THE AGGREGATES INDUSTRY'S EDUCATIONAL RESOURCE



MARCH 6 – 8, 2018 | HOUSTON, TEXAS GEORGE R. BROWN CONVENTION CENTER

EVERYTHING IS BIGGER IN TEXAS

and the 2018 AGG1 Academy & Expo is no exception.

BIGGER EXHIBITS

Over 48,000 square feet of exhibit space to help your operation improve efficiency, profits and safety.

BIGGER EDUCATION

50+ education sessions focusing exclusively on the needs of the aggregates industry, including processing, operations, safety, community relations, management and more.

BIGGER NETWORKING

With more than 9,000 attendees at AGG1 and the co-located World of Asphalt, this is your best chance all year to network with thousands of your fellow aggregates industry peers.

The only place for everything aggregates. All in one place. All at one time.

Visit AGG1.org for more information.

GENERAL SESSIONS INSPIRE PEAK PERFORMANCE

OPENING GENERAL SESSION



SUNDAY, MARCH 4, 2018 4:30 - 6:30 P.M. Marriott Marguis Texan Ballroom

Featuring keynote speaker MIKE ABRASHOFF

During the opening general session, former naval commander and author of It's Your Ship, Michael Abrashoff, will tell his inspiring story of turning around the worst-performing ship in the Navy. At the age of 36, the Navy selected Abrashoff to become Commander of U.S.S. Benfold. At the time he was the most junior commanding officer in the Pacific Fleet - on a ship that was plagued by low morale, high turnover and abysmal performance evaluations. Few thought that the ship could improve - yet 12 months later the ship was ranked #1 in performance – using the same crew. This session will impart practical and usable ways to take organizational performance to new heights.

CLOSING GENERAL SESSION



WEDNESDAY, MARCH 7, 2018 8 - 9:30 A.M. George R. Brown Convention Center, Ballroom A-B

Featuring keynote speaker THERESA PAYTON

It seems like every day we are hearing about a new major data breach. How do you protect your company's digital data from hackers and insider threats? Theresa Payton, star of the CBS TV series, *Hunted*, will prepare you for success in the ongoing battle against cybercrime at NSSGA's closing general session.

Payton identifies emerging trends and techniques to help combat cyber threats, from the impact of the Internet of Things to securing Big Data. The first female to serve as White House chief information officer, Payton is one of America's most respected authorities on Internet security, data breaches and fraud mitigation. With real-world strategies and solutions, she helps public and private sector organizations protect their most valuable resources. Attendees will hear a proven blueprint to stay a step ahead with practical steps for thinking like the adversary, while managing cybersecurity risk.

Participate in these events by adding on the NSSGA Experience package to your AGG1 Academy & Expo registration.

NSSGA COUNTRY CONCERT NIGHT SAWYER BROWN & LITTLE TEXAS



MONDAY, MARCH 5, 2018 7 – 10 P.M. George R. Brown Convention Center, Ballroom A-B

Included in your AGG1 ALL ACCESS PASS Also available as an add-on ticket.





Join your aggregates industry peers at the George R. Brown Convention Center to reconnect with new and existing business partners. Kick up your heels to the sounds of two award-winning country rock superstar groups – Sawyer Brown and Little Texas – while enjoying Texas-sized food stations and libations from various regions of the great state. This is the "can't miss" networking event while in Houston!

AGG1 ACADEMY

DOZENS OF EXPERT-LED SESSIONS COVER ALL ASPECTS OF AGGREGATES OPERATIONS

OPERATIONS & PRODUCTION

These classes address all facets of plant operations, production, and equipment maintenance, from 101-level courses to the latest technologies, processes and products that aggregate producers are using to produce aggregates and manage their fleets in creative and innovative ways.



AUTOMATION, TECHNOLOGY & SOFTWARE

Automation and advanced technologies help companies improve efficiency, employee safety, product quality, information management, and cost reductions within the aggregates industry. Attendees of these sessions can learn automation basics, discover new ideas and technologies being applied to aggregate production, and find out how emerging technologies are changing the way you do business.



BUSINESS MANAGEMENT & LEADERSHIP

Running an aggregates operation is about more than equipment and processes. These classes focus on the business-side of your operation and professional development, including understanding business and financial principles, dealing with the surrounding community, and ways to market and sell your product.

ENVIRONMENT, SAFETY & HEALTH



These sessions demonstrate best practices and techniques for the aggregates industry to be efficient, safe, healthy and environmentally responsible.

