Ontario Recreation Facilities Association

Building Community Since 1947

Better Understanding Ice Arena Registered Refrigeration Plant Roles and Responsibilities

Session Overview

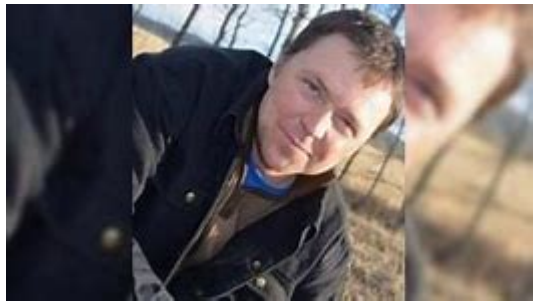
- Welcome by Frank Cowan Co.
- Terry Piche - ORFA presentation on what the issues and gaps include
- Brian Gee – TSSA roles and goals of the organization in respect to ice arena refrigeration
- Q & A with legal counsel
- Everything to be discussed can be accomplished at no cost

The ORFA

- The Ontario Recreation Facilities Association Inc. (ORFA) was created in 1947 as a not-for-profit organization with leadership mandate for the recreation facilities profession. It has no direct authority for owners.
  - Elected Volunteer Board of Directors
  - 7 Full-Time Staff
  - 7000+ Members
  - Self sufficient with NO government funding

In Memory of the Victims

- https://www.youtube.com/watch?v=BBxzXKRSjsc
- Wayne Allan Hornquist, 59, and Lloyd Stewart Smith, 52, both of Fernie; and Jason Donovan Podloski, 46, of Turner Valley, Alberta.



Post Fernie Tragedy

- Smell of ammonia started Dec. 2015
- Chiller was 30-31 years of age – typical life expectancy is 25-years and the City was advised beginning in 2010 the curling rink chiller needed to be replaced
- Failed equipment was never inspected due to the difficulty to perform the review
- 6 months before the failure brine tests showed unacceptable levels of ammonia in the brine
- The workers had disconnected an expansion tank which contributed to the failure
- Investigators have not been able to determine who placed the coupler on the pipe
- One of the deceased failed to notify WorkSafe BC as required when fire fighters attend a facility
- A change in service provider created a gap
- Several councils failed to deal with the issue
- Workers were not aware for the potential of fatalities occurring

(Source: 20 Mistakes that led to Fernie, Toronto Star, Oct 17, 2017)

Legal Matters

- RCMP were first to secure the scene – they have not completed their investigation
- City of Fernie sued the RCMP seeking access to the refrigeration plant logbooks and maintenance records which were collected at the time of the accident – the courts advised that they need to wait and ample defence preparation time would be given
- WorkSafeBC – completed their investigation and fined both the community and the service contractor for their breaches
- City of Fernie has sued the service contractor for breach of contract (ongoing)

ORFA Objective

- To follow through with WorkSafe BC findings, recommendation #4 that all arena owners:

"provide refrigeration system, maintenance program and worker qualification/skill awareness training to all employees and representatives responsible or involved with approving arena maintenance related activities or expenses"

What Plants are in Ontario? (as of Oct. 1, 2018)

Count of OE Plants	Plant Function											
Plant Type	01 - Power Producers/Utilities	02 - Petro/Chemical	03 - Production Industries	04 - Manufacturing Industries	05 - Medical	06 - Academic	07 - Food Process	08 - Public Services	09 - Commercial	10 - Residential	11 - Agriculture	Grand Total
STEAM PLANT	9	47	284	297	52	173	103	44	142	30	44	1,225
REFRIGERATION PLANT	7	10	5	110	11	28	75	909	39	13	3	1,210
POWER PLANT	50	36	30	139	127	43	219	43	30	8	9	734
COMPRESSOR PLANT	4	50		9			1	1				65
HOT WATER PLANT	2		2		2	3		1		1		11
STEAM PRIME MOVER PLANT	2	1										3
Grand Total	**74**	**144**	**321**	**555**	**192**	**247**	**398**	**998**	**211**	**52**	**56**	**3,248**

Refrigeration Legislation 101

- Ice arena refrigeration plants are referenced in various pieces of legislation, regulations, codes and acts that require interpretation based on size, type and refrigerants being used

- Operating Engineers Regulation (OER)
- Boiler and Pressure Vessels Regulation
- CSA B-52 Mechanical Refrigeration Code
- Occupational and Health and Safety Act
- Building Code
- Fire Code
- Electrical Code
- Regulation 347

Who Does What?

- **Operating Engineers Regulation (OER)** – deals with safe operations (people)
- **Boiler and Pressure Vessels Regulation (BPV)** – focuses on objects (equipment/room)
- **CSA B-52 Mechanical Refrigeration Code (B-52)** – adds national recommendations to support provinces and territories in new designs or operational/object updates that would immediately improve safe operations of a plant – can be directed or self driven
- **Occupational Health and Safety Act (OHSA)** – fills in any gaps not covered in these first three legislative obligations – competent worker
- **Building Code** directs plant room design, ventilation and fire suppression, **Fire Code** directs how equipment will be maintained, **Electrical Code** directs design and who can work on what electrical systems
- **Regulation 347** directs how waste, such as oils and refrigerants, must be stored and safely disposed

Plant Ownership Defined

- It always starts with the plant owner defined in the OER, who in most cases, is a corporation (municipality or business board of directors)
  - "owner" means the person to whom or which the plant is registered but does not mean the operating engineers or operators who operate, control or maintain the plant
  - Consider how much you know about safe water legislation…
- The owner's responsibility under Section 14 of the OER never changes, while the operator's responsibilities begin to increase based on the size and the mechanical layout of equipment and the possible requirement of a certified person

Your Plant is Registered

- All ice arena refrigeration plants have a registration – this is where accountability and responsibility begins to be defined

OER Application

- **3.** (1) This Regulation applies to the operation of all registered plants. O. Reg. 219/01, s. 3 (1).

