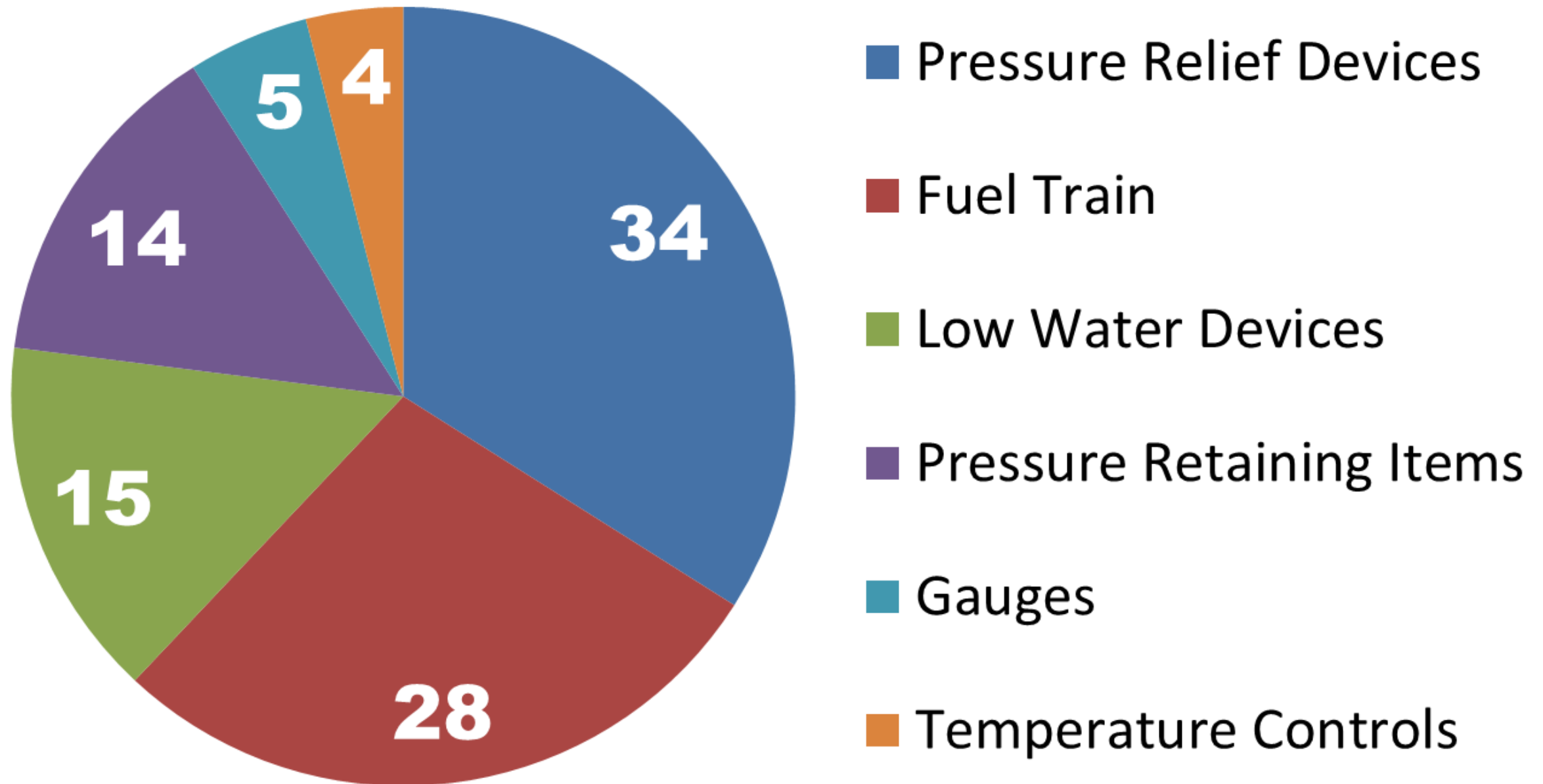
July – December 2018

Violation Identified	Percentage of Total
Emergency Shut Off	70%
Improper Installation	17%
Combustion Air	6%
Gas Leaks	3%
Damaged	3%
Flame Impingement	1%



Violation Statistics

July - December 2018



The Mission of the Boiler Inspection Program is Public Safety

- We haven't experienced any incidents in Colorado resulting in a fatality.
- That doesn't mean it can't happen in the future.
- Those responsible for boilers **must** conduct their own inspections and properly maintain the boilers.

