

# Butler-Justice, Inc. – Pioneers and innovators of environmental solutions for the asphalt production industry

By Brian Hoover

**B**utler Justice, Inc. (Butler-Justice) has built a remarkable reputation for knowledge, experience and innovation within the asphalt, aggregate, mining and industrial production industry. Since 1998, Butler-Justice has dedicated itself to providing simple and effective solutions to complex environmental challenges. Additionally, the company continues to serve customers in the aggregate, asphalt, concrete, quarry and mining fields with a full line card of crushing, screening and material handling equipment, parts and components.

## The Early Years – Two Mikes Share a Strong Work Ethic and Desire to Succeed

Business partnerships often come down to timing, chemistry and even a bit of luck. Mike Butler (Butler) and Mike Justice (Justice) first met one another while working for a high chrome foundry in South Gate. The company was Pacific Alloy Castings Co., Inc. and they manufactured wear parts for the aggregate industry. Justice was serving as Vice President of the company and he and Butler hit it off almost immediately. “Mike and I were a lot alike and also very different. We both had an easy-going temperament, and shared many of the same values and work ethic. After all, we were both Boy Scouts and of course lived by the Boy Scout Law of being trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, thrifty, brave, clean and reverent,” Butler



*Above: Todd Fields (left), Sales Engineer, Mike Butler, President and Brian Campbell, Project Manager.*

says with a smile. “Honestly, Mike Justice is one of the best men I have ever met in my life, besides my father and my son. We had a good Yin and Yang relationship. Where one was weak, the other was strong and this made for a great partnership. It was a sad and devastating loss for myself and so many others when Mike passed away in 2006 from ALS.”

Butler and Justice worked together at the South Gate foundry for around five years before both men started to feel like it was time to move on to the next chapter. “I felt like I had learned just about everything I wanted to about castings and so I signed on with Rock Systems, an aggregate equipment supplier out of Sacramento,” says Butler. “I made a lot of good friends in the

aggregate industry and eventually decided to start my own company, Production Parts and Equipment, in 1992. Mike Justice also moved on to go to work at Darco Engineering in Placentia where he spent a lot of his time securing air quality permits for companies like JPL, Delta Airlines, and CalMat (now Vulcan Materials).”

Justice called Butler while at Darco Engineering and explained that if Butler would go to work with Darco, Pioneer Crushers (now part of Astec) would agree to Darco becoming a licensed distributor for their crushing line. “I put my company (Production Parts & Equipment) on hold and went to work for Darco, and I had a lot of success at that job,” says Butler. “I was still working within

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the aggregate industry, selling crushers, replacement parts and even entire plants if called upon. The good thing was that I was working with Justice again and our relationship and bond continued to grow stronger.”

### **Butler-Justice, Inc. Is Founded**

After a few years, Justice and Butler, both, once again, moved on to other opportunities. Butler went back to operating his company, Production Parts & Equipment and Justice started Justice & Associates where he continued providing air quality permitting and engineering services to various industries. “I was selling Telsmith and Pioneer equipment and found a ton of success with portable recycling plants, specifically for crushing concrete and asphalt. They were looking for a larger company with more infrastructure and brick and mortar, so I called Justice for some advice. He immediately suggested that we put something together and create the infrastructure that these manufacturers were looking for in a distributor,” says Butler. “We were both mechanical engineers and Justice had many years of experience overseeing administration and office procedures, where my talent was better focused on sales. This was 1998 and the beginning of Butler-Justice, Inc., a name order that



**Mike Butler, President, Butler-Justice, Inc.**

was decided simply by how it rolled off the tongue. We continued selling crushing and screening equipment with parts and service, representing lines like Cedarapids (now a Terex brand), Simplicity Engineering, Telsmith, Pioneer and other products for the aggregate recycling market.”