(2) This Regulation **does not apply to**,

- (a) a person who performs work in connection with a plant other than the actual operation of it;
- (b) a person, other than an operating engineer or operator, engaged in installing, testing or repairing a plant

All are “Guarded” Plants

- All registered ice arena refrigeration ice plants are constantly being “guarded” by a series of safety and fail safe devices
- As long as these are being maintained risk of failure is reduced
- But who in fact is the “guardian”?

Attended vs. Unattended

- All ice arena refrigeration plants are guarded 24/7/365 by safety devices that shut off equipment based on pressures, temperatures or equipment failures
- The OER defines if a plant is required to be *attended* or *unattended*
  - *Attended* requires a certified staff to be in control for some portion of each operational day
  - *Unattended* has a less human responsibility for operation and control

Certified Staff

- The size of the refrigeration plant will dictate if TSSA certified staff are required
- If certified staff is required the owner is supposed to turn the plants operation over to the designated certified staff member with no financial or staffing control restrictions

If No Certified Staff is Required…

- Then it may be anyone's guess who is actually in charge…
- But the arena/facility manager is there every day it must be safe
  - Under the OER, it is the owner of the plant who will ultimately be held accountable
- In most ice arenas (workplaces) roles and responsibilities are not clearly defined beyond the OHSA which requires that a worker be "competent" as defined in the Act

What Does Competent Mean?

- Definition under the Occupational Health and Safety Act (OHSA), part of which requires a "competent person" to have "knowledge, training, and experience to organize the work and its performance"
- Ultimately, the owner determines competency and this is reviewed in the event of incident, accident or death

Refrigeration Packaged Unit

- Some new rinks have been sold “packaged” or “skid refrigeration units” that allow owners to (significantly) exceed horsepower limits of a traditional built-up refrigeration system that require certified staff
- What seemed like a good decision at the time of construction to avoid certified operators, may financially haunt future arena owners as these plants age…

Governing Agencies

Technical Standards and Safety Authority (TSSA)

- OER
- BPV
- B-52 MRC

Ministry of Labour

- B-52 MRC
- OHSA

Fire Code

- Local officials and Ontario Fire Marshals Office

Electrical Code

- Local officials and Electrical safety Authority

Ministry of Environment and Climate Change

- Regulation 347

In case of accident or death… all of the above and local police services may be involved at any given time

Where are the Governing Authorities?

- No governing authority has the ability to assess an operation for complete compliance
- They attend and conduct checks and balances as well as provide direction on improved safety and operations often based on incidents or accidents in other plant rooms
- Relying on governing agencies attendance to plant room with no issues being identified is no guarantee that the plant is actually safe
- Safe operations and compliance must be considered an internal responsibility

Turning things over to…

Brian Gee | Chief Officer
Operating Engineers

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Toronto, Ontario M9W 6N9
Tel: +1-416-734-3420 | Cell: +1-416-258-8989 |
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Overview of OE Program

Brian Gee, OE Chief Officer

ORFA Cowan Workshops

March 03 - 26, 2020

Putting Public Safety First

Agenda

- Staffing updates
- OE Program Status
- Log book and electronic requirements
- Planned process changes
- OE Regulation Update Status

