

Virginia Ready-Mixed Concrete Association Newsletter

June 2014

Alkali Reactivity – Identifying, Testing & Awareness

By Ann-Germaine Danz, Director of Industry Services

Representatives from suppliermember Luck Stone gave an informative presentation to the Hampton Roads Promotional Council on alkali-silica reactions, better known in the industry as A.S.R. Alkali-silica reactions fall under the more general category of alkaliaggregate reactions that may occur in concrete or mortar. These chemical reactions take place between alkalies (sodium and potassium) from portland cement or other sources and certain constituents of some aggregates. Geologist Bruce Faison, PG, unpacked the reasons why A.S.R. occurs in concrete and identified the warning signs of reactive aggregates; John Hellyer covered preferred testing methods for identifying reactive aggregate.

The Alkali-Silica Reaction

Bruce explained that in alkali-silica reactions, the sodium and potassium alkalies react with certain siliceous (silica-containing) rocks or minerals, such as opaline silica, chalcedony, volcanic glass, or silicious cement (see table,



page 3). Reactive aggregates containing certain forms of silica react with alkali hydroxide in concrete to form a gel. This gel absorbs water from the concrete mix or the surrounding environment and swells. Expansion of the gel as it takes on water and increases volume induces pressure, resulting in damage to the finished concrete in service. It is important to note that not all silica gel-producing reactions cause destructive swelling.





Damage due to A.S.R. reactions is limited due to measures taken to identify reactive materials, control reactions using

continued on page 3

SAVE THE DATE VRMCA Fall Convention September 7-9, 2014 Hilton Virginia Beach Oceanfront

in the mix
Upcoming 2014 ACI Classes2
Sell It by the Ton: Roller Compacted Concrete (RCC)4
Transportation Opportunities for Hampton Roads
Blue Ridge Council Hears From VRMCA HR Chair7
Is Your Business at Risk for Damages and Civil Money Penalties Based on Violations Stemming from Improper I-9 and E-Verify Procedures?8
Calendar of Upcoming Events9

Visit us online www.VRMCA.com

2014 VRMCA Officers & Directors

PRESIDENT

Jay McNeely

Eagle Corporation

VICE PRESIDENT

Stephen Render

Vulcan Materials

SECRETARY/TREASURER

Robert O'Brian

Lynchburg Ready-Mix

EXECUTIVE DIRECTOR

Douglas Easter

Easter Associates, Inc.

PAST PRESIDENT

Bob Chandler

Chandler Concrete of Virginia Inc.

DIRECTORS

Mark Bundy

Branscome

Billy Chenault

Luck Stone Corp.

Morgan Nelson

S.B. Cox Ready-Mix

Robert Sells

Titan Virginia

Jim Simons

Capital Concrete Inc.

Jeff Slagle

Chaney Enterprises

Genevieve Walker Switzer

T&W Block Inc.

Tony Wilt

Superior Concrete

Virginia Ready-Mixed Concrete Association 250 West Main Street, Suite 100 • Charlottesville, VA 22902 Phone: (434) 977-3716 • Fax: (434) 979-2439 easter@easterassociates.com • www.vrmca.com



Concrete Field Testing Technician Certification Program

Register Now! ... Space is limited to the first 35 registrants!



Upcoming ACI classes:

Virginia Beach Roanoke

Richmond Fredericksburg

Roanoke Bristol

Richmond Harrisonburg

Warrenton

July 8, 9, 10 FULL July 22, 23, 24 FULL

August 19, 20, 21 FULL

September 2, 3, 4 September 23, 24, 25

October 7, 8, 9

October 28, 29, 30 November 18, 19, 20

December 2.3.4

Questions? Contact George Boykin at (434) 906-2186 or email george.boykin@easterassociates.com.

2014 VRMCA Advisory **Council Regions**

Jay McNeely VRMCA Advisory Council Chairman

Eagle Corporation Charlottesville, VA Phone: (434) 971-2686 pjm@eagle-corp.com

BLUE RIDGE

Buddy Murtaugh Jr.

