

Agenda

- What to Expect When the Boiler Inspector Calls
- Enterprise Risk Management
- How can Agents help CIS members implement ERM/ISO 31000?
- ■CIS 2017-18 Renewal



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WHAT TO EXPECT WHEN THE BOILER INSPECTOR CALLS

Presented By Neil Rush, Eric Burton & Chris Davies

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- Intent of Equipment Breakdown Insurance
 Who Needs Coverage?
 Covered Cause of Loss
 Covered Equipment
- · Scope of the Program

 - Why are Pressure Vessels Inspected?
 Boiler and Pressure Vessel Inspection Schedules*
- · The Process
 - What to Expect When the Boiler Inspector Calls
 - Violations
- Questions

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Equipment Breakdown **Insurance**

What is the intent of equipment breakdown insurance?

✓ To cover damage to equipment that occurs due to internal causes rather than external causes



Wh	needs	coverage?
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✓Virtually every Building : Electricity Hot Water Cooling Refrigeration Steam Gas Jurisdictional Inspection



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Covered Cause of Loss

....is an "Accident" to "Covered Equipment"

"Accident" means the direct physical loss that causes damage to "Covered Equipment" and necessitates its repair or replacement:

- Mechanical Breakdown including rupture or bursting caused by centrifugal force
- 2. Artificially generated electrical current, including electrical arcing
- 3. Explosion, other than combustion explosion, of steam boilers, steam piping, steam engines or steam turbines

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Covered Equipment

"Covered Equipment" means

- A. Equipment that generates, transmits or utilizes energy, including electronic communications and data processing equipment; or
- B. Equipment which, during normal usage, operates under vacuum or pressure, other than the weight of its contents.

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S	ample Losses Boilers and Pressure	
	Vessels	Explosion, bulging, cracking
	Electric Motors, Generators, Transformers	Arcing burnout, bearing and rotor failure
	Air Conditioning	Piping and vessel cracking, explosion
	Pumps	Centrifugal explosion, bearing, shaft, blading breakage
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Scope of the Program

Scope of the Program

- Over 395 Locations
- Over 750 Objects
- Chubb Risk Engineers hold National Board Commissions and are licensed by the State of Oregon to complete boiler & pressure vessel inspections.

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Why are pressure vessels inspected?
· Mandated by the State of Oregon Boiler and Pressure Vessel Law:
ORS 480.510 to 480.670. Including but not limited to: -Power Boilers
\circ Steam boiler operating above 15 psi \circ Water boilers operating above 160 psi and/or temperature above 250 0 F
 Low Pressure Boilers ○ Steam boilers operating at or below 15 psi
• Water boilers operating at or below 160 psi and/or 2500 F
Unfired Pressure vessels: i.e.○ Air tanks, storage tanks, etc
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Why are pressure vessels inspected? (contd.)
· Safety of employees and the public
- Boiler explosion-Minnesota Day Care Facility
Additional Benefit
-Avoid loss of use of the object and business interruption

Boiler Explosion-Day Care Facility Minnesota Department of Labor & Industry Investigation



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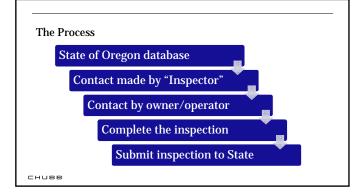
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Boiler and Pressure Vessel Inspection Schedules*

- · High Pressure Boilers
- Internal-AnnualExternal-Annual
- Low Pressure Boilers
- Internal- Bi-AnnualExternal-Bi-Annual
- Hot Water Boilers
- Internal Six Years – External- Bi-Annual
- Unfired Pressure Vessels ex. Air Tanks
- External-Bi-Annual
- * These are generalizations. For exact inspection time frame refer to OAR Chapter 918-225

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The Process



A Little About Chris Davies

1974-1978 - US Navy as a Boiler Technician

1980 - Went to work for the State of Washington as a stationary engineer .