OE Staffing Changes

Mike Adams: BPV/OE Director ⇒ Retired

Roger Neate: EDAD Ski Director ⇒ Acting BPV/OE Director

Brian Gee: OE Technical Advisor ⇒ Chief Officer

Caslav Dinic: Administration Manager ⇒ Chief Inspector

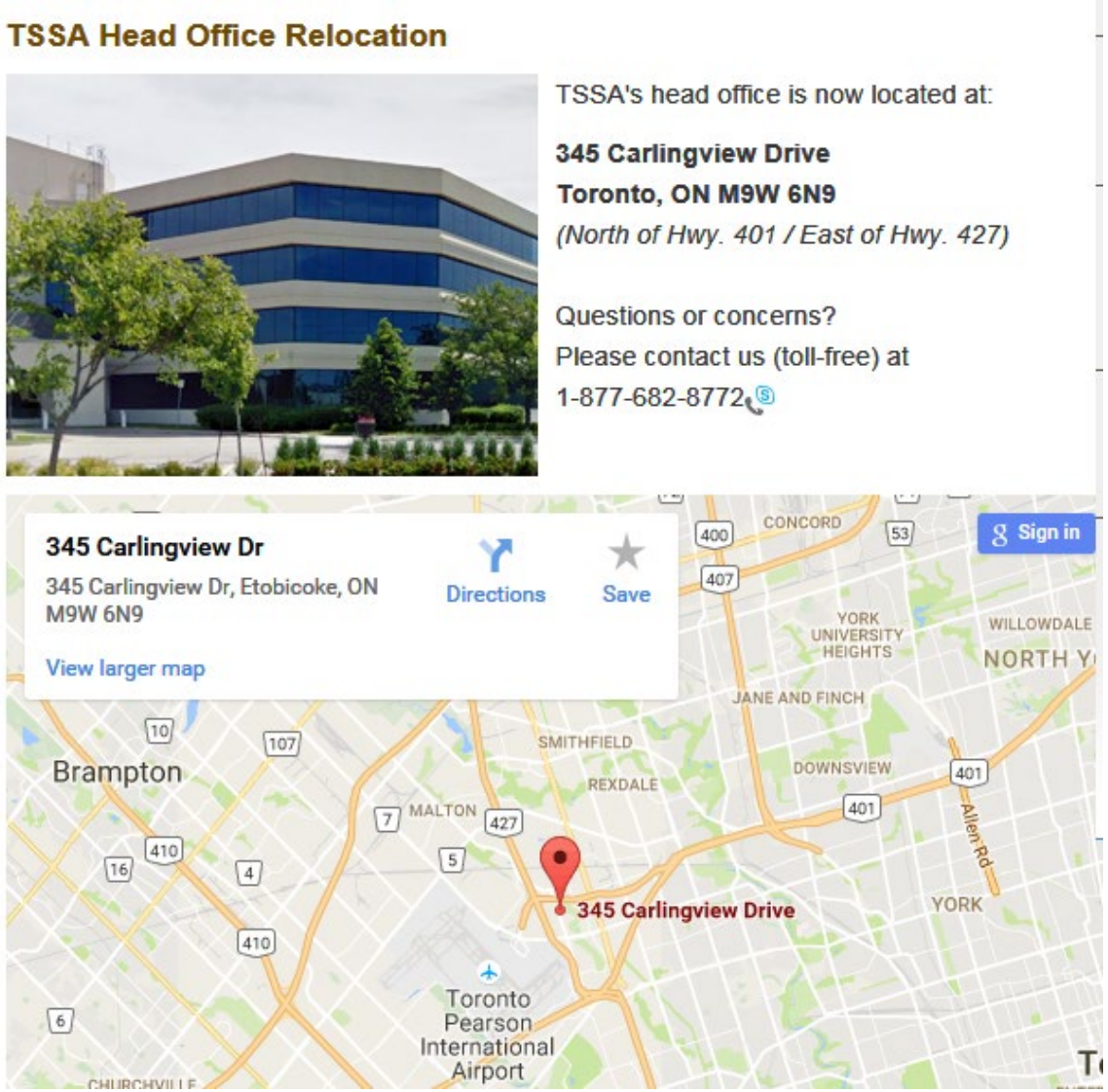
TECHNICAL STANDARDS & SAFETY AUTHORITY
TSSA

Putting Public Safety First

What's TSSA all about?

Purpose: To promote and enforce public safety

- TSSA is a not-for-profit, self-funded organization dedicated to enhancing public safety.
- Since 1997, TSSA has delivered public safety services on behalf of the Ontario Government, the residents of Ontario and its other stakeholders, in four key sectors:
  - boilers and pressure vessels, and operating engineers;
  - elevating devices, amusement devices and ski lifts; and,
  - fuels;
- TSSA employs over 400 staff across Ontario, of which approximately 70 percent work in operations.



What's Different between BPV and OE?

Overlap between BPV and OE:

- BPV responsible for pressure objects: i.e. **Boilers:** focus is on hardware
- OE responsible for safe operation of pressure systems *(which contain the pressure objects):* i.e. **Plants:** focus is on people

Periodic Inspections:

- BPV: 1, 2, 3 years depending on type of high, medium, low risk device
  - Performed by TSSA or Insurer; inspect condition of **object**
- OE: 6, 12, 24 month depending on risk derived from previous inspections
  - Performed by TSSA only; inspect operation, maintenance & staffing of **Plant**

PLUS! Fuels Inspections, Piping & Repair Inspections

Advisory Councils

Meet Twice/year

Plus Risk Reduction Group meetings

Primary mission – bi-directional communication

BPV Advisory Council

13 members

- Manufacturers
- Owner/Users
- Contractors
- Insurers
- Associations

OE Advisory Council

9 members

- Power generation
- Industry
- Training provider
- Associations
- Refrigeration

See web site for membership details

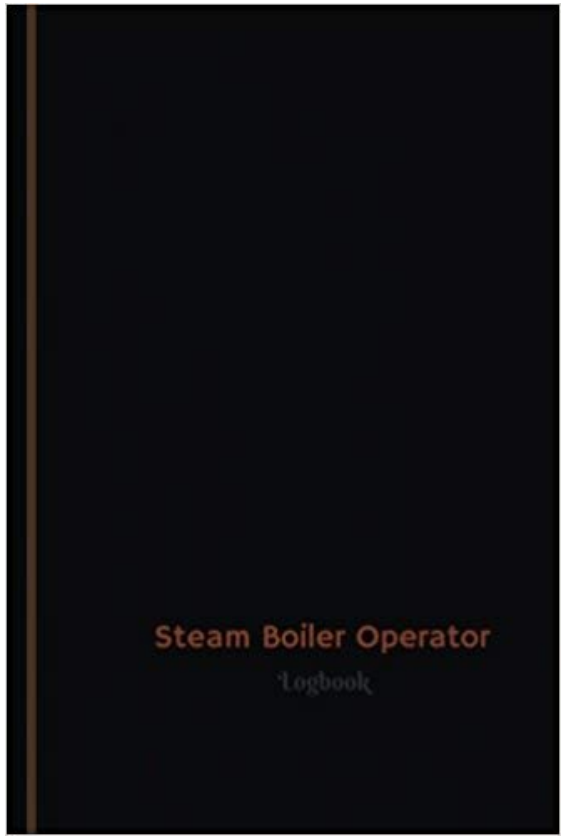
OE Certificate Holders (2018-10-11)

