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Concrete INFOCUS

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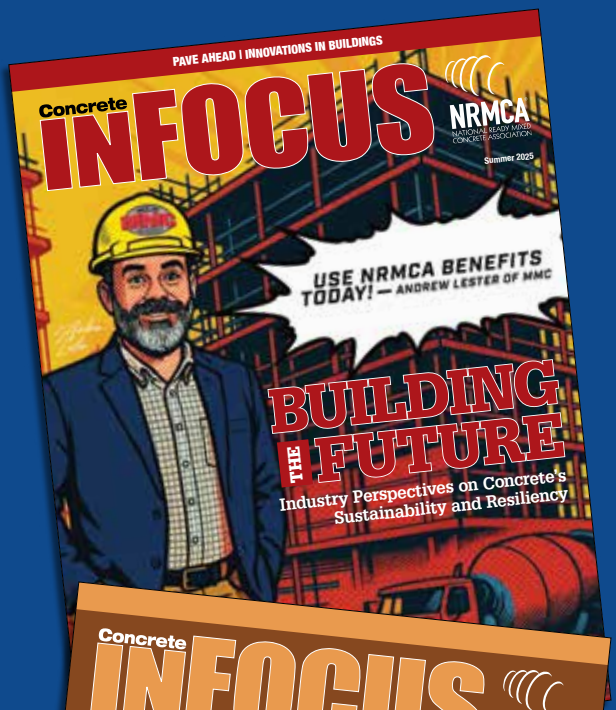

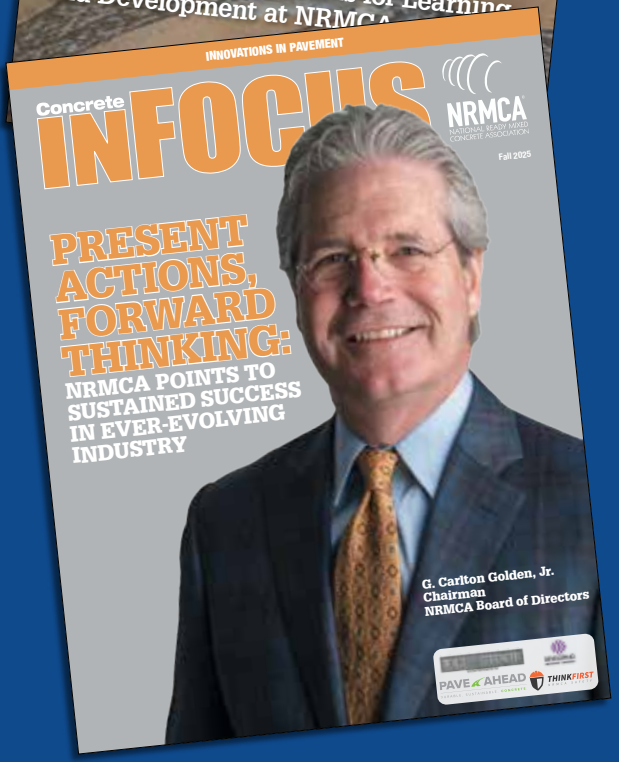

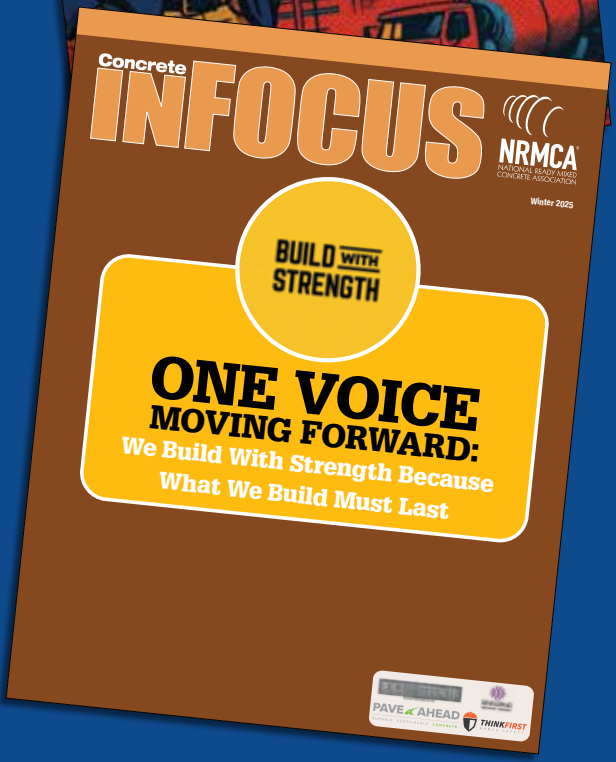

SPECIAL ISSUE 2025

BUILD WITH STRENGTH
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Frank Cavaliere
Managing Editor,
Concrete InFocus

A Second Look at the Year's Most Noteworthy Articles

Like an Oscar season where there are too many terrific movies to pare to a select few for the Best Picture award, this year's four issues of Concrete InFocus contained a wealth of informative articles, too many to include here in our annual Best Of issue. But that's what magazines should do, both in print and online. But since your time is limited and we realize you may have just thumbed through each issue (you're forgiven), each year NRMCA gives you a second chance at a first read of a handful of articles that we subjectively consider under the Best Of heading.