2018 AGG1 ACADEMY PROGRAM

All AGG1 Academy sessions are held at the George R. Brown Convention Center, Level 3.

TUESDAY, MARCH 6, 7:30 – 9 A.M.

📑 T41

Drones, Aerial Data and the Digital Job Site

Whether your goal is to optimize haul roads, analyze the safety of your work site, maintain compliance or track production levels against your project schedules, drones are an essential tool for digitizing and optimizing operations at aggregates sites. Many companies think about drones as a replacement for existing tools, but it is much bigger than that—it is about giving organizations greater visibility across all of their sites, whenever and wherever they need it. As we move towards complete digitization of work across industries, the need for accurate and immediate data that can be transformed into actionable business insights is continually increasing, especially at the enterprise level in the aggregates industry.

🙀 T42

Business Management & Leadership Community Relations: Implementing Educational Programs

Community relations are an important aspect of any operation. As part of these efforts, CEMEX has been actively involved with education in the communities in which we operate. Our sites provide a unique learning opportunity for both students and teachers with several newly-created programs, which include a minerals identification program for fourth graders, a Boy Scout Summer Camp, DIG IT! program and more. Learn about how CEMEX developed and implemented these programs, and how they have helped community outreach efforts and industry awareness.

T43 Conveyors 101

Conveyors are the lifeline to any aggregate plant's productivity. This presentation will review the "Conveyor 101" program that has proven successful at LafargeHolcim facilities across the country. Attendees will gain an understanding of conveyor systems, conveyor belts, their components and how they affect your plant's performance. Get safety guidelines for working on or around conveyors, tips on reducing fugitive material and dust (and solutions to control it), and ideas on how to implement a conveyor inspection and maintenance service program that works for your plant.

Medical & Recreational Marijuana: Will Your Workplace Go To Pot?

About 42% of Americans now live and work in states where medical marijuana has been legalized, and 21% live in states where recreational marijuana is now permitted under state law. The federal government position on enforcement is evolving, and court decisions interpreting protections for medical marijuana workers are yielding some unpredictable results. Newer statutes offer greater worker protections, and related statutes such as the Americans with Disabilities Act can further complicate issues of regulating off-the-job conduct and determining when workers pose a "direct threat to safety" as a result of marijuana use. This session will discuss legal developments, both case law and statutory, implications for workplace safety and enforcement exposure from OSHA and MSHA, policy positioning drug testing as "discipline" against injured workers, and the pivotal issue of how to determine "impairment" versus "use." The presentation will include practical suggestions for crafting legally enforceable policies substance abuse prevention and drug testing policies.

🕅 T45

Taking Ownership of Safety

Discover how aggregates producer Dolese Bros. Co. shifted from a management-driven safety approach to employee-owned safety in order to successfully drive a culture change within their organization. This approach has led to a 70 percent reduction in risky behaviors and 50 percent reduction in worker's compensation costs. Through this case study, Dolese Bros. Co. will show other aggregates operators how they, too, can implement this approach, including lessons learned and helpful resources.

T46

Attracting and Retaining Millennials Without Annoying the Baby Boomers

The workforce in the aggregates industry is changing faster than ever before in its history. The "my way or the highway" Baby Boomers built the industry as we know it today—but it's rapidly changing. 10,000 Baby Boomers retire each day. How companies react to this shift will determine their success over the next ten years. Attracting and retaining a quality workforce of Millennials means breaking through the old ways of thinking and reinventing the work cultures at our operations. Our multi-generational team of industry experts (a Baby Boomer, a Gen-Xer and a Millennial) will explore the best ways to communicate, collaborate and reduce frustrations to create a productive, happy work environment.

🔀 T47

Site Selection

This presentation will focus on the various considerations when evaluating quarry development. As operators continue to use the highest quality veins of virgin aggregates, the financial viability of a site becomes more challenging. We will review the best practices for site analysis and selection to ensure the most cost-effective solution while producing the highest quality end products possible.

🟹 T48

Methods of Underwater Excavation and Transport

Explore past, current, and future methods of extracting and transporting aggregate materials below the surface of bodies of water. The suitability, capital cost and operating cost of mechanical, hydraulic and pneumatic dredging equipment shall be investigated for deposits of varying depth, compaction, gradation, and transportation distance. Both deepening existing deposits and green field sites shall be explored. After attending this presentation, attendees should be able to: 1) Choose the types of dredges and techniques that can achieve the desired production rate; 2) Provide equipment manufacturers or sellers the necessary production, deposit, climate, etc. information for a valid quotation; and 3) Optimally evaluate dredge equipment choices based on initial cost and cost per ton operation. This presentation is suitable for all audiences (operator to owner) with little or no dredging knowledge (beginner).