Certification	Active				Pending Renewal			
	Number		Average Age		Number		Average Age	
	This Year	Change	This Year	Last Year	This Year	Change	This Year	Last Year
Restricted	1	1	50	N/A	0	0	N/A	N/A
1st Class	638	-9	60	60	35	15	64	68
2nd Class	1,924	-18	57	57	109	-10	65	64
3rd Class	3,064	24	48	48	192	-16	66	57
4th Class	3,252	-7	46	46	278	1	48	51
Refrigeration A	374	-22	53	53	39	4	61	58
Refrigeration B	284	10	54	54	9	1	59	50
Copmressor Operator	2,001	-18	52	52	142	14	54	54
TOTAL or AVERAGE	11,538	-39	53	53	804	9	60	57

Plant staffing by certificate class

Required Number of Certified Staff (crew)								
Plant Class	1st	2nd	3rd	4th	Refrig. A	Refrig. B	Comp. Op.	Total
1st Class < 100k kW	67	335						
1st Class > 100k kW	65	325	650					
2nd Class		54	270					
2nd Class, 8hr		2	4					
3rd Class			37	185				
3rd Class, 8hr			6	12				
4th Class				66				
4th Class, 8hr				369				
Refrig. A					76	380		
Refrig. A, 8hr					6	12		
Refrig. B						275		
Refrig. B, 8hr						282		
Comp Operator							80	
Comp Operator, 8hr							30	
Requried	132	716	967	632	82	949	110	**3588**
Available	638	1924	3064	3252	374	284	2001	11537
Spares	506	1208	2097	2620	292	-665	1891	7949
Can be 3rd, 4th, A						5009		292
						4344		7657

Log Books



Log, registered plants

37. (1) Every user of a plant shall keep in the plant a log in the form of a book or electronic log. O. Reg. 219/01, s. 37 (1).

(2) Subject to subsections (3) and (4), the logbook shall be bound and constructed so that the pages are numbered and cannot be removed and shall be large enough to accommodate all the required entries. O. Reg. 219/01, s. 37 (2). (without detection)

(3) Where a user keeps an electronic log, the user shall ensure that a dated paper print-out of the log is created at the end of each shift, is entered into the logbook and signed by the chief operating engineer or chief operator the next business day. O. Reg. 219/01, s. 37 (3). (This is impossible, put it in an appropriate binder)

(4) An electronic log shall include information relating to equipment used, information produced, form produced, back up ability, ambient operating limits, and authorized pass code entry by only the chief engineer, chief operator, shift engineer or shift operator, and shall be kept so that any substations have read-only ability. O. Reg. 219/01, s. 37 (4).

(8) Shift entries to the log shall include,

(a) the date, the shift and the times at which the shift begins and ends;

(b) the names of all shift engineers, shift operators, assistant shift engineers, assistant shift operators, other staff and operating assistants or trainees on a shift and their periods of duty on the shift;

(c) any instructions for the shift operation or for staff, along with the name of the person giving the instructions;

(d) any change from normal operating procedure and the time of such change;

(e) any unusual or abnormal conditions observed in the plant and the time they were observed;

(f) the starting or stopping times of primary equipment not recorded in other logs;

(g) documentation of any repairs or maintenance, including that required under subsection 39 (9), to any part of the plant, the times the repair or maintenance took place, if they were completed and who attended at the repair or maintenance;

(h) any malfunction of any item or equipment, the time of the occurrence and any remedial action taken to correct the malfunction;

(i) any work performed by plant operating personnel outside the plant, the time spent and who attended at the work;

(j) the entry of any unauthorized person to the plant, together with the purpose of the entry and the time of entry and leaving;

(k) primary shift functions, including the times of at least the following functions:

- (i) boiler blow down,
- (ii) water column blow down,
- (iii) controls tests,
- (iv) safety valve tests,
- (v) sootblower operation, and
- (vi) water sampling and chemical treatment. O. Reg. 219/01, s. 37 (8).

Meeting Electronic Log Requirements

- Only authorized persons may have access to make entries. S. 37 (5) & (6)
- Entries cannot be altered once the shift has ended. s. 37 (9)
- Must be protected from loss or destruction for three years. S. 37 (10) & (12)
- Must have a method that proves the chief engineer/operator has read entries. S. 37 (11)
- The user shall produce the logbook for examination upon the request of an inspector. s. 37 (12)
- Any substations have read-only ability. s. 37 (4)

Electronic log

1. The simplest is to purchase a pre-made system, U of T has one.
    - Budget
    - Find a supplier

2. Build your own using an “off the shelf program” such as excel.
    - In house skills
    - Protection protocols for tampering
    - Filing of pages

Sample Electronic Log

Here is a sample log page.

- Standard shift identifiers at the top of the page.
- Space for timed entries in the body, the record of changes which occurred during the shift.
- Routine shift entries, only the time need be entered by the shift engineer. This list also forms a reminder of shift routines to be completed each shift.
- A Record of the plant repairs. The WO becomes the record to refer to for details.
- Most importantly, in my opinion, “Pass Ons” for the next shift so that they are not blindsided by incomplete work left behind by the previous shift.