So here we go for 2025, from the Spring issue and concluding with the just published Winter edition. First off is the cover story from the Spring issue titled A Bold Agenda. Here, Executive Vice President, Learning & Development, Jeannette Munroe and her colleague Brian Lemay discussed their plans for restructuring the Association's educational offerings. They tell you how and why NRMCA is now offering courses during two, week-long semesters. Hundreds of members enroll in our courses each year and have welcomed the change, so please read more here.

Moving to the Summer 2025 issue, we've selected the first of two Build With Strength columns, this one titled Building the Future – Industry Perspective on Concrete's Sustainability and Resiliency. Kevin Lawlor of DDC Public Affairs (an advocacy firm retained by NRMCA) discusses a comprehensive market survey of ready mix industry professionals that highlighted key insights into concrete's evolution to address both sustainability and resiliency. And also in the summer issue, Mike Ireland of the Portland Cement Association – wait, strike that – the American Cement Association, tells us why the name was changed after more than 100 years as PCA.

We have another two Best Of selections in the Fall 2025 issue, including a Letter from the Chairman. That's as in NRMCA Board of Directors Chairman G. Carlton Golden, Jr. His column, Present Actions, Forward Thinking, is required reading for anyone who's interested in the long-term direction of NRMCA. Which should be all of us, right? The second selection in this issue fell under the NRMCA Member Corner heading. Associate member Command Alkon's Ron Carlson draws on his decades of experience in the ready mix industry to offer his take on pressing challenges facing us and the critical need for innovation to meet those challenges.

Lastly, we turn to the Winter 2025 issue and Executive Vice President, Strategic Operations, Brian Killingsworth's deep dive into the Build With Strength program: where it's been, how it arrived there, challenges to its existence as a key NRMCA member benefit and where it's going. If you missed this when it hit your mailbox or inbox a few weeks ago, we urge you not to go 0 for 2. And our last Best of 2025 selection is the Enviroscene column. Ever outspoken columnist Doug Ruhlin proclaims his Top 12 best practices you should follow to make sure you survive an inspection without a violation.

As always, thank you for being a reader of Concrete InFocus. We're already planning the Spring 2026 issue which we hope will be met with your approval. Meantime, all of us here at NRMCA wish you the best of the holiday season and a happy and healthy start to the New Year.

Frank Cavaliere can be reached at fcavaliere@nrmca.org.

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A Bold Agenda

Jeannette Munroe and Brian Lemay

With a new year came a new and bold agenda for learning and development at NRMCA. In the first week of January, the annual course calendar debuted, announcing courses, dates and locations for all in-person events in 2025. While learners will see many familiar and favorite NRMCA courses, viewable on the NRMCA website under the Learning and Development tab, there are some new features to the programs.

These features include schedule adaptations for the convenience of learners, the revitalization of some course designs and curricula, and innovations to the classroom learning experience. These changes were initiated in response to member feedback and incorporated to bring more learning opportunities to members with a focus on practical application of new knowledge and skill at work.

Semester Series

Among the more notable highlights is the introduction of the Semester Series. With this new approach, the majority of NRMCA courses will be offered during two, week-long semesters: Spring semester the week of May 5 in Fort Lauderdale, Florida and Fall semester the week of Nov. 17 in Dallas.

Why the change? Last fall, through surveys, focus groups and live sessions, the learning and development team launched a voice of the member initiative to better understand what members need, want and expect from NRMCA's learning programs. The Semester Series was partly designed in response to the frustration members shared when unable to register for courses that quickly and routinely sell out. Publishing the full course calendar in January gives members ample time to plan their learning agenda and register for courses, hopefully before they sell out.

More Courses and More Seats

On the topic of selling out: NRMCA has increased course offerings and course capacity so much that some courses will be offered twice as many times this year than in 2024, providing members more than 200% of prior years' enrollment capacity.

Bundle and Save

In each Semester Series, seven NRMCA courses will be offered throughout the week at the same location. With this format, learners may register for more than one course in a week, earning discounts when registering for multiple courses in a semester. They'll have the time and opportunity to design their own professional development plans while preparing their travel and training time arrangements more conveniently than before.

Networking at its Best

Members have long been interested in more opportunities to

network with industry colleagues. The Semester Series provides an unprecedented chance to interact with a diversity of colleagues from around the country who are working in similar, and different, roles. One byproduct of the Semester Series is the unprecedented exchange of ideas and expertise between colleagues in a setting entirely dedicated to learning, development and personal growth.

