

TO: Recovery Boiler Managers, Superintendents, Supervisors, Steam Chiefs, AF&PA Recovery Boiler Members, and Other Recovery Boiler Professionals

**2020 AF&PA RECOVERY BOILER
OPERATIONAL SAFETY SEMINARS
& REVIEW OF AF&PA - BLRBAC
GUIDELINES
ON-LINE VIRTUAL FORMAT**

PLEASE MARK YOUR CALENDAR AND PLAN FOR YOUR OPERATORS, SUPERVISORS, MAINTENANCE PROFESSIONALS, AND ENGINEERS TO ATTEND THESE ON-LINE VIRTUAL SEMINARS:

**September 24, 2020 (7:30 a.m. - 5:00 p.m.) EDT (1 Full Day Seminar Format)
October 20-21, 2020 (10:30 a.m. - 3:30 p.m.) EDT (2 Half-Day Seminar Format)
November 17, 2020 (7:30 a.m. - 5:00 p.m.) PST (1 Full Day Seminar Format)**

Unfortunately, a recovery boiler explosion occurred in North America in 2017. In 2019, there were 49 incidents in the USA and Canada reported to BLRBAC. Of these, 12 incidents were classified as critical. Some of these incidents were considered very serious and it was lucky there were no explosions. BLRBAC defines “critical” as meaning water entered the unit forward of isolating baffles, and there was a potential of an explosion. Training and reaction to the situations apparently saved the day in many cases. Learning to recognize the situation before it becomes critical is a big part of the battle. With the increased number of new people or less experienced people working in the recovery boiler area, companies are realizing the need for more training. Of the incidents reported last year, 69% were discovered by “walk-downs”, thus finding small problems before turning into large problems.

Although no dissolving tank explosions were reported last year, the AF&PA Recovery Boiler Committee feels there have been more upsets in this area that are not reported. Since 2015, 4 dissolving tank explosions have been reported to BLRBAC. AF&PA continues to study the dissolving tank explosion issue to reduce these upsets and to develop best practices to safely operate dissolving tanks.

Much is learned from the reported incidents. The Committee feels that more mills are realizing the need for people operating the boilers to further their knowledge and understanding of the safe operation of recovery boilers. As we see, most pressure part leaks are still found during operator “walk-downs” which supports the conclusion that the operators are more aware of what, where, and how to look for leaks, and to find them as early as possible. The greatest challenge we face in the recovery boiler operation is the recognition of major tube leaks followed by the operator’s correct and timely reaction to the emergency. The seminars focus on the proper training and handling of these upset situations to minimize exposure to personnel; reduce injuries; as well as down time and damage. The outstanding dialogue among attendees was again cited as a key factor in responses rating the seminars as “Excellent.” The responses repeatedly mentioned that the **main objective of the seminars** - the need to **increase awareness in safely operating the boilers - as most important.**

Thus, with the above factors heard from the mills, there is greater emphasis for these seminars. The cost for someone attending these seminars is rather small compared to the possible injuries and costs of an upset in the boiler. Based on inquiries already received, we anticipate very good attendance from operators, supervisors, maintenance professionals, and engineers. The Seminars are planned for active participation by each attendee. Therefore, to provide a program most beneficial to all, we try to limit attendance at each seminar to 64 participants. The Seminars will be in a remote, virtual, on-line format this year. Seminars are offered in both a one full day format (September 24, 2020 & November 17, 2020) and a two half-day format (October 20-21, 2020) to accommodate both scheduling preferences. A registration form and agendas for each seminar are enclosed.

The registration fee for each Recovery Boiler Operational Safety Seminar is only \$200 per person for AF&PA Recovery Boiler Program Member Companies (\$400 per person for Non-Member Companies). Please complete the enclosed registration form indicating which Seminar you wish to attend and return it to me along with your registration fee made payable to "AF&PA". Registration for each Seminar will be on a first-come first-served basis. Please let us know whether you plan to have people participate in the sessions this year. The attached form can be completed and returned to me as soon as you know by email or sent by mail to the address indicated on the form. To register by phone, call: Wayne Grilliot at (937) 602-1892.