Plant Log								
Date:	14-Oct	**Shift:**	N	**Start:**	18:00	**Finished:**	6:00	2019
Shift Engineer:	Me Again					**Signed:**		
In attendnace:	Everybody else							
Time:	**Entry**							
1:00	WO123 completed. Used last rebuild kit from stock.							
5:00	WO 124 unable to get head to seal leakage on lower left.							
	Shift Routines:					**PMs & Wos**		
17:55	Gauge glass reading confirmed					WO123	completed	
17:55	Water column blow down					WO124	started	
19:00	Water tests completed							
19:15	Chemicals feeds adjusted							
19:20	Boiler blown down							
19:25	CBD set to: 4.5							
18:10	Guarded controls alarm tested							
Pass ons:								
WO 124: requires head face to be dressed prior to re-assembly.								

Next Steps in the upgrading

- Decide on the process to lock the information.
- You can use the protection supplied within the program.
- The log page can be forwarded to the chief via email.
- When the chief reads the email there is a record that it was read.
- Print the page, punch holes in the page, insert the page in the binder.
- Chief signs the page when he arrives at the plant.
- The log can be a set of running pages (tabs) for the month in one excel workbook or split between each shift engineer for each month.
- At the end of the month the month of protected pages can be forwarded to the chief who can file them in a folder with protected access.
- After three years the folders can be deleted or just left where they are.

Chief Engineer/Operator Appointment Letter

The information required at TSSA:

- Plant Installed base number
- Name of the new Chief
- Class of certification
- Certificate Number
- Contact information (phone, extension if not a direct line, email, cell number)
- Effective date of the appointment if it is going to be in the future

Email the information to Tessie Sequeira tsequeira@tssa.org

NOTE: It is the owners responsibility to notify TSSA

Refrigeration changes

Brine/glycol testing requirements are being reviewed. We are working on fitting this into a directive or possibly the CAD.

All of the TSBC recommendations are of value. It would be great to get all of them in place. That will not likely happen. We are thinking that if we select a few of the highest value items, in terms of safety, ensure they are completed, we accomplish the greatest improvement in safety.

Some of the recommendations are a different level than our regulation.

The new Path One will likely move all of the small plants to unattended. The Risk Group is looking into the registration model and the effect of site safety.

Fernie Ammonia Incident

- On 17 Oct 2017, an ammonia release incident at the Fernie Memorial Arena in B.C. resulted in 3 fatalities.
- Technical Safety BC Inspection Report was released 25 July 2018.
- Root Cause was a leaking brine chiller (overdue for replacement) that over-pressurized the brine system.

- Investigation Report
- Investigation Appendices
- Animation

Recommendations 1 – 17 of 18

- Canadian Standards Association
  - Add pressure relief capability to secondary coolant system into B-52
  - Implement leak rupture ventilation into B-52 that consider leakage scenarios (underway)
  - Implement requirement to test ventilation systems (under consideration by TSSA)
  - Re-evaluate the emergency discharge provision of B-52 Annex B
- Arena Owners
  - Implement refrigeration system maintenance program (O. Reg. 219/01 TABLE 6)
  - Add awareness training (O. Reg. 219/01 TABLE 8)
  - Add leaking chiller procedures (O. Reg. 219/01 section 46)
  - Implement qualification training & procedures for managers (currently only operators)
  - Assess and test ventilation systems (working of a Chief Officer Order/Directive)
  - Inspect all emergency discharge piping (Should be performed by operators via PMs)

Recommendations 1 – 17 of 18

- Training Providers
  - Add brine testing
  - Improve training for development of organizational maintenance strategies/programs
  - Emergency situational guidance
  - Amend guidance to the operation of emergency discharge system
- Maintenance Contractors
  - Procedures to disclose issues to owners
- Local Government
  - Incorporate safety risk assessments for refrigeration plants
  - Assess organizations responsible for technical system management regarding manager responsibilities

COI - Overview

- Owners/operators of pressure vessel equipment are now required to apply for a certificate of inspection (COI) from TSSA as legal authorization to operate a pressure vessel in Ontario.
- The COI is issued by TSSA to the owner/operator after a passed periodic inspection and on receipt of a Record of Inspection (ROI).
- Insurers and third-party inspection providers are required to submit the ROI to TSSA after conducting a periodic inspection.
- TSSA is building a database of pressure vessels using the ROI information submitted by insurers and third-party inspection providers.
- Owners/operators of pressure vessels will pay a COI fee to TSSA.
- Insurers and third-party inspection providers are subject to triennial audit.

Pressure Vessel Authorization Process

1. **Inspector/Insurer Submits ROI**
   - Inspector uploads ROI information onto TSSA's BPV portal
   - Requires an account to be set up
   - ROI must be submitted in prescribed format
2. **Owner Makes Payment**
   - Owner logs onto portal and makes payment for their COI
   - Requires an owner account
   - Both online and invoice payments available
3. **TSSA Issues COI**
   - Downloadable COIs available through owner online accounts

ontacting the OE Chief Officer

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www.tssa.org

Thank you for your attention.