Learning Experience

Scheduling isn't the only change we've introduced in 2025. Learners in many NRMCA courses may also notice more focus on relevant tools, templates and techniques, and fewer academic-style exams. This approach is shaped by the belief that learning is most durable when it is practiced and applied, and most transferrable to the workplace when it is scaffolded through tools and templates.

We also believe that learning is enhanced when attendees actively participate in the classroom. Simple changes like classroom setup – tables of small teams versus schoolhouse style rows – make learning more social. Combine that with interactive content delivered via iPads versus printed binders and a familiar course can look and feel quite different, and novel, to a learner.

New Events

But not all courses will look familiar. Two longstanding programs that have faithfully served the membership for decades will be reimagined into entirely new formats. Developing Industry Leaders will return this spring from a year-long hiatus, still recognizable but distinctly different from its predecessor. Finally, the Certified Concrete Sales Professional program (CCSP) will sunset this spring and re-emerge as a dynamic two-day Sales Symposium in Salt Lake City in December.

Instructional Techniques

Finally, in an effort to diversify our faculty and offer more instructional experiences, expertise and voices, NRMCA will host a faculty development workshop during Spring Semester in May. We are recruiting faculty for all courses and all domains of expertise. If you are interested in becoming an adjunct faculty in one, some or all of our courses, please contact Jeannette Munroe.

Guiding Principles

We are designing and building a new agenda for learning, guiding by a simple belief: a quality learning experience should equally build the knowledge, skill and confidence of the participants. If we can accomplish this in each learning engagement, members will derive maximum value from the time, investment and trust they commit to NRMCA. We believe it's a worthy pursuit and look forward to seeing you in a classroom this year.

NRMCA Senior Vice President, Learning & Development, Jeannette Munroe can be reached at jmunroe@nrmca.org or 703-706-4864.

Building the Future – Industry Perspectives on Concrete's Sustainability and Resiliency

Kevin Lawlor, Chief Political Officer, DDC Public Affairs

NRMCA, through its Build With Strength initiative, promotes concrete's superior durability and resiliency while reducing environmental impacts through communication, advocacy, education, like the roundtable event pictured here, and design assistance. (Photo courtesy of Lionel Lemay, NRMCA).

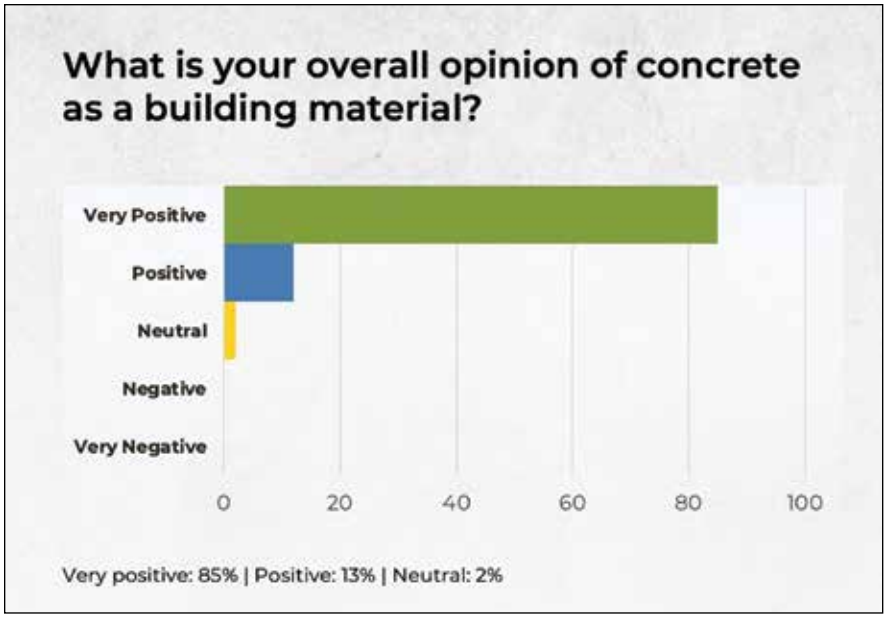
PHOTO COURTESY OF LIONEL LEMAY, NRMCA

Concrete has long been the backbone of modern construction. From towering skyscrapers to disaster-proof homes, its reputation for durability and strength makes it indispensable in the building industry. But as the world faces mounting challenges, from climate change to natural disasters, concrete's role is being redefined. Today, the industry is tasked with solving a unique puzzle: How can it balance the need for sustainability with the growing demand for resiliency?

To explore this complex question, earlier this year NRMCA and its Build With Strength program commissioned DDC Public Affairs to conduct a comprehensive market survey of industry professionals. This survey aimed to capture the perspectives of key stakeholders in the industry, including developers, engineers, architects and sustainability experts. Through a combination of phone interviews and e-mail surveys, the study assessed opinions on concrete's advantages, its environmental impact and its role in disaster mitigation. The findings reveal not only the material's strengths, but also the challenges and opportunities ahead for the concrete industry.