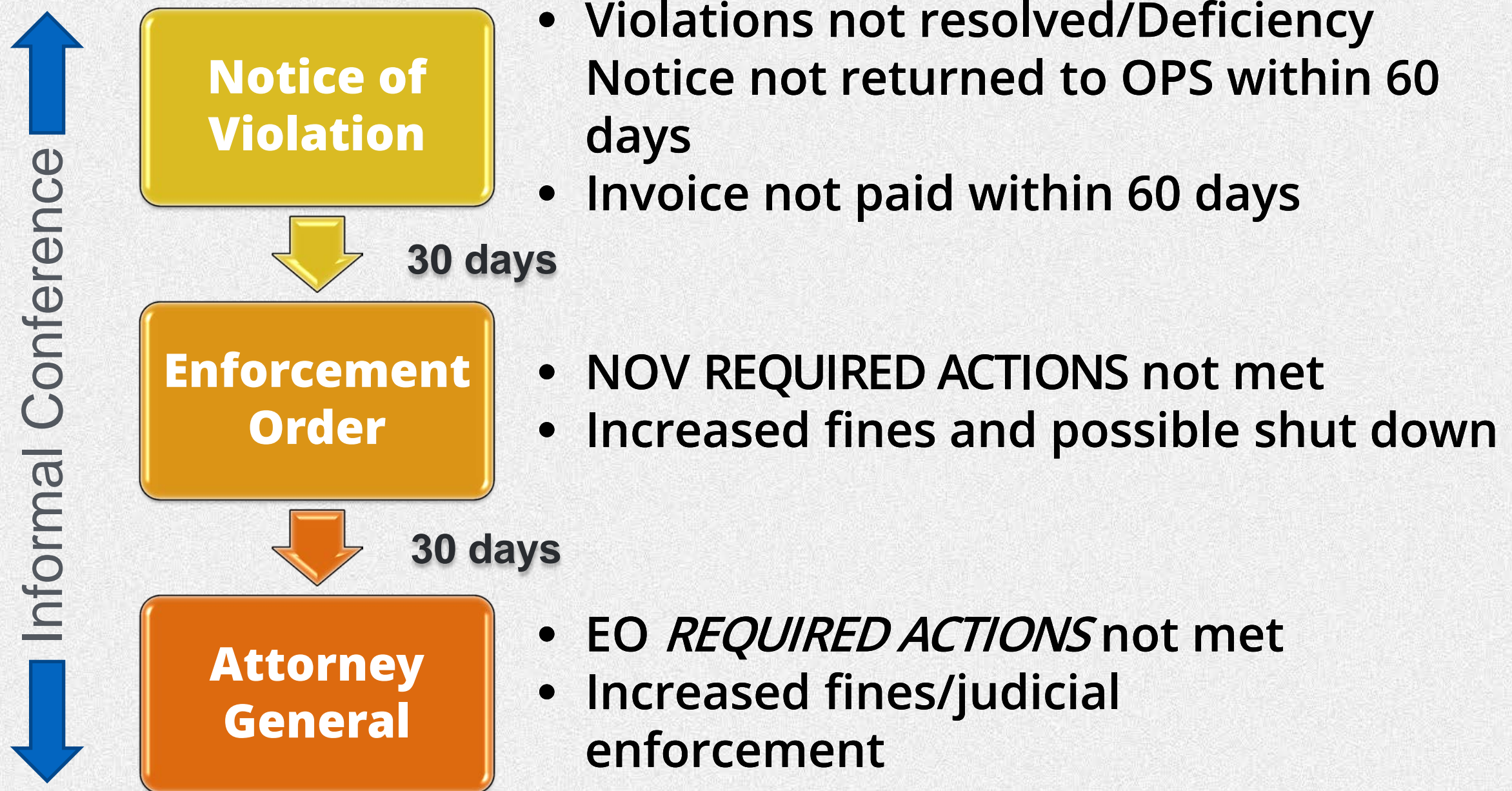


Enforcement

Boiler Program



Enforcement Process



So, You received a Notice of Violation...