Operating Engineers Regulation

Alternate Rules Update

Humphrey Kisembe, Regulatory Policy Advisor

October 23, 2019

Background

- April 3, 2019 - Bill 66, Restoring Ontario's Competitiveness Act, 2018 is passed.
- The Bill amends the Technical Standards and Safety Act, 2000 to provide the Minister with authority to approve alternate rules developed by a TSSA director.

The Alternate Rules

- The rules will be developed by TSSA and approved by the Minister
- The rules adopt the recommendations of the industry expert panel that;
    - Ontario should adopt risk-based regulation
    - Two alternate regulatory compliance paths:
        i. *An updated plant rating framework*
        ii. *An flexible site-specific framework*
- The rules will exist parallel to the Operating Engineers' Regulation
- Businesses to decide whether they want to comply with the alternate rules or the existing regulation

Expected Outcomes

- Enhance Safety
- Drive innovation through a modernized regulation that takes into account new technologies
- Reduce the regulatory burden on businesses by transitioning from a highly prescriptive regulatory model to one that focuses on evidence of risk
- Improve regulatory compliance through a clear an easy to understand
- Address labour supply challenges through a review of certification requirements
- Built in flexibility that can accommodation future changes

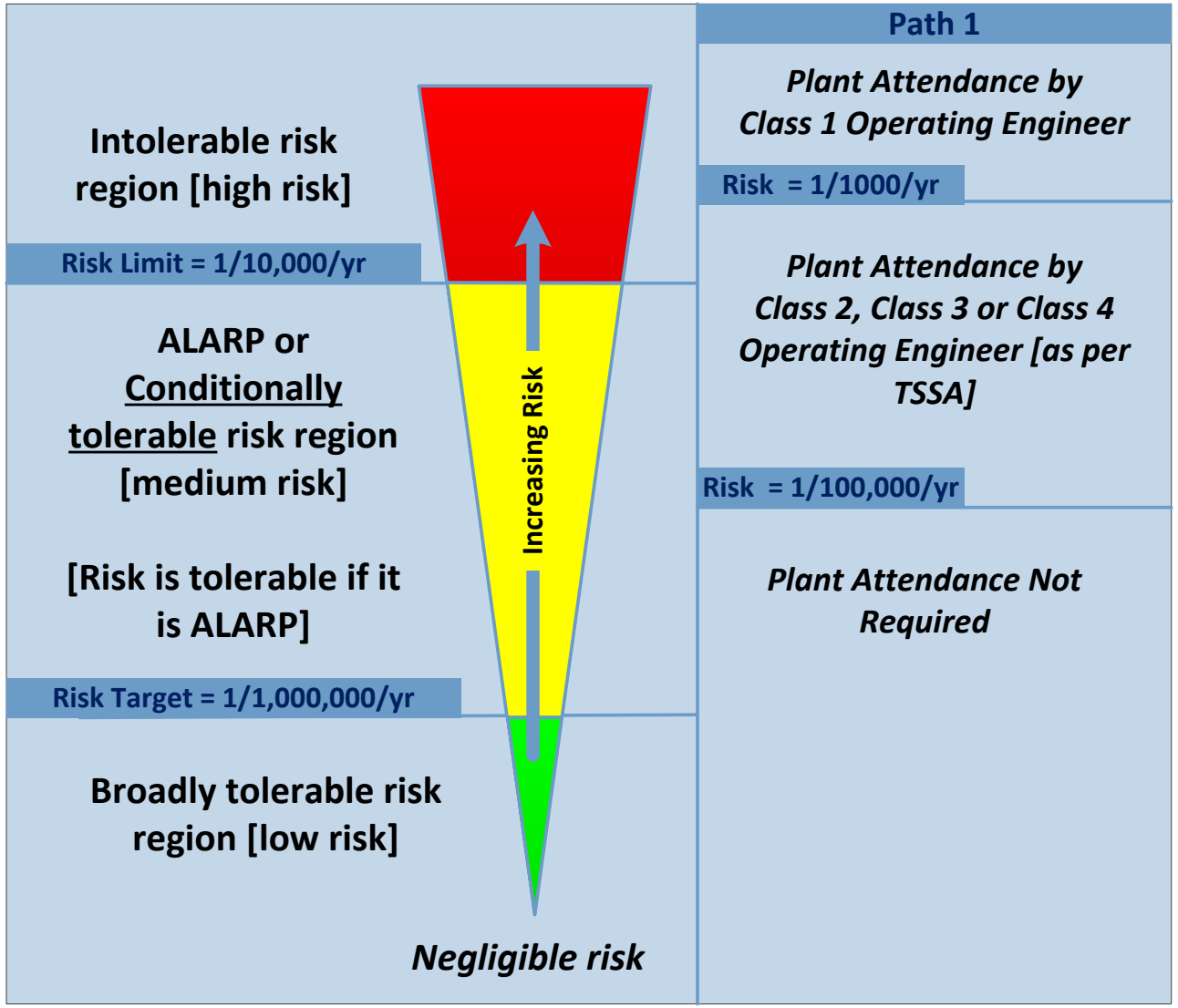
Key Milestones

Time Period	Milestone
2015	Jurisdictional scan report
September 2016	MGCS and TSSA establish panel of industry experts
May 2017	Panel recommendations report • Ontario should adopt risk-based regulation • Regulation should include two alternate paths to compliance
May 2017	MGCS and TSSA establish industry Risk Task Group
April 2018	Task Group reports - risk-based regulatory proposals • Path 1 risk-based plant rating framework • Path 2 site-specific risk and safety management plans (RSMPs)
December 2018	Government Introduces Bill 66 – The Restoring Ontario's Competitiveness Act, 2018
April 2019	Bill 66 passed – TSSA Act amended to provide Minister with authority to approve alternate rules created by the Director
April – May 2019	TSSA holds industry consultations Path 1 and Path 2 risk-based regulatory proposals
July 2019	Project team established – Goal: To deliver the alternate rules in line with expert panel recommendation and government direction