TUESDAY, MARCH 6, 9:30 – 11 A.M.

T51 Training the Aggregates Worker

Your employees are your organization's most valuable asset—and also your costliest. Training your employees to maximize their success (and the success of your company) is essential, but training adults is not easy. Employees often dread training, which lowers the effectiveness of the training—wasting your time and money. This presentation, based on over 20 years of study, will help aggregates leaders understand how to effectively engage, motivate, and educate their workers to optimize their training results. You will discover techniques to make your training efforts successful and unlock your most valuable resource's full potential.

T52 Crushing 101

This session will give an overview of the various types of crushers and their application, including a review of selection criteria, basic application, and what can be done by the operator to improve performance. By providing an overview of each type of machine and how they work, the attendee can better understand what tool to select for an application and how to set it up for best performance.

T53 New Life for Abandoned Quarries

The century-old Bellwood Quarry in Southwest Atlanta provided gravel to the surrounding Atlanta region for over 100 years, and now that it's at the end of its life, it's continuing to contribute to the city's development by serving as the backdrop for various movies and shows (including the first season of The Walking Dead, The Vampire Diaries, and The Hunger Games: Mockingjay) and helping to address Atlanta's water shortage issues. Mines or quarries are usually scrutinized when they are active as being disruptive to neighbors with truck traffic, blasting operations or even dust in these now developed urban areas. This operation is a great example of how this critical resource for urban development will become a part of Atlanta's water shortage solution and ultimately, the Bellwood Quarry will tie into the planned Westside Reservoir Park - Atlanta Beltline development, allowing all visitors to enjoy the natural beauty of the area and benefit from its historic background.

🕅 Т54

Safety vs. Gun Rights in the Workplace

More than 20 states have enacted "Parking Lot" laws or "Guns in Trunks" laws, which make it illegal for employers to prohibit the possession of firearms in employee-owned vehicles on employer-owned property. Often, these laws constrain employers from taking adverse employment action against employees who lawfully possess firearms in their vehicles. At the same, workplace violence is a growing concern that also may increase duties and liability for employers. This webinar will provide an overview and tips for complying with gun legislation that affects the workplace while still following legal obligations on workplace safety.

What Color is Your Flag? A Visual Approach to Changing Your Safety Culture

This is a roadmap of how one company moved their safety culture from reactive safety measurements to an easily-identifiable system of highly-visible system of proactive safety measures that reinforced their growing safety culture. This system is compatible with almost any culture, and can be expanded to fit new challenges and needs as the safety culture grows. Best of all, the system is easily transferable to any size operation or industry, and costs pennies to create and pilot. Further refinements can be grown in-house, and adapted to almost any existing (or future) technology.

E T56 Plant Mode

Plant Modeling – Planning for Profits in 5 Easy Steps

The root of profitability in aggregates production is plant efficiency—selecting and operating your equipment to produce what is needed, while minimizing waste. Often producers don't plan for their achievable efficiency, and they often reactively adjust their plants after experiencing inventory shortfall or excess. Plant simulation and flow analysis software can be used to proactively calculate optimum efficiency and plan for production based on sales forecasts. This presentation illustrates the easy five-step process employed by the latest universal plant modeling software to help producers achieve optimal efficiency, plan for sales, and ultimately—achieve greater profits. Real-life case study examples drive these benefits home for aggregate producers. Equipment manufacturers and dealers will find this presentation valuable as well, as it discusses recent advances in powerful, universal plant modeling software.



A New Way to Improve Worker Health & Safety Performance

Safety climate or culture have long been buzzwords in potentially hazardous occupations. Many claim safety culture assessments might prevent or reduce work related illnesses or injuries, but there are still flaws with using the results of blanket assessments to link with other on-site indicators of good health and safety performance.

The National Institute for Occupational Safety and Health (NIOSH) tried a different method to analyze safety climate assessment results in an effort to understand what types of organizational and personal factors play a role in workers' health and safety performance and which ones could be modified to produce better safety results. Rather than just providing aggregates companies with a typical "score," NIOSH focuses on which predictors have the biggest influence on workers safety-related decisions at their specific site.