The Operational Safety Seminars will be conducted on-line using Zoom Video and Audio Conferencing. Participants do not need to subscribe to Zoom to join the Safety Seminars but will need to download the Zoom software from the link that will be provided prior to the Safety Seminar, if you do not already have Zoom. There is no download or connection fees from Zoom to participate. Please check with your IT Department to make sure Zoom is approved for use in your company. A computer with camera, microphone, & speaker enabled plus an internet connection are required to participate in the Safety Seminar. I will be available if you wish to test your Zoom connection prior to the sessions, just contact me at wayne_grilliot@afandpa.org or (937) 602-1892 to set up a time.

Each Seminar will start with everyone in one large group (the Main Seminar Session). For the Recovery Boiler BLRBAC Incidents Team Exercises, the participants will automatically be grouped into smaller, pre-assigned Breakout Team Sessions. After the scheduled Breakout Team Session time, all participants will automatically rejoin the Main Seminar Session to report out and discuss their recommendations with the other participants. The transition between sessions should happen seamlessly for the participants. The sessions will not be recorded. Additional details and Seminar materials will be provided to the registrants prior to the Safety Seminars.

If there are any questions concerning these sessions, please do not hesitate to contact me at: wayne_grilliot@afandpa.org or (937) 602-1892.

Sincerely,
Wayne Grilliot
937-602-1892
wayne_grilliot@afandpa.org

Attachments:

Registration Form for 2020 Operational Safety Seminars

September 24, 2020 Operational Safety Seminar Agenda – (7:30 a.m. – 5:00 p.m.) Eastern Time

October 20-21, 2020 Operational Safety Seminar Agenda – (10:30 a.m. – 3:30 p.m.) Eastern Time

November 17, 2020 Operational Safety Seminar Agenda – (7:30 a.m. – 5:00 p.m.) Pacific Time

Operating Problems Discussion Suggestion Sheet



REGISTRATION FORM

AF&PA RECOVERY BOILER PROGRAM
2020 OPERATIONAL SAFETY SEMINARS &
REVIEW OF AF&PA AND BLRBAC GUIDELINES

The Seminars are offered in both a one full day format and a two half-day format to accommodate both scheduling preferences. For multiple participants from a single location, registration fees are based on per participant, not per internet connection.

We plan to have (number of people) _____ participate in the 2020 Virtual Operational Safety Seminars.

September 24, 2020 (number of people) _____ **October 20-21, 2020** (number of people) _____

November 17, 2020 (number of people) _____

Registration fee \$200 (USD) per person for AF&PA Recovery Boiler Program Member Companies. Registration fee for Non-Member Companies is \$400 (USD) per person.

Attendees

Names: _____

Titles: _____

Telephones: _____

Cell Phones: _____

Emails: _____

Company: _____

Mill: _____

Address: _____

Date: _____

Let us know of any special requests: _____

Please make checks payable to: AF&PA

Please return this form and payment by Email or Mail to:

AF&PA - Recovery Boiler Program
Attn: Wayne Grilliot
C/O: Program Excellence, LLC
712 Murrell Drive
Kettering, OH 45429

Email: wayne_grilliot@afandpa.org

To register by phone, call:
Wayne Grilliot (937) 602-1892

If paying by credit card (please provide the following)

Type of credit card: _____

Credit card number: _____

Expiration date: _____

Card verification code (CVC): _____

Full name on the card: _____

Amount to be charged to credit card: _____

Name: _____

Email: _____

Telephone: _____

Mobile: _____

AF&PA RECOVERY BOILER PROGRAM
OPERATIONAL SAFETY SEMINAR &
REVIEW OF AF&PA AND BLRBAC GUIDELINES

September 24, 2020
7:30 a.m. – 5:00 p.m. (EDT)

On-Line Safety Seminar

Eastern Daylight Time

AGENDA

- 7:30 – 7:50 a.m. Sign-in / Verify Computer Connections, Seminar Materials, and Team Assignments
- Wayne Grilliot – AF&PA Recovery Boiler Program
- 8:00 a.m. Welcome, Opening Remarks, AF&PA Antitrust Policy, Process, Introductions
- Wayne Grilliot – AF&PA Recovery Boiler Program
- Explanation and Outline of Seminar / Review Format by Monitors
- John Andrews
 - BLRBAC ESP Subcommittee Chairman
 - Boiler Services & Inspection, LLC (BSI)
 - Dean Clay
 - BLRBAC ESP Secretary
 - Boiler Services & Inspection, LLC (BSI)
- 8:15 a.m. BLRBAC 2019 Incident Summary Review
- John Andrews
- 8:40 a.m. Recovery Boiler Incidents 1, 2, & 3 - Assigned reading and team breakout sessions
- 9:20 a.m. 15 Minute Break
- 9:35 a.m. Team reports and open discussions of Incidents 1, 2, & 3
- 10:55 a.m. Recovery Boiler Explosion History – Prevention
Pyrolysis Gas, RB Safety Audits, BLRBAC and AF&PA Resources
- Dean Clay
- 11:30 a.m. Review of ESP Subcommittee Learnings from Reported Incidents
- John Andrews
- 11:45 a.m. Leak Detection Systems – Dean Clay
What are the signs of a leak in the control room?
- Indications of a Pressure Part Leak
 - Decision Time
 - Best Practices and use of Decision Charts
- 12:00 Noon 60 Minute Break

