



Photo: PCI

Embracing a Culture of Safety and Quality

William N. Nickas, *Editor-in-Chief*

Recently, I was part of a group that toured several precast concrete plants with the goal of sharing technology, efficiencies, and best practices. I paid careful attention to the safety practices, and I was encouraged by what I saw. Every facility followed the standard safety practices—inspirational posters located at each water cooler, yellow lines on the floor delineating walkways, and chains/rails with bollards indicating hazards. I was glad to observe that employees at all plants regularly take part in safety talks.

But one plant stood out from the rest. At that plant, every employee addressed and described each unit's function and processes in terms of what "my colleagues do" and what "our company" accomplishes. For example, one employee told us, "My colleagues in the department retrained after we got this new CNC [computer numerical control] machine, and now our company is saving materials, avoiding repairs/misfits [misalignments], and producing more with fewer people." I could tell from the unselfconscious tone in which this message was delivered that these employees see themselves as part of a team committed to common goals. This shared vision is critical to achieving a CULTURE of SAFETY and QUALITY.

The culture of safety and quality is not a new topic for the concrete bridge community. For example, we discussed it a few years ago in an editorial titled "Responsibility, Authority, and Accountability" (see the Winter 2017 issue of *ASPIRE*[®]). As we noted then, responsibilities, authority, and accountability (RAA) are clearly delineated and fully executed in a culture of safety and quality.

But how do we shift people's mindsets to RAA in the first place? Motivational speaker and safety culture expert Garrison Wynn, Certified Safety Professional, offers some good ideas. In a clip from one of his motivational presentations posted on YouTube,¹ he shares, "The reason people don't want to change is mostly because nobody wants to be a senior beginner." He elaborates, "They don't want to wake up and realize that what they know is no longer valid, and so they cling to their old ways."

In these situations, Wynn urges us to show

individuals how their knowledge and experience are going to help carry out the new way. "Once they see their experience is still going to be valuable, then you can show them how different might be better."

Wynn also explains that younger people want to know why there are rules and expectations. "When younger people don't know why," he explains, "They feel less safe."

Of course, when we feel pressured for time, it may seem counterproductive to pause and delve into the "why." But this pause is extremely important. If you are in a leadership or management position, resist the impulse to just cite company policy. Instead, take the time to look into the topic and facilitate a real discussion in which the team fully explores how a rule or best practice enhances safety and quality.

For example, if you are visiting a plant, consider engaging employees in a review of the use of dunnage and related storage practices. Remember to explain why this topic matters:

- Proper dunnage and yard storage are needed to ensure the quality of precast concrete components.
- Failure to store products properly can lead to damage, which in turn can lead to waste or the need for field repairs that delay erection.
- Proper storage plans and dunnage methods are necessary to help maintain component quality and keep personnel safe.

Also, share the most common issues that crews might encounter, including improperly placed dunnage that could result in component deformation; unlevel or soft ground for storage; uneven or misaligned stacking that could lead to a tilted stack that damages components or is unstable and dangerous; and so on.

Finally, point out a few key best practices: level bearings on flat ground; the use of two dunnage points, unless more are required by design; timely checks for compliance by a quality-systems team.

As a second example, when at a jobsite, help your team comply with Occupational Safety and Health Administration rules and general crane safety. Start by reviewing the four key exclusion zone areas:

- The load crush zone (the area between a

Editor-in-Chief

William N. Nickas • wnickas@pci.org

Managing Technical Editor

Dr. Krista M. Brown

Managing Technical Editor Emeritus

Dr. Reid W. Castrodale

Technical Editors

Monica Schultes, Angela Tremblay

Program Manager

Trina Brown • tbrown@pci.org

Associate Editor

Thomas L. Klemens • tklemens@pci.org

Copy Editors

Elizabeth Nishiura, Laura Vidale

Layout Design

Walter Furie

Editorial Advisory Board

William N. Nickas, *Precast/Prestressed Concrete Institute*

Dr. Krista M. Brown, *Independent Consultant*

Dr. Reid W. Castrodale, *Castrodale Engineering Consultants PC*

Tim Christle, *Post-Tensioning Institute*

Gregg Freeby, *American Segmental Bridge Institute*

Dr. Danielle Kleinhans, *Epoxy Interest Group of the Concrete Reinforcing Steel Institute*

Cover

A worker from Consor performs inspection work for the Oregon Department of Transportation from a bucket on a snooper truck underneath the Ben Jones Bridge over Rocky Creek. Photo: Consor.