### **Butler-Justice Inc.’s Insertable Portable Dust Collector Solution**

According to Butler, his friend and partner, Justice, was very good at recognizing opportunities and engineering simple solutions to solve just about any mechanical engineering challenge. A good example of this would be when

Butler-Justice visited Nevada Ready Mix in 2001 to install insertable dust collectors on every transfer point at the Nevada company’s plant. “Dust collection is a big deal in our industry and an even bigger deal right here in California. Justice took notice of the insertable dust collector (bin vent) that sits atop silos, and asked himself, ‘why can’t we put this on a portable plant.’ We represented Donaldson and took their dust collector and applied the technology to portable plants so they could meet and pass all South Coast Air Quality Management District permit requirements. Up until then, there were only standalone dust collector systems



**Todd Fields, Sales Engineer, Butler-Justice, Inc.**



**Brian Campbell, Project Manager, Butler-Justice, Inc.**



**Joanne Myers, Office Manager, Butler-Justice, Inc.**



**Above: Blue Smoke Control from Butler-Justice, Inc. captures blue smoke from key emission points in the asphalt production process**

that did not travel well due to the need to use ducting to collect dust from the required transfer points. I still have Justice's original sketches of the concept in my desk drawer. We massaged the design and made it acceptable and even desirable to our clients. To date, we have sold around 2,070 systems for various applications, including for use on jaw crushers, cone crushers, vertical and horizontal shaft impactors and portable aggregate plants."

### **Butler-Justice Blue Smoke Control**

Once again necessity became the mother of invention for Butler-Justice when Don Daley Jr. from California Commercial Asphalt called upon them to solve a smoke issue at their plant in San Diego in 2003. As homes and businesses began to encroach upon the San Diego asphalt plant, they began to be impacted by the distinct odor of asphalt production, and the San Diego County Air Quality

District mandated that something be done about it. "In the past, companies have used electrostatic precipitators to mitigate oily smoke from businesses like fast food operations. This involves a prefilter and electronic wires that collect the oil into a pan. However, electricity and oil droplets are not a very good combination at an asphalt plant as they present an obvious fire risk," says Butler. "Mike and I put our heads together once again, and thought of a company by the name of Air Cleaning Technology that had a filter system we thought would work for our industry. Donaldson also made a filter for the automotive machining industry that was used in collecting smoke. So, Justice and I designed and engineered a seven-stage filter solution where the final filter is equal to a HEPA filter (DOP filter that is 0.3 microns and very efficient). However, you also need several coalescing filters prior to that expensive final (gate keeper)

filter, including the initial filter which is a Chevron style filter. This is all sized on cubic feet per minute (cfm) of air and each filter can process 2,000 cfm. Capture and filter efficiencies had to be studied, in addition to air to cloth ratio and how much air one filter can process."

Butler explains that Blue Smoke is made up of tiny droplets of hot oil that are inevitably created during asphalt production. These sub-micron droplets need to be coalesced into larger droplets so they can be filtered out. An asphalt plant drum dryer processes aggregate, sand and rock dust at very high temperatures, and at the end of the dryer, hot asphaltic oil is added which creates hot oily mist that is referred to as "blue smoke." The hot oily smoke rises and makes its way to the top of the incline drag or bucket elevator and that is the first point of collection. "We capture blue smoke at various points as the asphalt is distributed to the storage silos. Below the



*Left: X-VOCS asphalt plant volatile organic compound and odor control system from Butler-Justice, Inc.*

silos are the gates that open and close while filling the trucks. We vent that area with a pneumatically controlled collection system,” explains Butler. “Smoke wants to coalesce into a much larger droplet at around 120 degrees Fahrenheit. More coalescing happens as we blend the hot air stream from the top of the silo filling operation with the much cooler air stream created during the truck loading process. Our design includes several systems within a system, which is driven by temperature reduction, air velocities and highly efficient filters. From the incline drag to the traverses, silo vents and batchers, each have different size ducts from 8 inches to 24 inches. It is all about controlling the air velocities and capture efficiencies. We are installing seven Blue Smoke Control systems right now and have more than 100 in operation throughout the United States, Mexico, Australia, Canada and all over Europe.”