AF&PA RECOVERY BOILER PROGRAM
OPERATIONAL SAFETY SEMINAR &
REVIEW OF AF&PA AND BLRBAC GUIDELINES

September 24, 2020
7:30 a.m. – 5:00 p.m. (EDT)

On-Line Safety Seminar

Eastern Daylight Time

AGENDA / (cont.)

- 1:00 p.m. Questions from the morning session? / Explanation of afternoon’s activities
- 1:05 p.m. Analysis of Dissolving Tank Explosions - Prevention
- John Andrews
- 1:45 p.m. Recovery Boiler Incidents 4, 5, & 6 - Assigned reading and team breakout sessions
- 2:25 p.m. Team reports and open discussions of Incidents 4 & 5
- 3:20 p.m. 15 Minute Break
- 3:35 p.m. Team reports and open discussions of Incident 6
- 4:05 p.m. Review of submitted “Operating Problems - Discussion Suggestion Sheets” and any other questions
- 4:20 p.m. Interlocks and interlock bypassing – Dean Clay
- Purpose of interlocks
 - Major interlock systems on recovery boilers
 - Specific procedures employed when interlocks are not functioning
- 4:35 p.m. **“Root Cause”** - Five key problem areas (training, maintenance, staff support, personnel qualifications, and production pressure). Summary and discussion
- John Andrews
- 5:00 p.m. Closing remarks / Adjourn

AF&PA – Recovery Boiler Program
Attn: Wayne Grilliot
C/O: Program Excellence, LLC
712 Murrell Drive
Kettering, Ohio 45429
1 (937) 602-1892
Email: wayne_grilliot@afandpa.org

AF&PA RECOVERY BOILER PROGRAM
OPERATIONAL SAFETY SEMINAR &
REVIEW OF AF&PA AND BLRBAC GUIDELINES

October 20-21, 2020
10:30 a.m. – 3:30 p.m. (EDT)

On-Line Safety Seminar

Eastern Daylight Time

FIRST DAY AGENDA – October 20, 2020

- 10:30 – 10:50 a.m. Sign-in / Verify Computer Connections, Seminar Materials, and Team Assignments
- Wayne Grilliot – AF&PA Recovery Boiler Program
- 11:00 a.m. Welcome, Opening Remarks, AF&PA Antitrust Policy, Process, Introductions
- Wayne Grilliot – AF&PA Recovery Boiler Program
- Explanation and Outline of Seminar / Review Format by Monitors
- John Andrews
 - BLRBAC ESP Subcommittee Chairman
 - Boiler Services & Inspection, LLC (BSI)
 - Dean Clay
 - BLRBAC ESP Secretary
 - Boiler Services & Inspection, LLC (BSI)
- 11:15 a.m. BLRBAC 2019 Incident Summary Review
- John Andrews
- 11:40 a.m. Recovery Boiler Incidents 1, 2, & 3 - Assigned reading and team breakout sessions
- 12:20 p.m. 45 Minute Break
- 1:05 p.m. Team reports and open discussions of Incidents 1, 2, & 3
- 2:25 p.m. Recovery Boiler Explosion History – Prevention
Pyrolysis Gas, RB Safety Audits, BLRBAC and AF&PA Resources
- Dean Clay
- 3:00 p.m. Review of ESP Subcommittee Learnings from Reported Incidents
- John Andrews
- 3:15 p.m. Leak Detection Systems – Dean Clay
What are the signs of a leak in the control room?
- Indications of a Pressure Part Leak
 - Decision Time
 - Best Practices and use of Decision Charts
- 3:30 p.m. Closing Remarks / Adjourn for the Day