Elements of Path 1 Risk-Based Plant Rating Framework

- A modified version of the current kilowatt-based approach to plant rating
- Approach estimates a risk score for plants using the following factors:
  - Equipment design – Aged designs vs newer (safest in class) designs
  - Fuel type
  - Guarded controls – Yes/No
  - Material type
  - Facility type/occupancy
  - Charge
  - Energy capacity in (kW)
  - Number of equipment
- Plants to be rated using a risk score
- Operator staffing requirements to be determined using a risk score

Decision Criteria for Attendance Requirements



Elements of Path 2 Site-Specific RSMPs

- Site-specific approach that provides businesses the flexibility to identify and manage risks associated with their operations
- Framework allows plants to manage safety risk posed by their operations using site-specific Risk and Safety Management Plans (RSMP)
- RSMPs will be approved by TSSA and monitored for compliance through audits
- Framework is based on the CSA Z767-17 Process Safety Management Standard
- TSSA is developing a guide to help industry implement Path 2 RSMPs

CSA-Z767-17
Process Safety Management
Pillars and Elements

Process Safety Leadership	Understanding Hazards and Risks	Risk Management	Review and Improvement
Accountability	Process knowledge and documentation	Training and competency	Investigation
Regulations, codes and standards	Project review and design procedures	Management of Change	Audits process
Process safety culture	Process risk assessment and risk reduction	Process and equipment integrity	Enhancement of process safety knowledge
Conduct of operations – senior management responsibility	Human Factors	Emergency management planning	Key performance indicators

Next Steps

1. Develop plant rating and attendance schedule for Path 1
    - **February 2020**
2. Guidelines for implementing Path 2 site-specific RSMPs
    - **March 2020**
3. Draft alternate rules
    - **Minister Approved Alternate Rules** – June 2020
4. Communication (ongoing) and Implementation **– July 2020**
5. Stakeholder consultations
    - **January – February 20202**

Ice Surface Operator

Refrigeration operator's certificate of qualification (In BC)

25 (1) An applicant for a refrigeration operator's certificate of qualification must

(a) have

(i) successfully completed a refrigeration operator's course, approved by a provincial safety manager, or provided proof of having an equivalent technical educational background that has been approved by a provincial safety manager, and

(ii) been employed for a period of not less than 6 months assisting in the operation of a refrigeration plant that uses

(A) group A3, B2 or B3 refrigerants and has a capacity of more than 25 kW of prime mover name plate rating, or

(B) group A1, A2 or B1 refrigerants and has a capacity of more than 125 kW of prime mover name plate rating, or

(b) be a refrigeration mechanic.

Ice Surface Operations

Refrigeration operator's certificate of qualification

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(b) be a refrigeration mechanic.

Thank You for this opportunity to share.

Any more Questions?

Reviewing What ORFA is Doing

- The ORFA continually focuses on education and awareness for members on what is transpiring within the industry
- The next slides outline what we have accomplished and what we continued to be focused on…

Driving Without a Seat Belt

- Consider council or board resolutions that are regularly passed to define bylaws on how the public will conduct itself - yet one of the largest, most expensive buildings in the municipal inventory is potentially being operated by under qualified staff everyday – with potentially thousands of visitors coming and going
- Nobody cares until something goes wrong
- The ORFA has been waving a warning flag to this gap for over 40-years – the Fernie, BC arena accident had some municipal leaders start to ask questions about their own operations

Ice Arena Registered Refrigeration Plant Operator Issues

- Unattended plants being operated and maintained by individuals that lack basic skills and ability to be in care and control of the plant room on behalf of the owner
- Self-contained refrigeration systems being controlled by poorly trained operators
- Attended refrigeration plants being operated by individuals who gained TSSA certification but failed to maintain their understanding of safe operations based on regulatory or technological changes; believing that the annual registration payment obligation to TSSA confirms competency

The Role of the Boiler Inspector

- Insured refrigeration plants will be visited by a TSSA Certified Boiler Inspector
- They do not work for TSSA – they are assisting your insurance carrier assess risk of loss to help design premiums
- They will make recommendations to reduce risk and lower premiums if completed
- This does not guarantee the plant is actually safe and compliant

But We are in a Contractual Relationship with a Licensed Refrigeration Contractor…

- You mean the same business that are constantly pressured through Request for Proposals to provide service – and change them to save what seems a few dollars upfront but costs the facility most often thousands as new mechanics try and figure out how the plant works, what has been changed or updated
- The same business you ask if “we can somehow get one-more-year” out of aged refrigeration equipment…

Be Clear…

- Refrigeration contractors have no obligation or accountability for the plants maintenance and compliance as defined in the OER…

3. *(1) This Regulation applies to the operation of all registered plants.*

O. Reg. 219/01, s. 3 (1)

(2) This Regulation does not apply to,(a) a person who performs work in connection with a plant other than the actual operation of it

Melting that Down

- It is the owners responsibility to direct the refrigeration contractor as to what maintenance of the plant is required… see “who is in charge of the plant room slide”