This article will dive into the study's results, highlighting key

Kevin Lawlor and Emma Winstead of DDC Public Affairs present Build With Strength market survey results to NRMCA's Concrete Promotion Committee on March 5, 2025. (Malachy Joyce, NRMCA).



insights into concrete's evolution to address both resiliency and sustainability. From its unmatched strength in natural disasters to its potential to lower its carbon footprint, concrete is transforming the way we build in a rapidly changing world.

Resiliency in Action: Concrete's Role in Disaster Mitigation

Concrete's unique characteristics have long made it the material of choice for builders, architects and engineers. Its unparalleled strength and durability allow structures to withstand natural disasters like hurricanes, earthquakes and wildfires. According to the survey, 96% of respondents believe concrete provides durability and resiliency unmatched by other building materials.

96% of survey respondents indicate they believe **concrete provides durability and resiliency to withstand natural disasters compared to other building materials.**

Concrete's resiliency goes beyond its ability to withstand the elements; it plays a vital role in reducing long-term costs associated with disaster recovery. Structures built with concrete can better resist hurricanes, earthquakes and fires, protecting communities and minimizing damage. A respondent emphasized, "I would like to see more builds with concrete because it is more economical overall, more resilient in natural

77% of survey respondents perceive **concrete's innovation and progress toward lowering its carbon footprint positively.**

disasters like fires or hurricanes, and I do not see a good, sustainable way to continue building with lumber."

One significant area of opportunity is hazard mitigation. Investing in concrete-based infrastructure can reduce the devastating economic and social impacts of natural disasters.

The survey's findings reflect this sentiment, with stakeholders overwhelmingly highlighting concrete's ability to provide peace of mind during uncertain times. By prioritizing disaster-resilient construction, the industry can meet the growing demand for structures that stand up to nature.

Sustainability: Reducing Concrete's Carbon Footprint

As the world pushes for greener solutions, sustainability remains a top priority for the concrete industry. While its production process has historically been associated with high carbon emissions, the industry is making strides to address these concerns. 85% of respondents hold a very positive opinion of concrete as a building material and much of this positivity stems from the progress being made in sustainability.

Innovations such as carbon capture technologies, low-carbon cementitious materials and alternative binders are transforming how concrete is produced. Many respondents emphasized the need for more education and awareness about these advancements. An industry leader who specializes in the reduction of embodied carbon stated, "More educational opportunities or resources would be helpful. Suppliers need to be educated on new mixes and procedures."

NRMCA and Build With Strength play a critical role in this effort. 93% of respondents noted that information provided by these organizations has increased their knowledge of concrete innovations, underscoring the value of education in changing perceptions. Highlighting case studies of sustainable concrete projects and showcasing measurable progress toward carbon reduction goals will help bridge the gap between innovation and implementation.

Challenges on the Road to Progress

While the survey paints a promising picture, it also reveals key challenges the industry must overcome. Among the most significant hurdles are rising costs, funding limitations and labor shortages. A sustainability expert shared how implementing low-carbon concrete solutions can be complicated: "With the lower carbon concrete and the longer drying time, it can be difficult to convince designers and engineers to implement this as a solution to the build. There is also the uncertainty related to the cost."

In addition to these operational challenges, the survey highlights lingering misconceptions about concrete's sustainability. While 77% of respondents view the industry's innovation positively, 23% remain skeptical about its ability to lower its carbon footprint. Managing these concerns requires transparency, continued education and real-life success stories that demonstrate concrete's potential to balance sustainability with resiliency.

Another challenge lies in the industry's messaging. Stakeholders expressed a desire to see more pro-concrete narratives that emphasize its strengths without directly criticizing alternative materials.

The Need for Workforce Development

Beyond sustainability and resiliency, the concrete industry faces a pressing need to address labor shortages. As one respondent noted, "The biggest challenge is people. They need to do the work, to drive the trucks, to do quality control, and whatever other jobs may need to be done." Training programs focused on skilled labor and education

93% of survey respondents indicated the **information provided by BWS and NRMCA has either strongly or somewhat increased their knowledge of concrete.**

about innovative materials and techniques are essential to meeting future demands.

Concrete's evolution toward sustainability also requires buy-in from architects, engineers and developers. The longer drying times and higher costs associated with some low-carbon solutions can make it challenging to convince stakeholders to adopt them. By providing training, resources and tools, including cost calculators and benchmarking studies, the industry can demonstrate the long-term economic and environmental benefits of sustainable concrete solutions.

Building Strength for a Sustainable and Resilient Future

The survey findings reveal a clear path forward for the concrete industry: balance sustainability and resiliency to meet the demands of a changing world. Concrete's ability to withstand natural disasters makes it an essential material for protecting lives and property, while ongoing innovations aim to reduce its environmental impact. By addressing misconceptions, investing in education and showcasing success stories, the industry can position concrete as the ultimate solution for sustainable and resilient construction.

One respondent summed it up, "Everything done over the past 10 years has helped to make concrete more competitive." This sentiment reflects the industry's progress in overcoming challenges and embracing innovation.