AF&PA RECOVERY BOILER PROGRAM
OPERATIONAL SAFETY SEMINAR &
REVIEW OF AF&PA AND BLRBAC GUIDELINES

October 20-21, 2020
10:30 a.m. – 3:30 p.m. (EDT)

On-Line Safety Seminar

Eastern Daylight Time

SECOND DAY AGENDA – October 21, 2020

- 10:30 – 10:50 a.m. Sign-in / Verify Computer Connections, Seminar Materials, and Team Assignments
Wayne Grilliot – AF&PA Recovery Boiler Program
- 11:00 a.m. Questions from yesterday’s session? / Explanation of today’s activities
- 11:05 a.m. Analysis of Dissolving Tank Explosions - Prevention
- John Andrews
- 11:45 a.m. Recovery Boiler Incidents 4, 5, & 6 - Assigned reading and team breakout sessions
- 12:25 p.m. 45 Minute Break
- 1:10 p.m. Team reports and open discussions of Incidents 4, 5, & 6
- 2:35 p.m. Review of submitted “Operating Problems - Discussion Suggestion Sheets” and any other questions
- 2:50 p.m. Interlocks and interlock bypassing – Dean Clay
- Purpose of interlocks
 - Major interlock systems on recovery boilers
 - Specific procedures employed when interlocks are not functioning
- 3:05 p.m. **“Root Cause”** - Five key problem areas (training, maintenance, staff support, personnel qualifications, and production pressure). Summary and discussion.
- John Andrews
- 3:30 p.m. Closing Remarks / Adjourn

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C/O: Program Excellence, LLC
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AF&PA RECOVERY BOILER PROGRAM
OPERATIONAL SAFETY SEMINAR &
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November 17, 2020
7:30 a.m. – 5:00 p.m. (PST)

On-Line Safety Seminar

Pacific Standard Time

AGENDA

- 7:30 – 7:50 a.m. Sign-in / Verify Computer Connections, Seminar Materials, and Team Assignments
- Wayne Grilliot – AF&PA Recovery Boiler Program
- 8:00 a.m. Welcome, Opening Remarks, AF&PA Antitrust Policy, Process, Introductions
- Wayne Grilliot – AF&PA Recovery Boiler Program
- Explanation and Outline of Seminar / Review Format by Monitors
- John Andrews
 - BLRBAC ESP Subcommittee Chairman
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What are the signs of a leak in the control room?
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 - Best Practices and use of Decision Charts
- 12:00 Noon 60 Minute Break

AF&PA RECOVERY BOILER PROGRAM
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REVIEW OF AF&PA AND BLRBAC GUIDELINES

November 17, 2020
7:30 a.m. – 5:00 p.m. (PST)

On-Line Safety Seminar

Pacific Standard Time

AGENDA / (cont.)

- 1:00 p.m. Questions from the morning session? / Explanation of afternoon’s activities
- 1:05 p.m. Analysis of Dissolving Tank Explosions - Prevention
- John Andrews
- 1:45 p.m. Recovery Boiler Incidents 4, 5, & 6 - Assigned reading and team breakout sessions
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- John Andrews
- 5:00 p.m. Closing remarks / Adjourn

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OPERATING PROBLEMS

DISCUSSION SUGGESTION SHEET

Please take a moment to share your thoughts!!!
Just jot down some things that you would like to have discussed!!!

SUCSESSES	CHALLENGES	QUESTIONS	ISSUES

POSSIBLE TOPICS: Precipitators, carbon steel, sootblowers, steam outs, instrumentation, ID fan, green liquor, FD fan, burner management, hoppers, superheater, water wash, cyclone evaporator, egress, insurance, spout cooling, qualification, plugging, generating bank, density, lagging, corrosion, combustibles, ESP, blowdown, pumps, capacity, agitators, metal spray, NDE, scaffolding, refractory temperature, agitators, drum level, air heater, emergency, personnel, atomizing steam, nozzles, sarco strainer, safety shut/off valves, smelt, near drum corrosion, double valve and tell-tale, refractory temperature, metal spray, flame detector, studs, fire protection, sprayer plates.

Completed forms may be submitted prior to the seminar. Send to: wayne_grilliot@afandpa.org
Questions may also be submitted in the Zoom chat session any time during the Seminar.

Also, please offer your suggestions of how to improve these Operational Safety Seminars. Thank you.