Ad Sales

Scott Cunningham • scunningham7@aol.com
(678) 576-1487 (mobile)
(770) 913-0115 (office)

Reprints

lisa scacco • lscacco@pci.org

Publisher

Precast/Prestressed Concrete Institute
Bob Risser, President

If you need to update your contact information with us or have a suggestion for a project or topic to be considered for *ASPIRE*, please send an email to info@aspirebridge.org.

Postmaster: Send address changes to *ASPIRE*, 8770 W. Bryn Mawr Ave., Suite 1150, Chicago, IL 60631. Standard postage paid at Chicago, IL, and additional mailing offices.

ASPIRE (Vol. 18, No. 3), ISSN 1935-2093, is published quarterly by the Precast/Prestressed Concrete Institute.

<https://doi.org/10.15554/asp18.3>

Copyright 2024 Precast/Prestressed Concrete Institute.



American Segmental Bridge Institute



Epoxy Interest Group



Expanded Shale, Clay and Slate Institute



Precast/Prestressed Concrete Institute



Post-Tensioning Institute



SILICA FUME ASSOCIATION

suspended load and a fixed object)

- The counterweight crush zone (the area between the moving counterweight of the crane and a fixed object)
- The dropped-object zone (the area where individuals are at risk for being struck in the event of a load drop)
- The bystander exclusion zone (the outermost zone, which should be clearly marked and have physical barriers or security checks to prevent unauthorized entry)


Next, look at the site together to identify these zones on this specific project. Reassure yourself and the crew that there are proper deterrents in place to stop unwarranted entry and other dangerous practices—and if there are problems, act promptly to remedy them.

During these teaching moments, be sure to let the employees know that company leadership always wants to know if they ever have safety or quality concerns. Remind them of how to report these kinds of issues. In a culture of safety and quality, every teammate feels empowered to act knowledgeably to keep themselves and others safe.

Let's all do our part to make safety and quality part of our concrete bridge community's culture. We can start by helping everyone overcome resistance to change, taking the time to explain “why,” and listening when others express concerns.

Remember, people who feel valued make fewer mistakes, and that positively impacts quality and safety.

Reference

1. Wynn, G. 2018. “Safety Speaker Garrison Wynn: Influence and Engagement.” YouTube. <https://www.youtube.com/watch?v=nUKkwVzyekM>. 

HIGH-STRENGTH STEEL BARS FOR PRESTRESSED CONCRETE



The Post-Tensioning Institute has published two new Technical Notes (Nos. 23 & 24) which are focused on developing industry awareness about variation in relaxation of alternative material, high strength, steel bars used in prestressing applications.

The alternatives discussed are “Non-ASTM A722,” and “ASTM A722-Like” bars. You can download these documents by visiting:



► WWW.POST-TENSIONING.ORG/FAQTECHNICALNOTES.

EDITOR'S NOTE

The PCI eLearning Center, a tool dedicated specifically to precast concrete and prestressed concrete but available to the general public, has a wide range of educational offerings, including several free, on-demand webinars on the topic of safety and quality culture. To access these webinars, visit <https://oasis.pci.org/Public/Catalog/Home.aspx>, click “Onboarding” from the Browse menu, and then select the “Mental Health and Safety” or “PCI Production Workshop Series” options.

MAX
maxusacorp.com

Keep Your Projects In The Fast Lane.
Choose our advanced rebar tying solutions and join the ranks of those who build with speed, build with excellence, and build for the joy of life uninterrupted by traffic.