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## AFS Developing Comments on OSHA's Proposed Crystalline Silica Rulemaking - Still Time to Provide Critical Input to AFS

As you know by now, in September 2013, the Occupational Safety and Health Administration (OSHA) issued a proposed crystalline silica rulemaking that would reduce the current Permissible Exposure Limit (PEL) by one-half and would establish a first-ever Action Level for silica exposure at 25 mg/cu.m.

To meet the reduced PEL, the proposed rule would mandate foundries implement engineering controls and work practice controls, including exposure assessments and monitoring, establishment of regulated areas or controlled access areas, respiratory protection programs, employee training and information, and medical surveillance. Information, training and recordkeeping requirements would also be required. Employers would not be permitted to rely on respirators except to the extent that the employer shows that engineering and work practice controls are infeasible. Employee rotation as a control method would be prohibited. Bottom line – OSHA's proposed standard will impact the majority of the facilities in the foundry industry.

Over the past few months, AFS has addressed the rulemaking by:

- Educating the Foundry Industry about OSHA's Proposed Silica Rule – AFS has continued to provide updates to the members, as well as hosting a webinar, and creating a Silica Resource Page on the AFS Web Site.
- Establishing Working Groups to Develop Comments - AFS has established several working groups to help craft our formal comments

which are due to OSHA on January 27, 2014. These groups have been meeting via conference call on a regular basis.

In fact, a number of TCMA members have been actively participating in these meetings.

- Requesting 90 Day Comment Extension – AFS submitted a request on October 1 to lengthen the time to respond to the proposed rule given the length and complexity of the proposal. At the end of October, OSHA granted a 47-day extension, with comments now due on January 27, 2014 - just a few short months away.

- Hiring Economic/Technological Feasibility Experts and Law Firm - In addition, AFS is a member of the American Chemistry Council's Crystalline Silica Panel which is coordinating an industry response to OSHA's proposed silica rule as well. The Coalition has retained a number of consultants, including a firm to conduct a technological and economic feasibility study of OSHA's proposed rule. The foundry industry, along with four additional industries, will be a focal sector for the feasibility study.

- Outreach on Capitol Hill – over the past few months, AFS Washington office has met with a number of congressional offices to outline the impact the silica rule will have on our industry.

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## Chairman's Comments

from Chris Norch



Dear TCMA Members,

As we wind down yet another year, many of us have seen quarters of growth and recession this past year. Through my executive board tenure at AFS and global exhibits, it has continually been made clear that we still have opportunities to grow our business. There are tremendous voids in the foundry supply chain both domestically and globally and one can take advantage of the current situation depending on the fortitude of your calculated risk/reward decisions. Many of our competitors have not fully utilized the recent downtimes to invest in new equipment additions, overhaul or replacement of aging facilities or simply enhance recurrent training to stabilize and create an environment for motivation for their valued associates. These and other business decisions seem to be coupled with the age old status quo to "hunker down" and see what happens. In our pasts, we have been able to do this and weather the upcoming ebbs and flows of our industry. However, in the immediate future we have two major contentions that may forever impact our long term growth.

First, we are all seeing a declining future workforce for our industry. While we have wonderful FEF universities and are doing our due diligence to invest in the future leaders of metal casting, many are reporting around our boardroom round tables that there is a woeful lack of availability in recruiting people who simply want to work. As we all know, it is mostly easier to recruit and maintain at higher salary levels, new generations searching for the "work/life" balance impact the historically long hours that we all put in while growing our foundry knowledge through our careers.

Couple that with the ever more elusive foundry laborer that sees pride and value in actually manufacturing something and it becomes more and more of a challenge as time goes on. Even the largest OEM's and foundry conglomerates are reporting this so it is our responsibility and duty to nurture and grow our strong human capital future keeping them engaged and enthused for manufacturing.

Secondly, our legislative agenda for 2014 is going to see one of the most arduous campaigns in our history. The failure to block reductions in PEL's for crystalline silica could cause us all to incur astronomical investments in additional dust collection, personal protective equipment and operational compliance costs. I won't belabor the points here as we have been posting webinars for the AFS Silica Task Force to keep our membership informed. We have had wonderful company input in the surveys sent out by AFS, local involvement with elected representatives and a common cause supported all of our membership and we MUST continue this fight. The AFS Silica Task Force has requested a 90-day extension to respond to OSHA's latest questions and I will report that decision as soon as it has been made public.