1996 - Promoted to Chief Engineer

2000 - Started work as the Facilities manager at the Evergreen State College

2002 - Started work for the Department of Labor and Industries as an inspector $\,$

2010 - Retired after 30 years with the State

2012 - Started employment with Chubb as an Equipment Breakdown Risk Engineer

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What To Expect When The Boiler Inspector Calls

- –First things first, we will contact the location and arrange for a time to complete the inspection
- -The time and date may not be very flexible if we have other appointments already
- $-\mbox{We}$ will call the contact listed on the State database or send an email if phone contact fails
- -We will let them know what needs to be inspected and the locations

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These Are The Most Common Violations

- -The nameplate on the vessel or safety valve is illegible
- -The safety valve set pressure exceeds the maximum allowable pressure of the vessel
- -The operator can not demonstrate the safety valve or controls
- -The safety valve does not work
- –Power boilers are required to have an operating log book logging test and maintenance

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What To Expect When The Boiler Inspector Calls

What We Look For

· Air Tanks/Receivers

- $\,$ We check the overall condition: rust, leaks, connected piping, dataplate, $\,$ etc.
- We may ask about how often water is drained and if it has an automatic drain, if it's tested
- We will read the dataplate and confirm the safety valve is the correct set pressure and capacity
- We will ask the contact to lift the safety valve to show it's not frozen

The same procedure can be applied to most other unfired pressure vessels, such as heat exchangers, storage tanks, etc..

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What To Expect When The Boiler Inspector Calls	
• Boilers External Inspection – The boiler has to be operating with pressure when inspected	
Low water output (LWCO)	
• The LWCO is normally a float or probe and will shut the boiler down if the water level should get too low. The water in the boiler is the only thing that keeps the boiler from overheating. If the boiler should overheat, the metal will become elastic and will not hold pressure. This can lead to anything from a tube rupture to total boiler failure. This can be an extremely dangerous condition and is never inexpensive to fix. Power boiler losses can easily exceed a million dollars.	
- Flame safe guards	
flame scanner or fire eye. Firebox explosions are the #1 hazard with boilers in recent years. You are introducing natural gas or oil to a closed area with a fire inside. If that fire should go out and the gas does not shut off, it can accumulate and then find a hot spot and ignite and cause an explosion.	
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William D. William D.U. F. J. C.U.	
What To Expect When The Boiler Inspector Calls • Boilers External Inspection — (Cont'd)	-
- Safety valves	
 On power boilers we check for the last time they were sent out and recertified at a valve repair shop. Chubb uses "Industry Standard" that is no more than once every three years. 	
 On most other boilers we will ask the operator to demonstrate the safety valve works by either hand lifting or raising the pressure in the boiler. 	
o If the safety does not work the boiler can over pressurize and fail.	
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What To Expect When The Boiler Inspector Calls • Boilers External Inspection – (Cont'd)	
- High Limit Control	
On a steam boiler this is the high pressure safety control. It should shut the boiler down before the safety valve lifts and have a manual reset. If it should fail the safety valves are the last line of defense from over-	
pressurization. On water boilers the high limit control is a temperature switch or some call it a aquastat . If the water temperature should get too hot the boiler will shut down and someone will need to come and press the	
reset to start the boiler. There could be other test your inspector may want you to demonstrate such as high and low gas pressure, or even the emergency shut down switch you should have by EVERY exit of the boiler room.	
Your inspector will walk around the boiler and should also check the nameplate on the boiler as well as the safety valve(s). I generally check the safety valves to make sure no excess weight is on the discharge and they are properly drained	
o He or she may ask questions about maintenance and review your boiler water chemical treatment log.	
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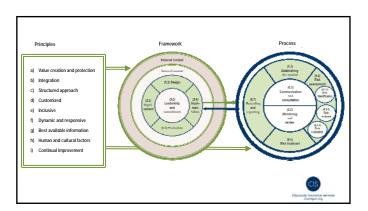
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Violations	
480.660 Notice of violation; correction; when use prohibited; appeal.	
(1) If an inspector determines that any condition exists that is a violation of the safety standards prescribed	
pursuant to ORS 480.510 to 480.670, the inspector shall post a notice in plain view on rear the affected boiler or pressure vessel that specifies the defective condition, and shall provide a copy of the notice to the	
owner or user of the affected boiler or pressure vessel, or to a representative of the owner or user.	
(2) If no immediate hazard to health and safety is evident, the notice shall state that correction of the defective condition is required within 30 days of the date of the inspection. If the correction is not completed within the	
30-day period, the owner or user of the boiler or pressure vessel may apply to the chief boiler inspector for extension of the time for making the correction. If the chief boiler inspector determines that corrective action	
was commenced within the time period specified in the notice, an extension may be granted for such time as is required to complete corrective action.	
(3) If an immediate hazard to health and safety is evident, the notice shall prohibit further use of the boiler or	
pressure vessel. The inspector immediately shall report that action to the chief boiler inspector.	
(4) If any person is aggrieved by a determination made upon inspection under this section, the person first shall appeal that determination to the chief boiler inspector and then to the Board of Boiler Rules. Subsequent appeal shall be as provided in ORS 183.480 to 183.540.	
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Why ERM?