Chairman

Rockingham Redi-Mix Harrisonburg, VA Phone: (540) 433-9128

buddy.murtaugh@conmatgroup.com

Scott Boshart

Secretary/Treasurer Superior Concrete Harrisonburg, VA Phone: (540) 433-2482 sboshart@superiorconcreteinc.com

HAMPTON ROADS

Barb Nelson Chairman

Titan Virginia Ready-Mix Norfolk, VA Phone: (757) 533-7130

bnelson@titanamerica.com

Lee Flemming

Secretary/Treasurer

Chesapeake, VA Phone: (757) 647-9409 edward.flemming@essroc.com

NORTHERN VIRGINIA

Dave Snider

Chairman Vulcan Materials Company Springfield, VA

Phone: (703) 354-7100 sniderd@vmcmail.com

Marc Granahan

Secretary/Treasurer Lehigh Cement Stone Ridge, VA Phone: (703) 618-0735 mgranahan@lehighcement.com

RICHMOND/CENTRAL VIRGINIA
Todd Miller

Chairman Vulcan Materials Chester, VA

Phone: (804) 751-2666 millerto@vmcmail.com

Brad Meyers

Secretary/Treasurer Swope and Associates Richmond, VA

Phone: (804) 4690-5016 bradmeyers55@gmail.com

SOUTHWEST

Sam Woolwine

Chairman Boxley

Roanóke, VA Phone: (540) 777-7623

swoolwine@boxley.com

George Kuhn

Secretary/Treasurer Chandler Concrete Christiansburg, VA Phone: (540) 382-1734

george.kuhn@chandlerconcrete.com

Alkali continued from page 1

Standard	Method	Timeline	Notes	Benefits	Drawbacks
ASTM C289	Rapid Chemical Method	24 hours	Requires chemical reagents and analytical equipment; should be accompanied by a petrographic analysis	Fast results	Potential influence of other minerals may sway on test results, does not properly identify strained quartz and other slow reactors
ASTM C1293	Prism Method	1 year	Potential for results in 13 weeks with modified temperature conditions	Trustworthy results	Long time frame
ASTM C1260	Rapid Mortar-Bar Method	14 days	Reference ASTM C227 for batch weights; ASTM C33 Appendix XII for guidance on reactivity	Fast results	False-positives with marginally reactive aggregates and false-negatives in the presence of deleterious strained quartz

supplementary materials, and thorough testing of aggregate.

Identification of ASR

The reaction presents itself in concrete pavement as surface cracking as a result of the aggregate swelling. Minor cracks begin running perpendicular to transverse or longitudinal joints; these are followed by map cracks at the corner of the slab. As the reaction progresses, cracking continues to present along the perimeter of the slab.

Joints are more prone than the center of the slab to exhibit cracking because the stress due to vehicles is higher, there is more moisture available for the gel reaction, and there is less restraint to expansion. In order to prevent unsightly, damaging cracking of the slab due to ASR, one can utilize the addition of materials meant to prevent or limit the reaction.

Controlling the Reaction

Alkali-silica reactions can be controlled using certain supplementary cementitious materials, or SCMs. When dosed properly, SCMs including silica fume, fly ash, lithium compounds, and blast-furnace slag cement have all significantly reduced expansion due to alkalisilica reactivity. The use of SCMs creates the presence of additional calcium silicate hydrate; this ties up the alkalies in the concrete and reduces its permeability. More is not always better with supplementary cementitious materials. For example, low-calcium fly ash is very

effective, while fly ash with a calcium oxide content above twenty percent starts to have diminished efficiency. Consult ASTM C1567, "Standard Test Method for Determining the Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar-Bar Method)," as a reference when using mitigation mix or supplementary cementitious materials. The dosage of SCMs required to offset reactivity should be verified by testing.

Testing and Standards

John Hellyer, Senior Technical Sales Support Specialist at Luck Stone explained the methods of testing for reactive aggregate. Three standard tests commonly used for A.S.R. are: ASTM C289, "Potential Alkali-Silica Reactivity of Aggregates (Chemical Method)"; ASTM C1260, "Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)"; and ASTM C1293, "Concrete Aggregates by Determination of Length Change of Concrete Due to Alkali-Silica Reaction." These standards evaluate if the concrete will swell excessively or have a large change length over time due to a gel reaction, thus causing cracking of concrete (see table above).