While we don't know for certain what our future will be, we DO know that as foundry men supporting one of the industries that built this great nation of ours we will NOT go down without a fight. Regardless of the agenda, we will persevere and through perseverance comes triumph.

Merry Christmas and Happy New Year to you and your loved ones.

Sincerely,  
Chris Norch  
TCMA Chairman

## Welcome

This TMCA newsletter is developed by the association to improve communication and provide members with the latest news and legislative action concerning their companies and the cast metals industry.

## Let us hear from you!

Please send company news, legislative inquiries, product updates and employee highlights to [TCMAINC.COM](http://TCMAINC.COM).

## Visit our website

[WWW.TCMAINC.COM](http://WWW.TCMAINC.COM)

TCMAINC.COM serves as a valuable resource for our members. Go online to read about our newest members to the association, members' achievements, the latest updates on our bulletin board and the latest news in the foundry business.

## Upcoming Events

**January 24, 2014**  
- Texas Chapter AFS meeting in Houston, TX at the Sam Houston Race Track

**January 27, 2014**  
- Comments due on OSHA's proposed silica rule

**March 7, 2014**  
- Texas Chapter AFS meeting in San Marcos, Texas

**March 31 - April 1, 2014**  
- TCMA Annual Meeting in Tyler, Texas

# Henderson Manufacturing Co.

Henderson Manufacturing Company was founded in 1951 by Y.D. (Bill) and Margaret Henderson for the purpose of perfecting, manufacturing, and marketing the "Hydra-Juster". Mr. Henderson had invented and obtained a U.S. Patent for the Hydra-Juster, which makes use of hydraulic pressure generated by a grease gun to tighten the tracks of crawler equipment. The Hydra-Juster makes this labor-intensive chore as simple as operating a hand held grease gun to achieve the necessary tension of the tracks.

Bill saw many obstacles during the realization of his invention. He battled alcoholism (he was sober for about the last 40 of his 67 years). He overcame setbacks in proving his invention as being workable, and his own doubts about the Hydra-Juster being able to meet his expectations and worthwhile to continue.

About 5000 units were produced and sold between 1949 and 1953 in a small shop with a half dozen employees who were able to turn out about 1800 units per year. Bill had enough faith in his product by this time to turn down an offer of \$500,000.00 for the Hydra-Juster and continue to produce it himself.

They, Bill and Margaret, earned a contract to produce the Hydra-Juster as OEM for Allis-Chalmers from the early 1950's until early 1970's. The Hydra-Justers were first produced as fabrications and then converted to steel castings (perhaps a result of Bill's work at Pittsburg Foundry and Machine as an apprentice machinist before his invention of the Hydra-Juster).

Before starting their own foundry in 1963, Mr. and Mrs. Henderson expanded their product line to include other parts for crawler tractors of all major brands. This increased the demand for castings which they had been purchasing from foundries in Oklahoma, Louisiana, and East Texas. This expansion required Bill to spend much time traveling to make sales and establish relationships with tractor dealers to sell the Henderson product line. Like many family business Margaret was required to spend many hours in the business as well as keeping two daughters and two sons "on the straight and narrow".

As the result of a heated conversation with a supplier-foundry owner, Mr. Henderson told the owner "I will go to Pittsburg and build my own foundry" and

poured his first heats of steel in late 1963. He had "cobbled together" used and homemade equipment from all over the USA and had a workable foundry to compliment his machine shop and completely produce his Hydra-Justers and other castings.

Quickly it became apparent that the foundry had more capacity than necessary for the tractor parts. This excess capacity allowed expansion into the jobbing foundry market, giving many new opportunities and challenges for the new foundry. These new experiences allowed the foundry and its personnel to grow and expand capabilities and knowledge in the industry.

Now the children were older and all involved in the business, the Henderson family worked hard during slow times and good times to grow the company. Always believing in the future, and despite the death of Mr. Henderson in 1981, re-investment in the company allowed stability and growth for the future.

During the downturn of '79-'82, the facility almost doubled in size, adding more up-to-date equipment, buildings, and processes preparing for the return of business. Although small in size, Henderson Mfg was one of the first shops in Texas to become 100% "air-set molding" by the mid '80s. HMC has ridden the upswings and downturns of the Oil Patch and mining and construction. HMC has been blessed to remain fairly steady in size and business for the last several decades, relying on the practice long established of working hard in the good times and reinvesting in the company. The company has been Henderson family owned and operated since its inception and is now in the control of the third generation of Bill and Margaret Henderson's family.