- Aligns organizational risks with organizational objectives
- Provides consistent format around the world
- Improves understanding of key risks and implications
- Focuses on opportunities and threats that matter
- Increases decision maker's ability to make confident decisions
- Reduces number of surprise or crises events





ERM	1 Princi	iples
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- 1. Value creation and protection
- 2. Integration
- 3. Structured approach
- 4. Customized
- 5. Inclusive
- 6. Dynamic and responsive



ERM Principles

- 7. Best available information
- 8. Human and cultural factors
- 9. Continual improvement



ERM Framework

- Leadership and Commitment
- Design Program
- Implementation PROCESS
- Evaluation
- Improvement



ERM Process	
Risk Assessment	
 Identification Analysis Evaluation Risk Treatment Communication	
Chysteelny Insurance Charaget-	nce services
Member Interest	
☐ Members interested in adopting ERM	



☐ Members interested in using ERM for decision making

CIS Risk Management Consultants are trained to help those members with interest in implementing ERM or using

 $\hfill \square$ Members not interested at this time

ERM for decision making.

Start with Yourself.... Familiatize yourself with ISO 31000 The framework The analysis Practice the process Include many resources Independent agents CIS risk management consultants & others Pre-loss legal Implement what you've learned

Share the Knowledge.... o Identify objectives o Engage your clients o Establish owners o Explain the benefits o Be involved to provide coaching

Work with all stakeholders Work through the process Find your acceptable level of risk Continually Review and Repeat Streamline the process Stay away from reactionary responses

Now Go and Implement...

- Quarterly ERM meetings
- Expectations and timing
- Follow through
- Be diligent and confident

The hard work and solutions will eventually pay off and (hopefully) prevent a catastrophic claim.

Taking Responsibility....

- Response is the opposite of reaction
- Taking action and making choices can be difficult, so focus on the mission and the objectives

Look at the word Responsibility a little differently. Break it down to the "Ability to Respond", and think about this:

Your "response-ability" is the capacity to face any s and make powerful choices that are consistent with say you are.

Security Safety Coverage Protection Renewal 2017-2018 Scott Moss, P/C Trust Director Tena Purdy, Underwriting Supervisor Trent McGath, Risk Information Manager

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- Cyber Assessment
- Liability Experience Rating Model
- NCCI
- Liability/Property Package
- Increase in Sub-limits
- Changes to Best Practices Survey
- Strains and Sprains New Program



Agenda - Continued

- CIS vs. Commercial Insurance
- Jail Claims
- Incident Reporting
- Drones
- Debris Removal Endorsement
- Auto-Related Events
- Renewal Reminders
- Additional GL Question for 17-18



Changes to Cyber

- Homeland Security has new cyber assessment tailored for local government.
 - Members with excess cyber limits are asked to complete assessment and make internal changes suggested by the report over the next year.



\$25,000 • High dollar claims have been capped at \$25,000 in the experience rating model. • CIS will increase the cap to \$50,000 at increments of \$5,000 per year until new cap is reached. Less that \$10,000 • Members with liability premium less than \$10,000 will not be impacted.

NCCI

- CIS has started submitting claims and payroll data to NCCI.
- CIS will use NCCI experience rating factors and worksheets beginning in 2018-2019.
- Under NCCI methodology, small premium members will not be experience rated.