The main drawback of ASTM C1293 is the year-long wait time for results, yet this time frame comes with trustworthy test data. According to recent findings by the International Center for Aggregate Research (ICAR), increasing the reaction temperature from 38°C to 80°C gives the same results for C1293 in as short

as thirteen weeks.

A more rapid test comes in the form of ASTM C1260, with results in about two weeks. Aggregates are determined to be non-reactive by C1260 if there is less than 0.10% expansion in 14 days. Marginally reactive aggregates may give a false-positive reading. Research by ICAR has found that approximately seventy percent of C1260 results tested non-reactive with the longer-term ASTM C1293.

Our speakers informed us that it is a best practice to assume that all aggregate is potentially reactive rather than be surprised by the behavior of the mix after it cures. It was also noted that not all reactions between alkali and silica produce destructive cracking of the concrete in use. Current research and test methods are evolving to advance our understanding of the alkali-silica reaction in order to better prevent failing of concrete pavements.

¹CT-13 ACI Concrete Terminology, American Concrete Institute, Farmington Hills, MI, USA, 2013. (pp.3). 2ASTM Standard C1260,07, "Standard Test Method for Potential Alkali Reactivity of Aggregates," ASTM International, West Conshohocken, PA, 2007, DOI: 10.1520/C1260-07, www.astm.org. 3"Alkali Aggregate Reaction," American Concrete Institute, Farmington Hills, MI, USA, 2014. URL: http://www.concrete. org/TopicsinConcrete/TopicDetail.aspx?id=5&Search=Alkali Aggregate Reaction 4Thomas, M.D.A., Fournier, B., Folliard, K.J., Resendez, Y.A., Alkali-Silica Reactivity Field Identification Handbook, US Department of Transportation, Federal Highway Administration, Washington, D.C. December 2011. ⁵Thomas, et. al. ⁶Kosmatka, S. and Wilson, Michelle L., Design and Control of Concrete Mixtures, 15th Edition, Portland Cement Association, Skokie, IL, USA, 2013. (pp. 80). 7 Kosmatka, $et.\,al.\,^8 International\,Center for\,Aggregate\,Research, University$ of Texas at Austin, Austin, TX. June 03, 2014. URL: http:// www.icar.utexas.edu/. 9ICAR.

Sell It by the Ton: Roller Compacted Concrete (RCC)

By Hessam Nabavi, Director of Industry Services

Roller Compacted Concrete (RCC) was the topic of discussion at the NVCAC June Quarterly Business Meeting. Shawn McCoy, Chief Operating Officer with Center Concrete Corporation in Pennsylvania was our guest speaker.

Mr. McCoy's career started in 1989 with I.A. Construction, which is a heavy highway construction company. In the 11 years that he worked there, Shawn produced asphalt products and was involved in the area of design & development.

In 2001, Shawn began working for Centre Concrete Company as a plant manager. Today he is the Chief Operating Officer. At Centre Concrete his primary duties include producing ready mixed concrete and RCC products. In the past 10 years, Shawn has invested a great amount of time and effort into RCC research and development, studying the placement, cost, life cycle and environmental benefits of RCC, as well as producing mix designs. Shawn is a member of the National Ready Mixed Concrete Association, and he is a participant on the National Ready Mixed Task Force. He also serves as a member of the Promotional Board for the Pennsylvania Concrete Association.

Shawn has been married to his wife Melanie for 30 years. Shawn and Melanie have two sons who are married, and have a beautiful granddaughter.

In his presentation, Shawn briefly touched on the following key elements:

RCC is a zero slump concrete with a very high compressive strength averaging 6000+ PSI in 28 days. This concrete mixture consists of local aggregates, Portland cement and water. Dump trucks transport the RCC mix from the plant to the conventional high density asphalt pavers. The mix is placed in layers 4 to 9 inches thick. It is compacted with steel



drum vibratory rollers. RCC does not require forms, finishing, steel reinforcement or jointing. To enhance appearance and to control cracking, saw-cut joints can be easily applied.

It offers combined economy, strength, durability, speed and ease of placement. It is being used as a paving material that carries heavy loads, for heavy-duty paving projects. It is also being used as a base for conventional pavements.