- After you have READ the Notice of Violation letter and if you have questions, call the OPS team member listed on the letter
- SUBMIT the required information:
 - Signed Deficiency Notice and/or Invoice payment



Enforcement Order (EO)

- Notice of Violation not resolved, with little or no communication taking place
- No reasonable progress being made to resolve violations
- Contact information may not have been updated with OPS
- Fines up to \$1,000 per violation, for each day of violation

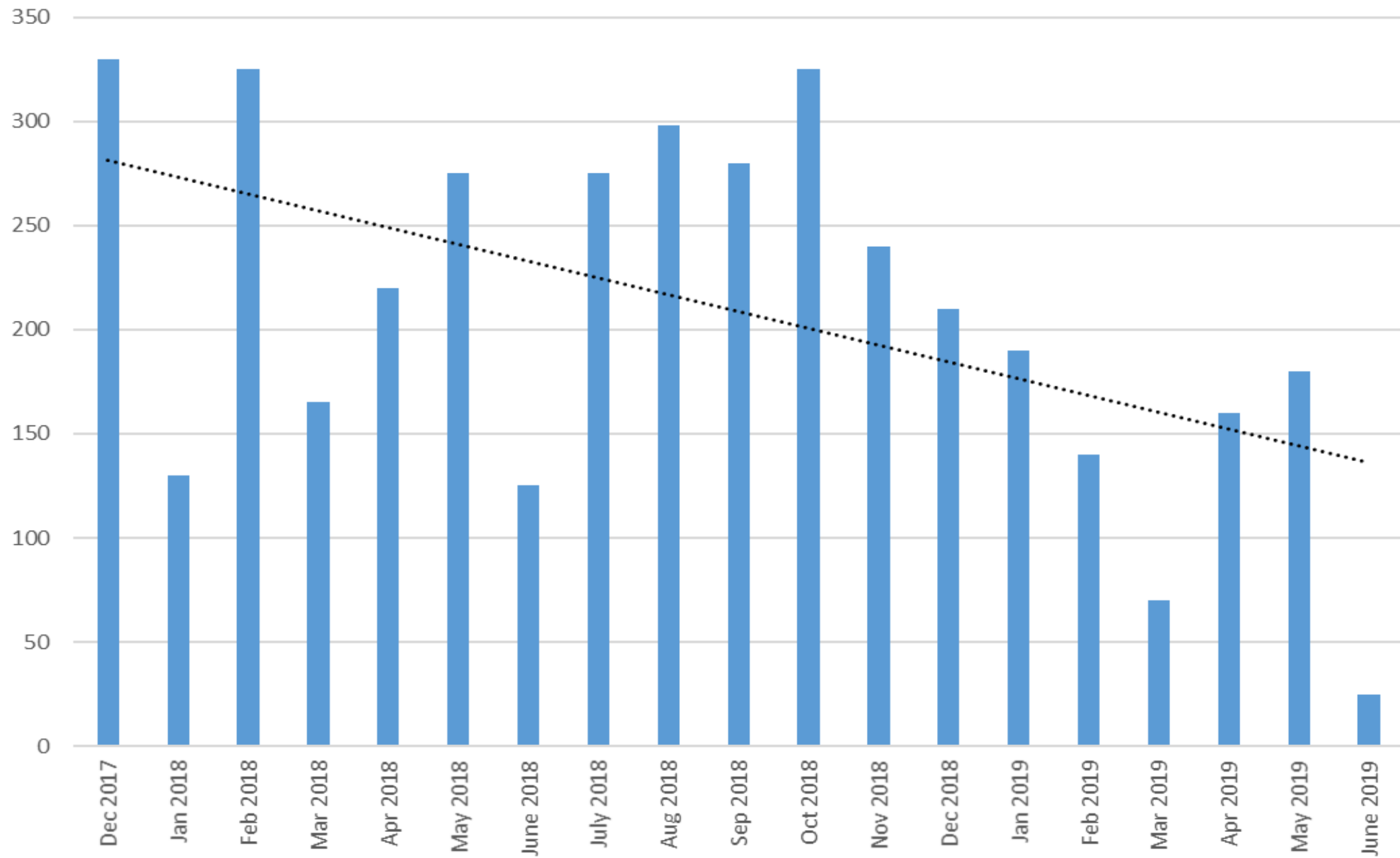


Informal Conference

- May be requested ANYTIME
- Very informal
- Can be conducted by phone or in person
- All involved and interested parties invited
- Usually will result in a Settlement Agreement



Monthly Boiler NOVs Issued Since December 2017



Questions?



Thanks for your time!