In this presentation we will discuss themes which have a large influence at aggregates sites which were not perceived as such by workers. These revealed gaps in current health safety processes including communication, engagement and ways leader can reduce worker's risk tolerance and increase their sense of control. We will discuss one company's safety climate assessment results and how they chose to focus on areas of risk tolerance, communication and leadership to shift employees' perceptions and behaviors over the course of one year.

TUESDAY, MARCH 6, 2 – 3:30 P.M.

🎀 T61

Aggregates Financials: Everything You Wanted to Know But Were Afraid to Ask

The financial statements are for accountants, right? Yet, many times we think that we have had a good month only to be disappointed by the final numbers. What happened? This class will provide the participants with a working understanding of the financial statements in actual terms that you can understand. From sales to production and inventory, the basic concepts will be covered and you will walk away with an understanding of how the money flows and how the bottom line is calculated.

🎇 Т62

Learn How to Protect Your Contracts and Profits from Fuel Price Volatility

There is continuous unavoidable year-over-year volatility in fuel prices. Fuel prices can and have changed by 70-80% in just a few months. This has made budgeting and bidding on new contracts very hard for companies when trying to factor in fuel costs. This presentation will give your business the financial tools to reduce the impact of fuel price volatility on your margins. This knowledge will help you to stabilize and manage your fuel budget and give your business a competitive advantage to bid under any market condition.



Screening is the critical "cashbox" of an aggregates operation. This course, intended for novice plant design personnel, will present the basic concepts necessary to understand screening operations. Learn about essential items like stratification, separation, bed depth, and the effects of stroke, screen media and their application, amplitude and speed. Attendees will gain tips to help existing screening operations while gaining an understanding for future plant expansions.

🔀 Т64

Conveyors 201: Maximizing Conveyor Performance

There's a big difference between seeing an issue with conveyor performance and truly understanding the issue. Part of gaining that understanding is knowing the specifications of conveyor belt construction, operational forces, transition distances, load zone requirements, and tracking cause and effect. And when you understand and implement industry standards on belt selection, take-up requirements and structural standards, you can maximize performance, reduce the number of trips to the conveyor and avoid costly and potentially hazardous repairs. This interactive class demonstrates how the best of standards are often violated, and how to avoid doing so in order to more accurately identify and rectify belt performance issues.

🕅 T65

Looking Back, Looking Forward: MSHA Enforcement Update and Compliance Strategies

This presentation will review MSHA enforcement trends and developments over the first full year of the Trump administration. Specifically, it will highlight changes implemented through MSHA's Metal and Nonmetal division, which apply to the nation's sand, stone and gravel operators. The session will examine the status of MSHA's rulemaking efforts and any new policy distributed by the agency in 2017 and early 2018. In addition to identifying areas of increased scrutiny by MHSA, the presentation will discuss strategies to maintain compliance and avoid enforcement in these areas. Additionally, the presentation will outline best practices for operators to follow during MSHA regular inspections and accident, fatality or agent investigations. These practices will offer operators real-world procedures to follow in order to protect their companies' interests from excessive or unreasonable enforcement while keeping a safe workplace for their employees.

衬 Т66

Taking Safety to the Bank: Manage Your Equipment for Safety and Profits

Worker safety should be a prominent consideration when choosing plant equipment and upgrading systems. Proactive maintenance programs and plant optimization make your operation run more efficiently with fewer breakdowns, therefore reducing the opportunities for a safety risk, accident or incident due to equipment failure. Additionally, equipment and systems that protect worker safety can also result in cost savings over time. In this session, we'll discuss how to design and select plant equipment and replacement parts in order to make sure you will not experience a premature failure, including the benefits of equipment standardization, cost savings of upgrading your plant, and real-life statistics demonstrating the advantages of plant upgrades.

🕅 T67

Increase Mine Worker Hazard Recognition and Risk Assessment Abilities

Results from NIOSH research show that mine workers at all experience levels differ in their hazard recognition and risk assessment abilities relative to safety professionals. These abilities are critical when performing a workplace examination. To improve hazard recognition and workplace examination ability, NIOSH created the EXAMiner which is a tool that can be used to train mine workers to identify hazards at their workplace and to more systematically assess the risk associated with hazards. This presentation includes a summary of key research findings as well as a demonstration and suggestions for how to incorporate the EXAMiner into your current workplace examination and hazard recognition training plan.