RCC as a high strength paving material and high rate of placement is often more economical than asphalt (flexible pavement).

Shawn wrapped up his presentation by suggesting that when it comes to RCC, producers should sell it by the ton.

To view Shawn's presentation, please go to http://www.vrmca.com/regions/default.aspx?region=4.

THANK YOU

VRMCA gratefully acknowledges the support of our 2014 Meeting & Convention Sponsors

























PROVIDING HIGH QUALITY REFINED POZZOLAN TO THE MID-ATLANTIC REGION



Available in bulk tanker deliveries, 2000-lb (0.9 Metric Ton) Bulker Bags, or easy to handle 50-lb (22.7kg) bags palletized on 2000 – 3000-lb skids.

For transportation/dispatch: Brannon McGiboney (301) 259-2179

Let one of our Technical Sales Representatives show you how STAR® Refined Pozzolan can improve the quality of your concrete.

Hank Keiper, P.E. 804.380.8078 Tom Wahl, P.E. 540.525.9331

www.sefagroup.com MORGANTOWN STAR® Newburg, MD





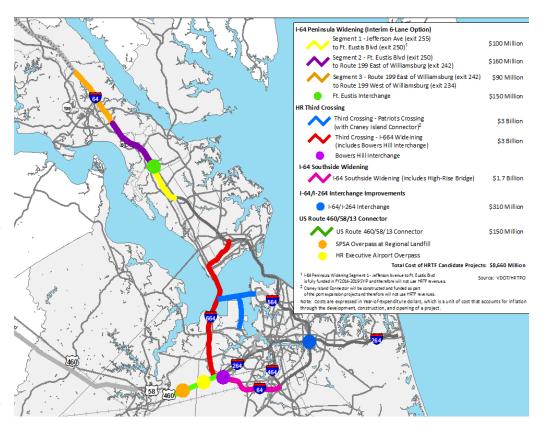
Transportation Opportunities for Hampton Roads

By Ann-Germaine Danz, Director of Industry Services

The Hampton Roads Promotional Council had the opportunity to host Mr. Dwight L. Farmer, PE at our June council meeting. Mr. Farmer currently serves as Executive Director of the Hampton Roads Transportation Planning Organization. He has held many titles over his extensive, 43-year transportation career in Hampton Roads, including program manager for the Virginia Department of Transportation's Southeast region and chief transportation engineer at the Hampton Roads Planning District Commission. Mr. Farmer also teaches transportation engineering courses at Old Dominion University's civil and environmental engineering department. Our presentation focused on new transportation opportunities, specifically on the financing of transportation projects through long-term phasing, bonding, and the newly-created Hampton Roads Transportation Fund.

House Bill 2313, approved April 3, 2013, established the Hampton Roads Transportation Fund. The funds allocated to the HRTF account are to be used

for the construction of new or existing roads, bridges and tunnels in Planning District 23 – Hampton Roads Planning District Commission. Localities included in Planning District 23 include the counties of Gloucester, Isle of Wight, James City, Southampton, Surry and York; the cities of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach and Williamsburg. Construction projects are to be prioritized by the Hampton Roads Transportation Planning Organization based on their capacity to have a large impact at reducing congestion in the region. Mass public transit and passenger rail are not covered by the local HRTF because state funds are already allocated to those modes of transportation. In October 2013,



Hampton Roads Local Component of the HRTF (Millions)											
Revenue Source	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	7-Year Total			
0.7% Local Sales Tax	\$109.00	\$123.20	\$127.50	\$132.40	\$137.70	\$143.20	\$149.00	\$922.00			
2.1% Fuel Sales Tax	\$48.70	\$54.40	\$56.20	\$58.70	\$61.40	\$64.50	\$67.20	\$411.10			
Total New Local Revenue	\$157.70	\$177.60	\$183.70	\$191.10	\$199.10	\$207.70	\$216.20	\$1,333.10			

Source: Virginia Department of Transportation, Revised January 22, 2014

a package of high priority transportation projects were approved to be funded by the Hampton Roads Transportation Fund.