In the end, it's not just about building structures, it's about building strength and security for the future. By embracing this dual mission, the concrete industry can rise to the challenge of creating a world that is both sustainable and resilient.

What's in a Name?

Mike Ireland
President, CEO,
Portland Cement Association

Shakespeare asked, "What's in a name?" For U.S. cement manufacturers, the answer is "everything."

I'm proud to be writing you today as the soon-to-be president and CEO of the American Cement Association. It's great to be able to say that.

On May 7 at the 67th IEEE-IAS/PCA Cement Conference in Birmingham, Alabama, the Portland Cement Association announced it will soon be renamed the American Cement Association (ACA). We felt the conference was the appropriate place to reveal this, as the event is truly international – and we wanted to tell the world about it!

I know I don't have to explain to this audience why our association has chosen to rebrand. Everyone working in this industry is well aware of how different things are today compared to 109 years ago when the Portland Cement Association was founded. From the materials our member companies produce, the objectives we advocate for on Capitol Hill and the overall goals this association's members have set for themselves…we've come an incredibly long way since 1916.

To be frank, identifying ourselves as the Portland Cement Association today is essentially inaccurate, in important and undeniable ways. The longer we hold on to that particular name, the more imprecise it has become with time.

Portland cement was the only game in town for decades. But now, as you know, lower-carbon cement is in demand and fast becoming the cement of choice. Aside from all 50 state Departments of Transportation approving the use of Portland Limestone Cement last year, blended cement consumption has grown more than tenfold since 2021 and now accounts for more than 60% of total cement consumed in the U.S.

The "portland" in Portland Cement Association has also become problematic as it unsurprisingly caused many people unfamiliar with the industry to assume our association represented cement manufacturers in the Portland, Maine or Portland, Oregon, areas. We have no doubt that some top-tier media passed on publishing our association's statements as they assumed it only spoke the voice of a few, as opposed to voicing the concerns and positions of cement companies throughout the U.S.

Despite the fact that this association celebrated its first anniversary when Woodrow Wilson was president, I think the new name will make the American Cement Association feel 109 years young. Still, of course, all the good things that come with age are in check: we're certainly wiser. We've learned from experience, which has given rise to our association's strength and trust in our decision-making. It was undebatable. Our Board of Directors unanimously agreed it's high time for this name change to happen.

They also overwhelmingly approved the association's official slogan: "Sustainable cement for resilient concrete." Board members believe it represents the start and finish of the essential products cement companies provide to society and NRMCA plays an unquestionable role in that equation.

Abraham Lincoln once said, "Whatever you are… be a good one." In my opinion, words to live by. For the soon-to-be-officially named ACA and NRMCA, words we continue to live up to as an industry.

Mike Ireland can be reached at mireland@cement.org.

Present Actions, Forward Thinking

G. Carlton Golden, Jr.
Chairman,
NRMCA Board of Directors

Before I discuss with you some recent key developments here at NRMCA, allow me to introduce myself to those of you whom I haven't met. I'm G. Carlton Golden, Jr., and I'm the current chairman of the NRMCA Board of Directors. In my day job, I'm the chairman of Builders Supply Company, a CRH Co., based in Bossier City, Louisiana.

If you're like me, your ready mixed concrete company pays a not-insubstantial amount of money each year to NRMCA. And I think it's safe to assume that you'd like those membership dues to be put to good use: to help your company navigate the changing conditions of the industry; meet the challenges of maintaining a stable and effective workforce; and staying on the right side of governmental regulations – among many other things, of course.

I obviously cannot cover everything I'd like to discuss in detail in this limited space, but I can at least give you the highlights of what my colleagues on the Board – in consultation with NRMCA staff – believe are a few key areas you should be aware of. Each of them has direct relevance toward ensuring that NRMCA uses Producer and Associate members' dues effectively.

First, and very briefly, we are working with a consulting firm called McKinley Advisors that is helping us look for shared services opportunities with the American Cement Association, National Stone, Sand and Gravel Association and the National Asphalt Pavement Association. Our organizations share a long history of service to the construction materials industry and to the members who make it successful. Over the last 10 years we have successfully worked with ACA on shared services in financial reporting and HR, saving both organizations time and money. Today, we are exploring a deeper shared services agreement that could strengthen our collective advocacy, streamline operations and enhance the value we deliver to our members.

Next comes the Build With Strength program. This past May, a group of professionals from across the concrete industry led by Henry Batton convened to redefine the future of NRMCA's promotion efforts and the BWS program to increase the usage of concrete in the built environment. During a strategy session, the team identified four key objectives that will guide the promotional program's next iteration. NRMCA staff is now focused on refining these top four tactics under each of these objectives and translating them into clear, actionable plans to execute the workplan.

As Build With Strength continues to compete for market share, our promotional efforts are undergoing a meticulous reassessment focused on delivering greater value to NRMCA members *(please see NRMCA's Brian Killingsworth's column on page 11 for more details)*. A strong and clearly articulated long-term vision is essential, ensuring NRMCA members have a clear understanding of our promotional efforts to ensure Build With Strength represents the benefits and use of concrete in the built environment.