The company has been a quiet, steady, low-profile asset to Camp County, Pittsburg and employees and families for many years and in the process earned a respected place among its peers in the foundry industry. •



## Foundries in Our Past

Recently, I posed a question to several of our members regarding their knowledge of foundry history in Texas. I asked them to name as many bygone foundries and their locations as their memories could muster. It is amazing that such a long list came together so quickly. I wanted to include the list in this newsletter so that other members could add to or correct our listings. Some of the locations are omitted because our memories have faded!

*Full list of Foundries on Page 5*

An interesting item found on the internet was an article regarding Nash Iron Foundry near Jefferson. The article is shown below.

### Nash's Iron Foundry

Nash's Iron Foundry, the first iron furnace and foundry in Texas, was located sixteen miles northwest of Jefferson, near the site of present Mims Chapel in northwestern Marion County (Cass County until 1860). The furnace was built in 1847 on a tributary of Alley's Creek on the Walter H. Gilbert headright by Jefferson S. Nash, a Cass County planter impressed with the quality of the local iron ore. A foundry was added sometime thereafter, but it was only intermittently operational. In 1857 the business, under the name J. S. Nash and Company, was reorganized with three active partners: Nash, his son William D. Nash, and David Browder, an expert in iron production brought in from outside Texas.

Plagued by chronic shortages of money for equipment, the company approached the state legislature for funding in the form of a land grant in 1857, but no aid materialized. In January 1858 the company was incorporated as the Nash Iron, Steel, and Copper Manufacturing Company, and by this time the Nash furnace is reported to have sent more than 10,000 pounds of iron to Jefferson, the nearest shipping point.

Still hoping to receive financial assistance from the state legislature, the company expanded and retooled its facilities in 1859 and 1860.

The secession crisis and the outbreak of the Civil War put an end to the possibility of government aid, and the operation found its transportation and equipment difficulties considerably aggravated by the war. In 1861 the company attempted to shift over to the manufacture of cannons, cannon-shot, and rifles for the Confederate Army. A quantity of cannon-balls was produced, but it appears that no artillery pieces or small arms were manufactured. On March 5, 1863, the company was reincorporated under the name Texas Iron Company. The company continued to suffer from shortages of equipment and capital, and the business was sold to the George A. Kelly Iron Company toward the end of the war. Much of the plant was dismantled and moved to Kellyville, and by the later 1860s all that remained of Nash's enterprise was an abandoned furnace.

#### BIBLIOGRAPHY:

Robert L. Jones, "The First Iron Furnace in Texas," Southwestern Historical Quarterly 63 (October 1959). Bill Winsor, Texas in the Confederacy (Hillsboro, Texas: Hill Junior College Press, 1978). •

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## Proposed Crystalline Silica Rulemaking - Still Time to Provide Critical Input to AFS

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• Developing AFS Silica Survey - In addition, AFS has developed a survey that requests very important information about your foundry. Over 60 foundries have filled out the survey and the association is still seeking additional participation. One key area we are seeking input on deals with the cost of complying with their new proposal.

WE believe OSHA has significantly underestimated the compliance costs. We need hard data to show the true costs of the rulemaking. There is still time to fill out the Silica Survey – here is the link to the survey - [www.afsinc.org](http://www.afsinc.org). We encourage you to complete the survey to the best of your ability; if you cannot answer all of the questions, do not let that keep you from providing as much information as you can. Additionally, if your foundry has taken action to reduce crystalline silica exposure such as new ventilation, new shot blast equipment, sand delivery system alteration, etc. AFS needs information concerning how much your project(s) cost your foundry, what level of success did you achieve, and could your foundry meet the proposed reduced PEL.

**Please fax your response to Fred Kohloff, AFS EHS Department, at 847/824-7848 or email it to [fhk@afsinc.org](mailto:fhk@afsinc.org). All responses received from the survey and subsequent correspondence will remain confidential. If you have any questions regarding this update, contact Stephanie Salmon, AFS Washington Office, at 571/242-0186 or [ssalmon@afsinc.org](mailto:ssalmon@afsinc.org).** •