### **X-VOCS – Tackling Odors and VOCs**

The quest for environmental solutions didn’t stop at dust control and the Blue Smoke Control system. Butler-Justice

continued to address ways to attack odors and volatile organic compounds (VOCs) in various industrial settings. Another one of their remarkable innovations is their X-VOCS, technology designed to control emissions from hot oil tanks. “When a hot oil tank is filled, The internal smoke laden air is displaced and escapes from the vents on the tank. This odor is very strong and even more egregious than that within a plant operation,” says Butler. “We engineered and built the X-VOCS initially as an odor control device and have updated its design to now also serve as a VOC capture system. As a truck fills an oil tank, smoke is displaced and escapes into the environment. A solution was needed to mitigate both the VOCs and the odor.”

It all started when a customer approached Butler-Justice with the problem of having an adult education center adjacent to their asphalt manufacturing facility. The Air Quality District received daily phone calls about the odors and something needed to be done. “You can burn off VOCs with very expensive control devices like you have seen at oil refineries. However, an asphalt plant cannot have that flame or

afford an expensive device like a regenerative thermal oxidizer (which burns VOCs as fuel). This left us with the solution of absorbing the VOCs and their characteristic odors by utilizing carbon. The initial filter is an Amistco coalescing filter, followed by same highly efficient DOP filter used in our Blue Smoke vessels. The VOC laden air stream then passes at low velocity to stages of carbon media developed specifically to treat VOCs of sulphur dioxide,” says Butler. “The system works extremely well and our sales engineer, Todd Fields, was key in all of the research and development of this product solution. We are just getting started, but now have 11 units throughout California (R.J. Noble, Teichert) and Arizona (Vulcan Materials), in Connecticut and in Boston (Brox Industries). We also have three nearly completed units in our shop with one unit being placed on a trailer for travel demonstrations. We test the VOCs before and after use of the X-VOCS to prove out our technology for the numerous air districts.”

Butler-Justice is a testament to the power of innovation and

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**Above: Blue Smoke Control system from Butler-Justice, Inc. shown in operation at R.J. Noble Company in Corona.**



**Above Left: Todd Fields, Butler-Justice, Inc., points to the gates below the silos that are vented with a damper control collection system from Butler-Justice, Inc.**



**Above Right: Butler-Justice Team visits with JR Gillespie, Plant Manager at R.J. Noble Company in Corona.**

[Continued from page 24] commitment to environmental responsibility. Founded on the principles of hard work, trustworthiness, and collaboration, this company has consistently delivered simple yet effective solutions to complex environmental challenges. Butler-Justice is a small, boutique company where service means everything, a tradition that was embedded into the company culture by the two co-founders, Mike Butler and Mike Justice, and has continued to this day even though one of the founders has passed on. “We have long-term employees and every one of them has their own unique set of skills that contributes to the current and future success of our company. I don’t write paychecks, our customers do. They are the boss and when they are happy, we are as well. We want to develop these environmental

controls and be on the cutting edge of responsible engineering and manufacturing practices,” says Butler. “You know, Mike Justice had a talent for looking at complicated challenges and coming up with simple, effective solutions. He would say, ‘it takes an engineer to design a system but it takes a really good engineer to design a simple system that works.’ He was such a talent and I cannot thank him enough for being in my life.”

From their pioneering work in portable dust collectors, to their game changing Blue Smoke Control system, and the ongoing development of X-VOCS, Butler-Justice has established itself as a leader in environmental solutions. They continue to push the boundaries of responsible engineering and manufacturing practices, striving to address the ever-evolving challenges of

air quality and emission control. With a strong team of dedicated professionals and a focus on customer satisfaction, Butler-Justice remains at the forefront of environmental innovation, ensuring a cleaner and healthier future for industries and communities alike.

Butler-Justice also represents a long list of manufacturers including Terex/Simplicity, Terex/Cedarapids, Terex/Canica, American Eagle, Beltway, Conveyor Accessories, Weg, Donaldson Torit, Monarch Industries, Amcast, Worldwide Electric Corp., Rockshield Rubber Co., Kenco Engineering, Luff, and other ancillary products. For more information on Butler-Justice, please visit [www.butlerjustice.com](http://www.butlerjustice.com) or call their Anaheim headquarters at (714) 696-7599. **GA**

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