- Compounding the matter is Ontario’s aging arena infrastructure

Fernie's Legacy

- The three lives lost that October, 2017 day cannot be in vain
- Any community that suffers the same type of situation should be prepared to be held to a higher level of legal accountability
- To deliver on recommendation #4 to all arena owners:

  "to provide refrigeration system, maintenance program and worker qualification/skill awareness training to all employees and representatives responsible or involved with approving arena maintenance related activities or expenses"

Moving Forward…

- Moving forward, to assist the owner in meeting competency requirements, the ORFA recommends that every unattended/guarded registered ice arena refrigeration plant have a designated operator who is properly trained to undertake the care and control of the plant room in partnership with the owner of the plant

- The ORFA offers a variety of education and awareness programs and services that can assist:
  - On-line self directed resources
  - On-line Safe Arena Refrigeration Operator Awareness webinar
  - Basic Arena Refrigeration training course
  - Professional designation CARPT (*Certified Arena Refrigeration Plant Technician)*

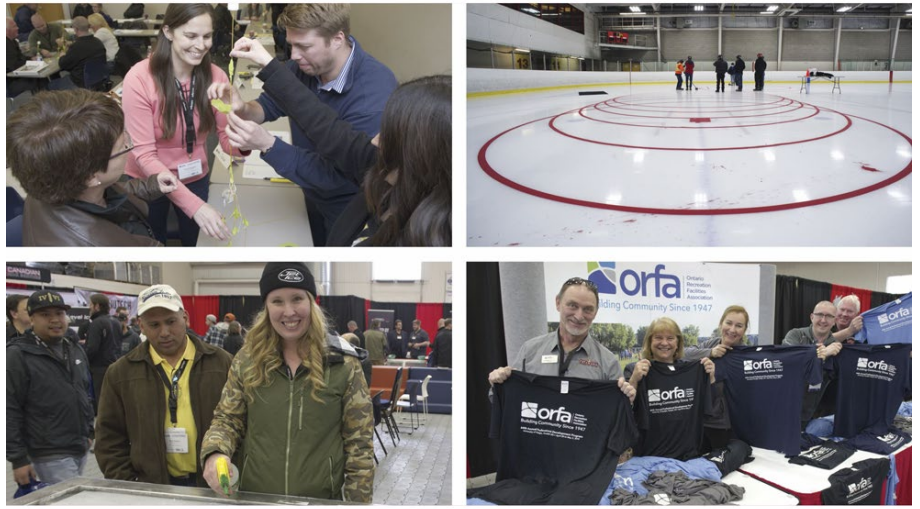
What to Consider in Your Operations

- How is business currently being conducted?
  - How engaged is senior staff?
  - How well trained are those in the care and control of your operations?
  - What processes and programs are currently in place?
- Do current job descriptions define roles and responsibilities?
  - Consider having HR department build in certification and training into hiring programs (no cost)
- Are staff using ORFA resources as baseline to competency and due diligence (benefit of membership)
  - Plaintiff lawyers do

ORFA APDP & Regional Training

PROFESSIONAL DEVELOPMENT
EVENTS 2020

orfa Ontario Recreation Facilities Association
Building Community Since 1947



65TH ANNUAL PROFESSIONAL DEVELOPMENT PROGRAM
University of Guelph, Guelph, Ontario • Sunday, April 26 to Friday, May 1, 2020

2020 ORFA EXPO Tradeshow for the Recreation Facilities Industry
Gryphon Fieldhouse, University of Guelph • Monday, April 27, 2020

RECREATION FACILITIES EMERGENCY MANAGEMENT FORUM
The Westin Harbour Castle, Toronto, Ontario • Sunday, June 7 to Tuesday, June 9, 2020

2020 REGIONAL COURSES

2020 IN-HOUSE COURSES

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You Are Invited…

RECREATION FACILITIES EMERGENCY MANAGEMENT FORUM

Sunday, June 7 to Tuesday, June 9, 2020
The Westin Harbour Castle
Toronto, Canada

ORFA Web Site

- Both the APDP and Emergency Management Forum brochures are available at www.orfa.com
- In addition, many resources pertaining to the information shared today are available on line as a benefit of membership at the same web address

Conclusion

- The industry got to this state by accident – what is being done today was considered best practice as no one had taken the time to balance the risks with the economics

- Aging buildings, retiring of senior staff and an increase in pressure to be fiscally responsible are considered the 3 largest threats to safe ice arena operations
  - Recreation Facilities Asset Management (RFAM) tool available as a benefit of membership (inventory module)

Maybe next time we can talk about…Regulation 565 – Public Pools, Splash Pads…

- "owner" means a person who is the owner of a public pool;
- "operator" means a person designated by the owner of a public pool as being responsible for the operation of the pool;
- **6.** (1) Every owner shall designate an operator. R.R.O. 1990, Reg. 565, s. 6 (1).
- (2) Every owner and every operator shall,
- (a) maintain the public pool and its equipment in a safe and sanitary condition

Wrap-up

- Questions
- Thank you
- Travel safe

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Madorin, Snyder LLP
BARRISTERS AND SOLICITORS

- Introduction
- Understanding Municipal Responsibilities and Liabilities
  - Occupiers' Liability
  - Statutory Requirements
  - Other Sources of Liability
- Understanding Potential Liability for Individual Councillors
  - General Rule
  - Exceptions
- Questions?