📑 Т68

Aggregate Quality Control Testing 101

Gain a solid knowledge of rudimentary aggregate quality control testing procedures. We'll discuss gradation, -#200, Finus Modulus, specific gravity, absorption and LA Abrasion. This session will also provide a demonstration of how best to store your data and evaluate performance using Process Behavior Measurement (SPC), monitor variability, predict future results and/or the need for change in the production process.

WEDNESDAY, MARCH 7, 10:30 - 11:30 A.M.

👯 W51

Outreach is More Than Just Writing a Check

Sometimes, community outreach seems more like an obligation than an opportunity. But in this day and this age of NIMBVism, the need to build allies is more essential than ever. This session will present examples of some of the most effective—and cost-effective—ways to get involved in your community, including the cost structures and benefits of each effort and how to obtain the most positive attention for your good works. Learn how to get so popular in your community that it will be impossible to close you down.

W52 Ws2 Washing & Classifying 101

As quarries progress into their reserves, operations are processing material with a higher level of clay and silt. While some materials may require only rinsing, others require scrubbing to remove clay and other deleterious materials. Attend this session to gain a comprehensive overview of topics including aggregate washing techniques, maintenance routines, classifying tanks, screws versus screens, troubleshooting common washing problems and the consequences of wrong-sized equipment.

W53 Crushing 301: How to Get the Most Out of Your VSI Crusher

Learn about the physics and function of vertical shaft impact (VSI) crushing. This interactive presentation will cover types of applications, mechanics, different configurations, automation, maintenance and basic best practices regarding the operation of and hazards to your VSI. Through photos, videos and animations we'll discuss ways to optimize your VSI and troubleshoot common issues. Take advantage of more than 55 years of experience with VSI crushers—bring your questions to this session and get solutions!

🜠 W54

The Four Stages of Fines Recovery

Get a comprehensive overview of the four stages of fines recovery, fines handling, water management and water recycling in a typical wet processing aggregates operation. You will hear about methods of fines recovery, benefits of using a fines recovering system, the future of potential environmental regulatory changes and how they may impact fine particle waste and storage.

🚫 W55

Steep Slope Erosion and Sedimentation Control

Hear the case study of how one West Virginia limestone producer addressed slope erosion and sedimentation control despite several unique hydraulic and hydrologic features associated with the steep valley slopes, while taking into account compliance with a NPDES General Water Pollution Control Permit and an erosion and soil control plan.

W56 Belt Convey

Belt Conveyor Safety

Belt conveyors pose risks to workers who work on or around them. They also pose risks to managers and supervisors of those workers. This presentation will offer a "nuts-and-bolts" look at the hazards of belt conveyors and how to protect against them. Learn specific tactics to keep yourself and your employees safe around belt conveyors, including: emergency stop switches and an explanation of what they do and don't do to protect a worker, recommendations for best practices in machine guarding, energy stored in belt conveyor systems, and why standard lock-out/tag-out procedures should be supplemented to improve plant safety.

W57 Making GHS Education Fun!

This training will demonstrate some simple, inexpensive methods you can use to teach chemical safety (GHS) information to your employees. In addition, the skills learned in this presentation can be used to teach nearly any safety/educational material in your plant. The materials needed for success are those found in almost any plant operation of any size: a computer, typical Office programs (WORD, POWERPOINT), and a photocopy machine/printer.



Drilling and blasting are integral parts of the total mining process and affect many down-stream costs. This session will outline the basics of shot measurements, blast design, layout and hole loading required for a safe and efficient blast. An understanding of these steps will increase the chances for a successful blast. Methods for measuring success are also discussed.

WEDNESDAY, MARCH 7, 2 – 3:30 P.M.

W61 The ABCs of UAVs – Key Steps to Get Your Drone Program Off the Ground Legally

Unmanned aerial vehicles (UAVs) and systems are creating exciting new opportunities for companies to scope out, plan, conduct and monitor operations. However, the airspace is now regulated. This session will provide all the background and tips you need to get your UAV program started safely and legally.

W62 Developing Employees from the Ground Up in the Aggregates Industry

As the U.S. Supply of skilled equipment operators continues to decline, aggregate companies have to create innovative training programs to develop the skills of the workforce of tomorrow. Rogers Group took on the challenge of creating a comprehensive Heavy Machine Operator Training Program to develop skills that drive safety, quality and productivity. The presentation will provide details to allow other aggregate producers to create similar programs. In addition, the presentation will provide a candid assessment of the opportunities and pitfalls of implementing such a program.