NRMCA remains dedicated to building on its strengths and momentum in advancing this important initiative. And the Board will discuss and vote on this program at its next meeting, scheduled for October 10 in Kissimmee, Florida, during ConcreteWorks 2025.

The third item I'd like to tell you about is NRMCA's Strategic Plan. You should know that a working group led by my industry colleague Scott Brewer and comprised of stakeholders from across the Association and staff has made significant progress in crafting the plan that will guide the Association from 2026 through 2029. Scott's team has synthesized hundreds of insights and feedback gathered from NRMCA members, industry leaders, state affiliates and staff experts into three key goal statements which further the Association's Mission, Visions and Values, and focuses on our People, Industry and Members.

- People: Attract, strengthen and sustain the concrete workforce;
- Industry: Lead industry growth by positioning concrete as the material of the future; and
- Members: Drive member success by elevating advocacy and amplifying value.

The Strategic Plan Development Team is gathering more member feedback around the goals; sharing details around measurable objectives designed to further these goals and working with NRMCA committees to develop the tactics needed

for implementation. I encourage all members to join in this discussion.

If you are interested in participating, visit NRMCA.org and search Strategic Planning to access the draft plan, the report of the Strategic Plan Development Team and to join one of the scheduled feedback sessions.

Finally, NRMCA is also tackling a long-needed update of its bylaws. Specifically, a Bylaws Update Working Group has been established to review and recommend revisions to NRMCA's governing documents. Comprised of Scott Parson, Rodney Grogan, Tim Becken, John Carew and Pete Lyons, the group is focused on ensuring the Bylaws reflect the evolving needs of the Association and its members. Key areas under review include improving meeting effectiveness, refining voting procedures, evaluating the structure of the Board and Executive Committee, strengthening leadership succession planning and enhancing overall member engagement. The goal is to position NRMCA for sustained success in an ever-evolving industry.

Concrete Solves Today's Building Challenges:

Five Challenges Concrete Solves

Brian Killingsworth, NRMCA Executive Vice President, Strategic Operations

Across the built environment, the conversation is shifting. Our experience leads us to conclude that owners, architects, developers and policymakers are less concerned about what buildings are made of and instead are asking how they perform. In this era of increasing natural disasters, material volatility and affordability pressures, NRMCA's Build With Strength (BWS) campaign is evolving to meet a simple but transformative mission: To show the world the challenges concrete solves.

From Awareness to Advantage

Since its inception, BWS has elevated concrete's role in building safety, durability and sustainability. The campaign helped change the conversation around resilience by demonstrating that concrete buildings can withstand fire, flood, wind and time better than most alternatives. Today, BWS is expanding beyond awareness to align with NRMCA's broader promotion strategy, integrating communications, technical services and advocacy under one unified purpose: positioning concrete as the solution to the toughest challenges facing modern construction.

Let me emphasize: BWS is not ending. In fact, we believe it's entering its most impactful phase. Our goal is to no longer simply tell people where concrete can be used; we're showing them why it's indispensable when performance matters most.

CHALLENGE 1: Resilience as a Design Standard

Hurricanes, tornadoes, wildfires and floods are redefining how communities think about risk. Concrete buildings are proving essential for long-term resilience, from storm-resistant schools in the Gulf Coast to wildfire-safe housing in California. The National Institute of Building Sciences' Multi-Hazard Mitigation Council continues to demonstrate that every dollar spent on resilient construction can save up to $13 in post-disaster recovery costs. Strength, non-combustibility and the ability to maintain structural integrity during catastrophic events are increasingly being written into building codes and insurer policies. These codes and policies must change the minimum expected requirements to better mitigate risk. Taking on the cost to rebuild entire communities after a disaster is no longer feasible, so stronger codes are necessary to help communities return to functionality as quickly and efficiently as possible.

CHALLENGE 2: Affordability

In a period of rising construction costs, concrete is becoming a cost-control tool. Innovative forming methods such as Insulating Concrete Forms (ICFs), tilt-up construction and concrete masonry units allow for faster, more efficient builds with long-term operational savings. Developers are rediscovering that first-cost comparisons tell only part of the story, especially when insurance, maintenance and energy efficiency are considered over a building's lifecycle.

Data and analysis at MIT's Concrete Sustainability Hub clearly indicate that cement-based building solutions have both economic and environmental lifecycle advantages over other building types. In fact, the MIT CSHub developed tools that provide sustainable strategies during the early design stage which can save users time when building and modifying detailed models.