The nine candidate projects include: I-64 Peninsula Widening; Hampton Roads Third Crossing; I-64 Southside Widening (including the High-Rise Bridge); I-64/I-264 Interchange Improvements; and the US Route 460/58/13 Connector. Mr. Farmer suggested that based on his economic evaluations, all of these projects can feasibly be put into motion at the same time. It is the task of the Hampton Roads Accountability Commission to spend money from the HRTF account to build roads, while the HRTPO will still decide the order of how projects are phased into construction. The Accountability Commission is the financial planning wing created by House Bill 1253 and Senate Bill 513; it is comprised of mayors and chairmen from the fourteen localities included in District 23. Non-voting members represent the Commission of Highways, the Virginia Port Authority, the Commonwealth Transportation Board, and the Virginia Department of Rail and Public Transportation. In addition to spending the Fund, the Accountability Commission has the ability to issue bonds and the ability to set toll rates. Some projects will be faster than others due to the varying scale of construction involved and the level of complexity of the existing site. The package of projects boils down to ten billion dollars' worth of investment over the next twenty-five years.

Blue Ridge Council Hears From VRMCA HR Chair

By Bob Nablo, Director of Industry Services

Joyce Kessinger, Director of Human Resources for Boxley, and Chair of the VRMCA HR Committee, recently spoke to the Blue Ridge Council about two topics; the issue of sleep apnea testing for mixer truck drivers, and the applicability of new hours of service regulations for those same employees. As you might imagine, both topics generated quite a bit of discussion and a number of questions.

Kessinger strongly recommended that producer members take every opportunity to seek advice on both of these subjects—from their respective insurance companies with regard to coverage on the sleep apnea question, and from local law enforcement as to how the hours of service regulations are being interpreted. The Blue Ridge Council asked that the VRMCA Safety and HR committees look further into these topics since there seems to be quite a bit of difference of opinion and advice being distributed.

Initial guidelines on sleep apnea testing recommended the testing for certain body types, and these guidelines have included a sizeable number of mixer truck drivers. Many insurance companies currently cover the home or lab testing only under specific circumstances, and the considerable cost could fall back on companies or individuals. Some of the guidelines have come under question and a bill passed and signed into law in October 2013 requires that the Federal Motor Carriers Safety Administration (FMCSA) go through a formal notice and comment rulemaking proceeding when issuing future guidance on sleep apnea. Kessinger believes Certified Medical Examiners, as opposed to other medical providers, may be more likely to require truck drivers with certain body types to be tested for the condition.

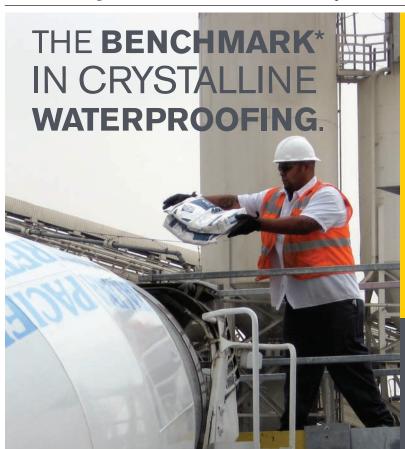
As for Hours of Service regulations, on Friday, June 20, 2014, 1/Sgt. Shawn Gobble of the Virginia State Police confirmed the Department follows all the

FMCSA regulations. His response was to the following information:

FMCSA has now clarified that, effective August 2, 2013, it will no longer enforce the 30 minute break requirement against any driver that qualifies for either of the "short haul operations" exceptions. Drivers that fit into the exemption are:

- All drivers (CDL and non-CDL) that operate within 100 air-miles of their normal work reporting location and satisfy the time limitations and recordkeeping requirements of 395.1(e)(1).
- Non-CDL drivers that operate within a 150 air-mile radius of the location where the driver reports for duty and satisfies the time limitations and recordkeeping requirements of 395.1 (e)(2).

Both of these situations are important to VRMCA members, and the lively discussion at the luncheon suggests there are details yet to be resolved.



Just pour it in your mixer; it's that easy. We provide:

- Step-by-step instruction
- Batch customization
- Field support

Only Kryton protects your concrete and profitability permanently.

Most Specified.
Most Trusted.
Be Sure. Be Kryton.