🔀 W63

Conveyors 301: Lower Your Cost Per Ton and Resolve Operational Concerns

If you've ever had to reprocess an out of spec stockpile, you can understand how important it is to ensure material quality is guaranteed at loadout. This seminar will compare methods of conveying and stockpiling to ensure your material maintains gradation. When should you truck product instead of conveying? Analyzing the type of material, distance, elevation, environment, labor requirements are all part of the equation when determining the best approach for your operation. We will review how two operations reduced their cost per ton and environmental impact when they reduced the number of times they handled product with conveying installations.

🔀 W64

Optimizing Cone Crusher Performance

There are many operating parameters that factor into optimizing cone crusher performance. Matching the crush performance to your desired production needs will force you to analyze various aspects of the installation. We will cover all of the variables of today's high speed cone and help you understand what affects each has on output capacity, gradation and cubicity. We'll cover machine sampling and benchmarking as key ingredients in the optimization process.

🕅 W65

Take the Lead During an MSHA Inspection

Knee-jerk responses to an MSHA inspection can get in the way of creating a supportive safety environment for your team. This session explores a deeper understanding of MSHA regulations and highlights the biggest areas of misinterpretations and misunderstandings. The goal is to go beyond not only satisfying the inspector but also to create a truly safety driven process when MSHA is on site. The team presenting includes legal counsel as well as industry certified safety professionals.

👀 W66

Taking Safety from the Office to the Jobsite: What to Say and Do to Demonstrate Commitment

Every person in an organization has a specific function to get the job done, and yet all are held "responsible for safety." Executives, project managers and supervisors have a particularly wide scope of influence and accountability, so it is critical that they demonstrate commitment through both words and actions. It starts with leading by example, but true leadership goes beyond wearing proper PPE and ensuring others do the same. This keynote focuses on tactical activities to create and sustain a culture of positive safety performance through leadership, communication, training and recognition. Safety doesn't just happen it is built through trust, consistency and accountability. Audience members will learn how to integrate these principles into their daily routines.

🜠 W67

Wet Frac Sand Processing

Wet Frac Sand Processing will focus on specific techniques and equipment used to wash and separate raw frac sand into multiple product stockpiles ready to be conveyed to the dry plant. The integral theme of the presentation will focus on the equipment used to make these wet separations that are generally undersized and not maximized to their full potential. By following a few simple rules and with the right process design, maximum plant efficiencies can easily be achieved which in turn leads to a more profitable business. Fines Recovery and Water Management will also be covered which will reduce the amount of water required to run a wash plant and to minimize the foot print of the overall plant. Through the use of Clarifiers and Filter Presses new technology can completely remove settling ponds from a new or existing mine.

W68

Sales Metrics: Are Your Measurements Driving the Right Behavior?

By using the right metrics, both quantitative and qualitative, a company can systematically build a solid customer base that minimizes its risk while maximizing its overall profit. This session will discuss a variety of metrics that can be used to measure sales as well as the strengths and weaknesses of each. You'll learn how these metrics support the sales process and lead to overall profitability. Some of the metrics will include: Average sales price (ASP), volume, revenue, margin, customer contacts, and win percentage.

THURSDAY, MARCH 8, 7:30 - 9 A.M.

📑 TH41

ROI of Advanced Technology for Optimizing Sales and Operational Planning

Technology is cool, but how does it help you make money? In this session, we will look at a few different angles for quarry operations professionals and process improvement managers to evaluate the benefits and ROI of advanced technology on their business. Bridging the gaps between sales and operations is essential for ensuring effective delivery to the customer. Learn which costs can be affected by today's latest technology, what benefits to expect, and how to calculate the impact for your own specific operation.

👯 TH42

Proactively Identifying and Planning for Risk in the Aggregate Industry

The aggregates and construction industries are highly competitive and time-sensitive industries. Delivering construction materials and projects on time and on budget is hard work without worrying about risks to your operational well-being. Those of us whohave spent time in the aggregates industry know that you cannot afford any significant unplanned events and still reach financial and productivity goals. So we cannot afford to ignore risk in hope that it will not affect our day-to-day operations. We will discuss Legal, Environmental, Water Management, Geological/Geotechnical, and Public Relations risk and how to be proactive and plan now for what could go wrong. Preparing for these situations ahead of time and not having to rely on your crisis management skills will reduce your operational risk and save you time and money.

🚰 TH43

Crushing 201: Attaining The Highest Percentage of Pay Product

This presentation will review the different principles of a cone crusher to identify the key elements that encourage attrition crushing and a desirable product shape. Learn how to attain a more cubical product, which helps producers get a higher percentage of pay product on the ground.