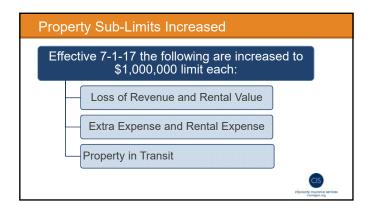


Package: Property & Liability

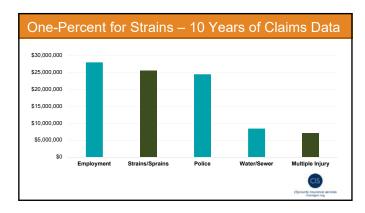
 Beginning in 2017-2018, any new members in the CIS Trust will be required to purchase both Liability and Property coverages.











Three-Year Program

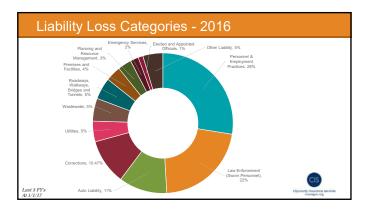
- Occupational or physical therapist
- Provide in-house training
 - Focus training
 - BalanceStrength

 - Tempo
 - FlexibilityBrace

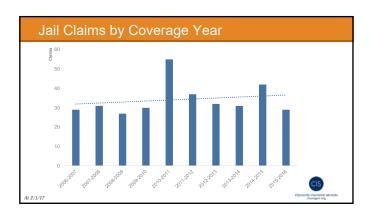
 - "Just in Time" training app
- Budget: 1% of 10 years of claims = \$250,000 (over 3 years)



cis	Commercial Insurance
Occurrence	Claims made
\$5 million limit	\$1 million limit
Employment Liability covered	Often some or all excluded
Professional Liability covered	Requires separate policy
Medical Malpractice covered	Requires separate policy
Police Liability covered	May require separate policy
Cyber Liability – limited coverage	Requires separate policy
Public entity adjusters	Commercial adjusters
Public entity risk management	Little or no risk management

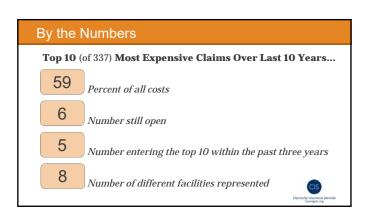












Claims Costs Outpacing Rate

- The current rate for an occupied jail bed is \$445, but the average per bed claim cost over the past three years is \$731, or 64% higher than the charged rate.
- Jail Loss Ratio Last Ten Years: 183%
- The rate will climb unless claims decline...



Incident Reporting & Access to Claim Notes

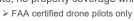
- Member On-line Incident Reporting Module is under development
- Access to adjuster's claims notes on Compass (CIS claims software)





UAV/Drone Endorsement

- No automatic coverage
- Completed application required to endorse
- \$250k in liability coverage
- Scheduled on the mobile equipment schedule; coverage only while in a building or covered auto; no property coverage while in flight



- ➤ Follow FAA regulations
- Adhere to ORS 837.300





Debris Removal Endorsement

- Debris Removal Endorsement
- \$50,000 in debris removal
 - · Only limit available
 - Used for properties that member does not want to replace, but need coverage for debris removal if building is lost due to a covered peril





Auto-Related Events

- Demolition Derby
- Auto/motorcycle races
- Young drivers
- Monster trucks rallies



Earthquake Limits

- \$200 million shared limit
- \$100 million dedicated limit (sold in \$10 million limits – two are still available)
- CIS Board considering another \$100
- Consider underground exposures





Renewal Reminders	
April 3 - Online renewal application will be posted to website	
April 3 - 2017-18 schedules will be posted for review with your member	
Appraisal values will be included in the 2017-18 property schedules	
All building, contents and property in the open (PIO) not appraised will be trended 1%	
defided 179	
CIS Characterism windows	
GL Question	
• Question added:	
-Jails - Do you contract out your medical services to an insured	
third party such as Conmed Healthcare Management; Corizon	
Health or NaphCare?	
©	
турингу пинара и темп	
Final Topics	
■ Eclipse	
Crime coverage limited to member's money	
■ Moonlighting Firefighters/Reserves	
■ Treatment Plant Watering Systems	
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