These tools can recommend a range of optimal attribute values to users, allowing them to balance design diversity, cost and environmental impact while modifying the workflow to meet their demands. MIT reports that following recommended attribute features and design solutions can help save approximately 10% on cost and approximately 20% on the carbon impact on average. For a medium-sized office building, these savings could total more than $6 million over 50 years.[1]

CHALLENGE 3: Sustainability with Accountability

The cement and concrete industries' decarbonization journey is well underway. Through the American Cement Association's Roadmap to Carbon Neutrality and NRMCA's Environmental Product Declaration (EPD) program, ready mixed concrete producers are documenting and reducing embodied carbon across

their supply chains. Every EPD tells a story of a producer who's measuring what matters and finding ways to minimize impact through optimized mixtures, SCMs or emerging technologies like carbon mineralization. Numerous plants nationwide now publish EPDs, proving that transparency is no longer optional, it's a market advantage.

NRMCA is also leading the way with an update to the concrete Product Category Rule (PCR). Revisions and the technical review have been completed for the PCR. It is anticipated that the revised PCR will be published at the end of 2025. Additionally, the concrete benchmarking report will be updated. NRMCA is targeting publication in the first quarter of 2026. We expect up to 18 subregions to be published in this version in addition to the eight regions currently used in the benchmark report. With these tools, the concrete marketplace is poised to demonstrate how low-carbon materials can be included in any project.

CHALLENGE 4: Performance Under Pressure

From design flexibility to long-term service life, concrete is helping builders and owners meet the pressures of sustainability certifications, performance-based codes and long-term ROI requirements. Contractors are increasingly selecting concrete systems for speed of construction and predictability, two qualities that reduce project risk in an era of volatile supply chains. *(See the Innovations in Building article in this issue for more about how hybrid systems can meet future performance demands.)*

A Unified Message Moving Forward

As BWS becomes an integrated part of NRMCA's core promotion program, it will link with state affiliates, regional promoters and allied associations to tell unified stories that connect local innovation to national impact. The focus is clear: demonstrate how concrete solves real-world problems. Concrete has always been strong; our goal now is to make sure people understand that its strength isn't just physical, it's economic, environmental and societal. We "Build With Strength" because what we build must last.

Brian Killingsworth can be reached at bkillingsworth@nrmca.org.

1. *Early-Stage Building Lifecycle Optimization of Cost & Carbon Impact*, MIT CSHub Research Brief, Volume 2021, Issue 3 (https://cshub.mit.edu/files/2025/06/0421-LCA-Brief.pdf).

How to Survive an Environmental Inspection at Your Concrete Plant

Douglas Ruhlin

Environmental inspections by your state's environmental agency or the federal Environmental Protection Agency are a fact of life in the ready mixed concrete industry. They may be routine, complaint-driven or follow-up inspections, but the bottom line is the same: inspectors show up expecting to find your facility in compliance. How you prepare – and how you conduct yourself during and after the inspection – often makes the difference between a clean inspection report and a violation that can cost you money, time and reputation.

Throughout my years, I've seen and guided a lot of concrete producers through environmental inspections. We've seen what works, what doesn't and what gets companies in trouble. The good news? With the right preparation, you can dramatically reduce your risk.

Here are 12 best practices you can and should follow to make sure you survive your inspection without a violation:

1 Get Your Paperwork in Order

This is a top priority, since your first line of defense is your records

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and documentation. Inspectors nearly always begin with records. If they're in great shape, organized, present and readily accessible to someone who knows what they have and need, then that's more than half the battle. Usually, that sets the tone for a great inspection outcome. Conversely, not having your records or documents present, accessible or organized is the first (and often clearest) sign that you and your concrete plant are probably not in compliance. That means Stormwater Pollution Prevention Plans (SWPPP), Spill Prevention, Control and Countermeasure Plans (SPCC), air permits, discharge monitoring reports, inspection reports, annual certifications, waste manifests and training records must be current, accurate and immediately accessible.

Keep everything in a central location, such as a file cabinet or a well-organized digital file. If it takes you 45 minutes to find a training log, you've already created suspicion.

2 Keep Training Records Up to Date

Inspectors often ask: "Who's trained and when?" Each employee with environmental responsibilities – whether operating a loader, managing the washout pit or handling fuel – should have documented training. Records should be signed, dated and refreshed annually. Don't just check a box; make training meaningful so employees know how to handle real-world scenarios. Oh, and that training should include how to be prepared for an inspection, what inspectors look for and want, and how employees should react when an inspector visits the concrete plant.

3 Conduct Routine Self-Inspections

Waiting for your inspector to show up unannounced (and often when the plant is busy or not fully staffed) is not a winning strategy. Set up regular, documented inspections of your own facility at least monthly or quarterly. Don't just go by "what my permit requires," do what's best for your concrete plant and your company. Walk the site with a checklist: stormwater controls, dust suppression, chemical storage and housekeeping. Correct problems immediately and note them in your records. Inspectors are more forgiving if they see issues identified and corrected internally.

4 Keep Your Plant Clean and Orderly

Housekeeping, housekeeping, housekeeping! Yes, appearance really matters! A neat, well-kept facility conveys that you care about compliance. Trash, oil-stained pavement, leaking drums and poorly managed washout pits send the opposite message. Sweep up cement dust, manage aggregate piles and keep the yard free of debris. A clean site not only reduces environmental risk but also sets the tone for the inspector's entire visit.