🕅 TH44

Developing a Communications Strategy to Support a Journey to Zero

At every level of an organization, the way leaders talk about safety has a direct impact on attitudes, beliefs and behaviors – which influence safety results. A safety improvement journey fueled by accountability and positive recognition requires a communication strategy that leverages a variety of written and active messaging opportunities to inform, involve and inspire. Through words and deeds, leaders must set a sincere and credible "tone from the top," managers must ensure accountability for safety activities and front-line supervisors must champion a culture of zero-incident performance. Delta Companies Inc. committed to an engagement-based approach to safety improvement in 2015 and learned quickly that effective communications at each level deliver the trust, responsibility and openness required for measurable culture change. This case study presentation will focus on a strategy within a strategy – Delta's communication tactics to ensure the success of its safety culture initiatives.

TH45 Dissecting Maintenance

Learn how to perform maintenance of an aggregates operation by separating different aspects of maintenance into quantifiable parts to make them obtainable daily. Discover how proper equipment operation ties into proper maintenance and, in turn, helps maximize production. Your maintenance program can become more efficient by implementing some simple changes, including streamlining your maintenance procedures and supporting education and continuous improvement in your workforce.

🕅 TH46

Practical Approaches to the Prevention of Musculoskeletal Disorders and Slips, Trips, and Falls

Overexertion and slips, trips and falls continue to be the top causes of injuries in aggregates mining. Many of these injuries occur in scenarios common to most mine sites, and many mine workers conduct their jobs around hazards that may be undetected or just not perceived as a hazard. Hazard identification and recognition are essential to ensuring a safe and productive workplace. This session will provide an overview of the types of injuries affecting aggregates mine workers and discuss methods for mitigating risk for these injuries. The focus of this workshop is on prevention of injury through the recognition and mitigation of hazards in the workplace.

🔀 TH47

Bridging Soft Soils and Voids During Reclamation

Quarrying often occurs in urban areas, and abandoned quarries can be an eyesore or even a potential hazard. Reclamation of closed or existing quarries presents an opportunity for development of commercial, residential and recreational activities, but first one must address threats like falling debris, large pools of water and sinkholes, and backfilling is not only expensive but can also lead to voids in the backfill, making the material susceptible to settlement. Developers across the world are increasingly using geogrids to bridge the voids beneath subdivisions built over closed quarries, to bridge sinkholes on highways and transfer the loads in pile caps. Learn more about geogrids and how this technology offers a cost-effective way to bring closure to a mine or help repurpose it to add value to the surrounding community.

🔀 ТН48

Screening 201: Screening Maintenance Course

Whether you are producing at full production, a few days a week, or rotating a single crew among multiple plant sites, common screening problems could be robbing you of your efforts to maximize your screening operation and production. These problems lead directly to reduced production rates, lost operating time and poor product quality. All three dictate your cost and profit per ton. This session will clearly identify common screening problems, explain how they affect production and/or quality, and what solutions will solve them.

THURSDAY, MARCH 8, 9:30 - 11 A.M.

TH51 Employment Law Series: Hiring to Firing and Everything In Between

Get a comprehensive overview of key topics related to hiring, employing, and firing employees. Make sure you understand essential "do's and don'ts" of employee recruiting and interviewing, managing medical leave, paying employees correctly and FLSA compliance, employee background checks under the Fair Credit Reporting Act, and how to fire employees while avoiding liability.

TH52

Screening 301: Maximizing Screening Efficiency

Get a comprehensive overview of an effective screening operation and learn the appropriate application of various types of screens, how to measure their effectiveness, and an overall evaluation of the condition of the screen and structure. Specific topics that will be discussed include screen types, stroke profiles, g-force, screen efficiency, sampling protocols, screen axis movement, structure movement and examples of improvements. The performance evaluation section of this presentation will include a case study with an existing aggregates producer.

W TH53 How to Control Dust from

Aggregate Processing Plants

Dust emissions from mining and material handling operations arise from four major sources: unpaved roads, paved roads, material processing and stockpiles. Dust emissions are a regulated pollutant and must be controlled to comply with federal, state and local air quality standards. This presentation describes a method for developing a dust control plan that relies upon a combination of good operating and engineering practices coupled with wet suppression and dry collection systems. Based on the philosophy that good dust control is good process control, this method is designed to comply with regulation without sacrificing productivity. By treating dust control as a problem of process control rather than a regulatory issue, plants can employ low-cost, low-efficiency controls first to reduce reliance upon more expensive and efficient control measures. As a result, affected facilities can comply with air quality standards at the lowest possible cost.

