

THE ABSENCE OF CRITICAL
INCIDENTS AND NEAR
MISSES DOESN'T MEAN
YOU'RE PREPARED TO
**TACKLE AN
EMERGENCY**



YOUR CHALLENGE: HISTORICAL SAFETY DOES NOT ALWAYS PREDICT FUTURE PROTECTION

Safety is the number-one priority when it comes to boiler operation, and it has been for some time. Why is it, then, so many operators have difficulty answering questions like, “How do you know when an emergency shutdown is really needed?” or, “What are the factors that help you decide whether an incident is critical or non-critical?” And behind these more tactical questions lies the most important question of all: “How safe are your people working around the recovery boiler every day?”

These questions are so tough because most mills base safety on how they’ve performed in the past (i.e., no critical incidents in X days). But the past doesn’t predict the future. For example, industry statistics show that while explosions

have trended down, critical incidents are on the rise—likely because mills are extending time between outages to meet production demands.

It may be possible that you’ve been safe essentially “by accident”—in other words, it wasn’t any specific action you’ve taken that kept you safe; it’s just that the boiler didn’t develop any detectable issues in the specified time period (e.g., a small leak that hasn’t reached the smelt bed yet). Historical safety reviews can be a slippery slope, providing a false sense of security that keeps you from more proactive investigations. So, when a legitimate leak scenario inevitably happens, the ultimate question becomes, “How quickly and decisively can you respond?”



Even though explosion rates have trended down in recent decades, critical incident (CI) rates have slowly risen in that same time.¹

1. Black Liquor Recovery Boiler Advisory Committee: Meeting Minutes, Crowne Plaza Hotel/Atlanta Airport, April 8, 9 & 10, 2019.



YOUR SOLUTION: **DRIVE SAFETY WITH PURPOSE**

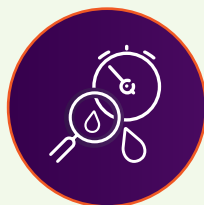
Just because you haven't had a critical incident or near miss recently, doesn't always mean you're fully prepared to tackle an emergency situation when it happens.

With Buckman, you can rely only on your equipment and people to make important safety decisions, with no dependence on third-party chemicals or instruments.

You'll:



Monitor the most leak dynamics, even beyond boiler trip



Identify likely problem areas within 15 seconds of leak detection



Investigate issues quickly with your own staff and return the boiler to normal service

**As a result,
you'll give your operators the contextual information they need to assess danger levels,
separate false alarms from real ones, and ultimately keep more workers out
of harm's way.**

Here's how...

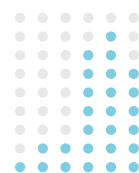


RELY ONLY ON YOUR PEOPLE AND EQUIPMENT FOR SAFETY

You want to be in full control of your mill's safety. But when your leak detection system incorporates third-party instruments or chemicals that can drift, break, or run out, you experience safety gaps every time you're waiting on a technician, part, or restock.

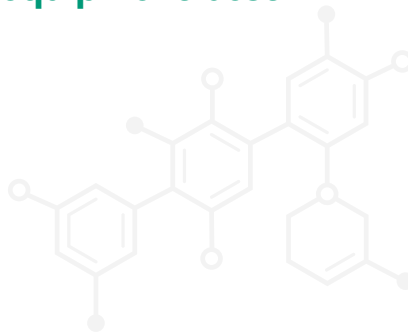
With **Buckman's robust solution plugging directly into your current operations**, you'll rely only on your mill-maintained equipment and your people to make important safety decisions related to potential leaks and eliminate time and energy wasted scheduling vendor resources for installation, maintenance, or repair.

This means you'll be able to muster your own staff quickly, and when you're able to take fast action, you're more likely to prevent collateral damage and resultant risk—helping you ultimately feel safer in the hands of your mill professionals who know your equipment best.



Robust Solution:

No dependence on third-party chemicals or instruments that drift, break, or run out





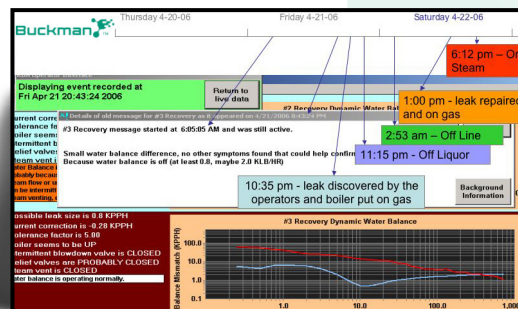
PINPOINT LEAKS FASTER— EVEN BEYOND BOILER TRIP

Targeted Leak Detection:
Ability to alert within 15 seconds
of potential leak, with contextual
data like size and area—even
beyond boiler trip

Some systems can take as long as 30 minutes to warn operators of a large leak. And they rarely provide location information, which means your staff has to manually investigate the boiler, adding time and safety concerns to an already risky situation.

With **targeted leak detection**, you'll know of large and small leaks as quickly as 15 seconds from detection and be able to target the most likely problem area.

This means your staff can bypass lengthy investigations and go right to fixing problems while continually monitoring past initial leak detection. Such information is critical not just for identifying a fix, but also for assessing how dangerous the situation might be. As a result, operators are better able to separate false alarms from real ones—and ultimately keep more workers out of harm's way.



When you partner with Buckman,

you'll know of large and small leaks within 15 seconds from detection and rely only on your mill-maintained equipment and your people to make leak-related decisions.

You'll...



Bypass lengthy investigations
and go right to fixing problems



Eliminate time wasted scheduling
vendor resources for maintenance



Feel safer in the hands of your
mill professionals who know your
equipment best

All this means you'll **be better able to assess danger, separating false alarms from real, and keep more workers safe.**

To learn more, please visit us [online](#).

The RBA is a support tool for use and incorporation in your comprehensive recovery boiler monitoring program. The RBA is focused on providing the operators with additional information and monitoring which allows operators to make decisions based on data, experience, and expertise. The operator, and not the RBA, must always be the final determining factor as to what type of intervention is required.