*The inventor of the crystalline admixture and the only true Permeability Reducing Admixture for Hydrostatic Conditions (PRAH) according to the American Concrete Institute (ACI). Refer to: ACI 212.3R-10 Chapter 15.

www.kryton.com 1.800.267.8280



BE SURE. BE KRYTON.

Is Your Business at Risk for Damages and Civil Money Penalties Based on Violations Stemming from Improper I-9 and E-Verify Procedures?



By John G. Kruchko and Kevin B. McCoy

The Office of Special Counsel for Immigration-Related Discrimination (OSC) within the Civil Rights Division of the U.S. Department of Justice (DOJ) has made it a priority to pursue employers who allegedly misuse or abuse access to the E-Verify program and unlawfully discriminate against applicants and employees in hiring and termination on the basis of citizenship status discrimination and document abuse. Under the Immigration Reform and Control Act of 1986 (IRCA) and the implementing regulations of the U.S. Citizenship and Immigration Service (USCIS), all U.S. employers are required to verify the identity and employment eligibility of newly hired or rehired employees by properly completing DHS Form I-9 within three business days of the first day of employment and prior to the expiration of time-limited DHS work authorization documents. Certain federal contractors and employers doing business in states that mandate participation in the federal E-Verify program must do more than just complete a paper I-9 form -- they must also submit employee I-9 data for verification through the DHS operated E-

Verify data base system. Employers may also enroll and participate in E-Verify on a voluntary basis under current law.

The Rules Governing E-Verify Participation and Use

As a condition of E-Verify enrollment, employers must sign a Memorandum of Agreement with the Department of Homeland Security (DHS) and the Social Security Administration (SSA) committing to limit use of the E-Verify system under the terms of the agreement and applicable regulation. Further, participating employers must agree to abide by the rules for tentative nonconfirmation of social security account numbers and DHS work authorization status, including providing timely personal notice to affected employees of their right to contest the mismatch and refraining from taking adverse action against workers who elect to contest tentativeSSA and DHS non-confirmation results; closing out E-Verify cases in a timely manner; notifying DHS that employees with final confirmation notices have been terminated; and maintaining required E-Verify information and paperwork with related I-9 files.

How OSC Learns of Potential I-9

and E-Verify Pattern and Practice Citizenship Status and Document Abuse Discrimination

Reports of alleged employment discrimination growing out of inappropriate I-9 and E-Verify employment verification procedures can reach OSC through multiple channels. An individual who feels that he was subjected to discriminatory treatment in the verification process based on national origin or citizenship status can file a charge of discrimination, which could trigger a broad investigation of the respondent employer's I-9 and E-Verify practices. OSC could also open an investigation based on an anonymous tip reported on the agency's hot line. For the past several years, OSC has also pursued enforcement leads received from the CIS Verification Division's Office of Monitoring and Compliance and from the DHS Office of Homeland Security Investigation (HSI), a division of Immigration and Customs Enforcement (ICE) responsible for enforcement of the I-9 verification and paperwork rules.

OSC has broad investigatory authority under Section 274B of the Immigration Reform and Control Act of 1986 (IRCA) to identify and deter intentional

discrimination in hire and termination by covered employers based on national origin (employers employing more than three and fewer than 15 employees) and citizenship status (all employers employing more than three employees). Backed by the subpoena power vested in the DOJ Executive Office for Immigration Review Office of the Chief Administrative Hearing Officer (OCAHO), OSC has successfully required respondent employers to produce all I-9 and E-Verify records, application forms, and verification policies and training materials covering extended time periods. The agency is looking for direct and indirect anecdotal and statistical evidence that the employer subjected foreign workers to disparate treatment through practices such as insisting that such workers produce a DHS work authorization document for I-9 and E-Verify purposes and by terminating foreign workers upon receipt of a tentative non-confirmation notice without first giving them timely notice and an opportunity to resolve the original no-match situation.

Should OSC conclude an investigation with a finding of "reasonable cause" of discrimination, the agency would file an administrative complaint against the employer with OCAHO seeking civil money penalties, back pay, compensatory and punitive damages, reinstatement, and other affirmative relief on behalf of identified, aggrieved individuals or one or more classes of aggrieved individuals of unknown identity. Months of pleadings, motions, discovery, hearings and briefing would follow. At the end of these proceedings, should the administrative law judge find the employer guilty of violating Section 274B, the judge could issue an order directing, among other things, that the employer pay civil money penalties ranging from \$250 to \$1100 per violation (in a first offense case) and such other damages as OSC has proved

at trial, along with a directive to rehire the employee.