🕅 TH54

An Eye Opener: Why Culture Impacts Fatigue Risk & How Technology Can Help

Fatigue is a leading contributor to 35-40 percent of incidents, and surveys of shift workers demonstrate that nearly half of the population nods off while working at least once per week. This stark reality has driven the development of technologies that deliver valuable information about the conditions under which employees operate, but few companies are equipped to leverage the data in a Fatigue Risk Management System that touches all the influencers of a safety culture to deliver safer work conditions and improved performance. Discover technologies used to generate safety-related data and how an organizational culture impacts overall performance improvement, especially when systems that engage all levels of the organization are utilized to mitigate fatigue risk.

🟹 TH56

Operational Benefits of Using Thickeners and Presses

Water is a resource that requires a focus on recovery along with conservation and environmental impact. Two methods of water management include thickeners, also known as clarifiers, and presses. This presentation will focus on the operation of thickeners and recessed plate presses and their operational benefits.

衬 TH57

Pit, Haul Fleet and Crushing Optimization

The extraction process usually involves several different types of machines interacting with each other in order to transport blast material to the processing areas. As all pits are designed differently, each one has a unique set of problems, behaviors and bottlenecks that affects production and reduces efficiency. In this session we will review some of the common causes of increased cost and reduced efficiency in the extraction operation. We will analyze the effect on productivity and production cost, how these problems can be detected and monitored using technology, and the potential improvement to expect after an improved process is implemented.

🚺 TH58

Wetlands Delineation and Mitigation Perspectives

What are wetlands, and how do they affect our mine planning process? What are our choices when we have to mitigate for wetlands impacts? This session will discuss the changing definition of waters, and how that will affect the ways in which we impact wetlands and purchase or create wetlands mitigation. Aggregates companies have many options because of their accessibility to equipment, acreage, and a long history of environmental stewardship.





66 CANAL CENTER PLAZA SUITE 300 ALEXANDRIA, VIRGINIA 22314

OUTSTANDING OPERATIONS FACILITY TOUR

EVEN THE AGG1 OPERATIONS TOUR IS BIGGER IN TEXAS! This year, visit two outstanding aggregates distribution facilities.

MONDAY, MARCH 5, 2018 12:30 – 3:30 P.M.

Meet at 12:30 p.m. at the Marriott Marquis Crawford Entrance to board transportation to the two facilities.

Cost: \$50/early, \$60/advance, \$70/onsite Tour is limited to the first 100 registrants.



VULCAN MATERIALS COMPANY HOUSTON SHIP YARD

The Vulcan Materials Company Houston Ship Yard is an aggregates distribution operation located at the Houston Ship Channel in Houston, Texas. The distribution yard has been providing high-quality construction materials to the greater Houston market for over 29 years. Construction aggregates are delivered to the shipyard by Panamax-class self-unloading vessels from Vulcan's Calica Quarry located in the Yucatan Peninsula of Mexico.

Houston-based Vulica Shipping, a subsidiary of Vulcan Materials, operates three Panamax ships specifically designed to service this unique supply chain of highquality construction materials from Mexico to the United States. The Houston Ship Yard is a key outlet for the limestone products manufactured at Vulcan's Calica Quarry.



CEMEX NAVIGATION AGGREGATES DISTRIBUTION YARD

The CEMEX Navigation Aggregates Distribution Yard is located about three miles east of downtown Houston along the banks of Buffalo Bayou and upstream from the Houston Ship Channel. The aggregates distribution yard has been providing high-quality construction materials to the greater Houston market for over 25 years.

Construction aggregates are delivered to the CEMEX Navigation Yard by train from the CEMEX Balcones Quarry, located in New Braunfels, Texas, which is located about 175 miles west of Houston. The CEMEX Balcones Quarry is recognized by the U.S. Geological Survey as the nation's top producing crushed stone quarry. The Houston area is a key market for the crushed and washed limestone produced at the CEMEX Balcones Quarry. The limestone transported to the CEMEX Navigation Yard is distributed to internal and external customers for the greater Houston construction market.

CEMEX also manufacturers ready-mix concrete at this site and operates a barge loading facility as needed for transporting construction aggregates. CEMEX is a global building materials company with the U.S. Headquarters located in Houston, Texas.