5 Keep Your SWPPP and SPCC Current and Up to Date, Always!

Too many producers let their stormwater or spill plans collect dust. Inspectors know this. Review your SWPPP and SPCC at least annually or whenever site conditions change. Are your maps current? Are BMPs (best management practices) still accurate? Are responsible staff listed by name? Nothing undermines credibility faster than a plan that doesn't match reality.

6 Label and Manage Containers Properly

Every container on-site, whether a drum of admixture or a five-gallon bucket of solvent, should be labeled, sealed and stored properly. Unmarked, deteriorating or leaking containers are low-hanging fruit for inspectors. Store chemicals under cover, on secondary containment where required, and keep inventories updated.

Here at Resource Management Associates, we even go so far as to direct our clients to clearly label water tanks at a concrete plant (since in an emergency, someone unfamiliar with your plant, like a local firefighter, might mistake that big tank for a fuel tank and stand back as your plant burns down!). Know this: no one ever got a violation for having too many containers, drums and tanks properly and clearly labelled, but violations are given regularly in the concrete industry for poorly or unmarked containers.

7 Know Your Permits and Their Limits

Concrete plants often juggle multiple permits: stormwater, air, wastewater, solid waste and fuel storage. Don't just file these away; understand the limits and benchmarks they set

and be in touch with your progress. For example, do you know if your NPDES stormwater permit monitoring results have been in compliance or how they're trending? Track them and all other environmental performance data. Whether it's fugitive dust, pH levels in stormwater or gallons of oil stored on site, know your thresholds and ensure you're not exceeding them. Inspectors will ask and ignorance is no excuse.

8 Assign and Empower an Environmental Point Person

Every facility should have a designated environmental lead for the plant, someone who owns compliance, coordinates training, maintains records and greets inspectors. That person doesn't have to be someone always present at the plant, but it must be someone with authority and knowledge. And it can't be someone who has to jump in a car a few hundred miles away and speed to the site to meet with your inspector during an unannounced visit (and most inspectors won't wait long and will lose patience). Nothing creates more problems than five different employees giving five different answers to the inspector's questions.

9 Practice an "Inspection Drill"

Just like safety drills, run a mock inspection. Walk through what happens when an inspector shows up: Who greets him or her? Where does he or she wait? Who provides documents? How do you escort him or her around the site? Practicing this process reduces panic, keeps messaging consistent and prevents accidental admissions or missteps.

10 Control the Tour

An inspection starts (or should) with a meeting at your starting point (plant office?) between the inspector and the designated plant representative. At that point, ask for identification. We've seen too many times when concrete plant operators will let the wrong person onto a plant at his or her own peril, such as some third-party group representative who's probably not looking to buy concrete.

Get a name, contact information and keep a record of the date, time and weather conditions as well as the purpose of the inspection. During an inspection, always escort the inspector. Don't let him or her wander off alone. Stay professional and cooperative but guide the route to highlight your strong points while addressing potential problem areas proactively. If they see an issue, don't argue – acknowledge it, explain corrective actions and move on.

11 Take Notes and Mirror the Inspection

As the inspector takes notes, you should too. If he or she takes a picture, you take a picture. If he or she asks a question, write it down. This parallel recordkeeping helps you track concerns, anticipate findings and build your own file for follow-up. Too often, companies forget what inspectors focused on until the violation letter arrives weeks later. And when the inspection is over, write a clear, coherent summary of what happened during the inspection.

12 Follow Up Promptly and Thoroughly

The inspection isn't over when the inspector leaves. If you receive a verbal observation or a written request, respond quickly and completely. Provide requested documents within deadlines, correct deficiencies and document those corrections. Regulators respect facilities that act decisively and transparently after an inspection. Ignoring requests or dragging your feet almost guarantees escalation.

Bonus!

OK, here's a bonus practice for you to use. It's "be ready at all times." This is critical. When you get a permit from a government regulatory agency, the fine print of the permit gives the regulatory agency the right to conduct site inspections for compliance purposes, usually without prior notification to the plant. So, you should always operate as if someone is about to walk onto your site for an inspection. If you've got your program in order, your site looks great and you're ready at any time for an inspection, then you have nothing to fear and you most likely will pass with flying colors.

Surviving an environmental inspection isn't about luck; it's about preparation, professionalism and consistency. The best facilities operate as if every day is inspection day.

Bringing It All Together

Surviving an environmental inspection isn't about luck; it's about preparation, professionalism and consistency. The best facilities operate as if every day is inspection day. They maintain records, train staff, keep their sites clean and approach compliance as part of daily operations, not a once-a-year scramble. Concrete producers that adopt these practices don't just avoid violations, they gain peace of mind, stronger community relations and more resilient operations. Inspections will happen; it's only a matter of when. The choice you control is whether you're ready.

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