How to Protect Your Business

The government encourages E-Verify employers to conduct internal compliance assessments to ensure compliance with the privacy, anti-discrimination, usage, and paperwork retention requirements of the E-Verify MOU. To guide employers in measuring the rate of compliance, DHS has developed a detailed 77-point E-Verify compliance check list and encourages employers to track the effectiveness of corrective action measures over time.

Any documents related to such self-assessment audits would be subject to future discovery in the event of litigation with the OSC or other parties, unless protected under the attorney client and work product privileges. As such, it is highly recommended that employers refrain from engaging in conducting E-Verify self-assessments except where performed at the direction of counsel for the purpose of rendering legal advice, with appropriate precautions taken to ensure the confidentiality of all working papers and advice memoranda.

Requesting an E-Verify Assessment

If would like to know how your business measures up under DHS E-Verify compliance standards without creating potentially damaging evidence for future discovery, the FordHarrison Business Immigration team has developed a spotcheck audit protocol for detecting serious I-9 and E-Verify compliance issues. If you are interested in requesting such an audit or have questions about this legal alert, please contact the FordHarrison attorney with whom you usually work or any other member of our Business Immigration team.

Copyright 2014 FordHarrison, LLP

John G. Kruchko is a Partner with the Labor & Employment Law Firm of FordHarrison, LLP in Tysons Corner, Virginia; Kevin B. McCoy is also a Partner with the Firm. An original version of this article was prepared by Louis Britt, a Ford Harrison Partner in the Firm's Memphis office and Katie Parham, a Senior Associate in the Memphis office. For more information, please contact Mr. Kruchko or Mr. McCoy at (703) 734-0554 or by e-mail at jkruchko@fordharrison.com, or kmccoy@fordharrison.com. This article is published for general information purposes, and does not constitute legal advice.

On the Horizon Calendar of Upcoming Events

JULY 8-10, 2014

ACI Concrete Field Testing Seminar and Examination*

Advanced Technology Center Tidewater Community College – Virginia Beach Campus 1800 College Crescent Virginia Beach, VA *PRE-REGISTRATION REQUIRED

JULY 10, 2014

NVCAC Executive Council Meeting

11:30 AM - 2:00 PM Bull Run Country Club Haymarket, VA

JULY 15, 2014

CVCAC Business Meeting

3:00 PM - 4:30 PM American Tap Room Richmond, VA

JULY 16, 2014

SWCAC Business Meeting 8:00 AM - 9:30 AM

The Roanoker Restaurant Roanoke, VA

JULY 22-24, 2014

ACI Concrete Field Testing Seminar and Examination*

Chandler Concrete of Virginia 614 Norfolk Ave SW Roanoke, VA *PRE-REGISTRATION REQUIRED

SEPTEMBER 7-9, 2014

VRMCA Fall Convention

Hilton Virginia Beach Oceanfront Virginia Beach, VA

SEPTEMBER 18, 2014

SWCAC Golf Outing

Ashley Plantation Golf Course Daleville, VA Save the date! More details to come!

Please visit the online calendar for an up-to-date list of events. www.VRMCA.com/calendar



WHEN SO MUCH IS RIDING ON YOUR CHOICE OF CEMENT, MAKE THE **RIGHT** CHOICE

Roanoke Cement has supplied ready-mix producers and the construction industry with consistent, dependable, high quality cement for over 50 years.

A superior product, backed by excellent customer service, the latest technology, and reliable distribution shows our commitment to serve our customers.

When so much depends on your cement, choose Roanoke Cement. Call 800-782-7622 or 540-992-1501 today.

THE **RIGHT** PRODUCT & SERVICE
IN THE **RIGHT** PLACE
AT THE **RIGHT** TIME

ROANOKECEMENT A TITAN AMERICA BUSINESS

The Smart Road bridge, at 175 feet tall, is Virginia's tallest bridge. Approximately 9,647 cubic yards of high-strength concrete were used to construct the 2,000-foot long bridge.