### CONTINUED FROM PAGE 4

## Continued: Foundries in Our Past

Name	City	Name	City
AAA Foundry	Fort Worth	Pan American Foundry	Fort Worth
A&B Foundry	Dallas	Pearce Foundry & Machine	
Adair Foundry	Houston	Pioneer Foundry	Houston
Alamo Iron	San Antonio	Pittsburg Foundry and Mach.	Pittsburg
American Brass	Fort Worth	Precision Mfg.	
American Mfg.	Fort Worth	Quality Castings	Gilmour
American Valve	Beaumont	Ray Dynamics	Paradise
Ampco	Garland	Richmond Foundry	Richmond
Anacast	Fort Worth	Robertso Foundry	Weatherford
Arlington Texas Industries	Arlington	Roe Foundry	Fort Worth
B&W	San Angelo	Rudolph Foundry	Pittsburg
Baker Foundry & Machine	Fort Worth	San Antonio Machine	San Antonio
Barnes Foundry	Fort Worth	Sherman Foundry	Sherman
Bass & Hays	Grand Prairie	SKP	Fort Worth
Bellmore Metals	Fort worth	Skyvara Foundry	Houston
Capital Foundry	Shallow Water	Smith Brass Foundry	Fort Worth
Cast Rite	Fort Worth	Smith Steel	Marshall
Centeco	Fort Worth	Snow Corp.	Fort Worth
Dallas Foundry	Dallas	Southern Aluminum Foundry	
Darbyshire	El Paso	Southwestern Brass Works	Fort Worth
Dunn Foundry & Machine	Levelland	Southwestern Foundry	Paris
East Texas Steel Castings	Longview	Sterling Faucet	
Fort Worth Steel & Mach.	Dallas	Supercast	Fort Worth
Globe Foundry		TESCO	Houston
Granite Foundry		Texas Bronze	Fort Worth
Gulf Star Foundries		Texas Foundries	Lufkin
Hall Foundries	Lubbock	Texas Steel	Fort Worth
Hitchcock	Denison	The Texas Foundry	Fort Worth
Horne Foundry	Houston	Trinity Brass	Dallas
KO Steel	San Antonio	Tri-States	Fort Worth
L&L Foundry	Irving	Trnity Valley Iron & Steel	Fort Worth
Lloyd Metal Foundry		Trojan Foundries	
M. Gold Foundry		TRW Mission	Houston
McKinley Metal	Fort Worth	Valley Mills Foundry	Valley Mills
Magnus Metals	Fort Worth	Wesco Foundry	Fort Worth
Murray Gin Foundry		Western Foundry	Tyler
Oil City Brass	Beaumont	Western Iron Works	San Angelo
Pampa Foundry		Wichita Falls Foundry	Wichita Falls
		Worth Manufacturing	Fort Worth

## Members Comments

### Castings, The Foundation of Our American Life - Part 2

From Wikipedia: Casting is a manufacturing process by which a liquid material is usually poured into a mold, which contains a hollow cavity of the desired shape, and then allowed to solidify.

#### Part 2

The foundry equipment manufacturer I went to work for in 1980 was owned and operated by an English company. We were known for having the best Nobake foundry equipment in the world at that time. When the US Navy asked for us to provide equipment, I found myself being the highest ranking salaried employee who could get a security clearance for the facility; no non-Americans allowed. The one thing I can say about that trip is that the Navy does things big! From submarines to destroyers to aircraft carriers, castings are a staple. And let's not forget, the USS New York as commissioned November 7, 2009 with a bow poured from steel from the World Trade Center.

One of my grandfather's sons-in-law lived in Texas and without much persuasion, he decide to spend his winters there. Now this son-in-law had a few acres in East Texas to raise his cattle on. If you're going to have pastureland in East Texas you need a Caterpillar to clear the land. When one wore out, he got another. After a few decades of this, I asked him one day if I could have the scrap rights to his property. Today everyone wants to recycle. But it's about more than just taking things to a recycling center. At some point the material must be reintroduced back into the manufacturing process. When you see a car crushed and hauled off, it is being sent to a sorting facility where the metal will end up at a foundry for melting.

In 1998, my grandfather passed away at the age of 97. I was in Virginia on a project when it happened. Within a few hours, I was able to arrange flights for my mother and myself to East Texas. Traveling via jet airliner, within 24 hours the family was in one place to celebrate the life of a family patriarch. Modern airplanes have a significant number of castings ranging from lost wax, to permanent mold to sand castings. Aviation castings for air planes are some of the most precise castings manufactured today. They are used in such critical components as the engines, landing gear and seats. The turbine blades in the jet engines are some of the most precise lost wax castings that exist.

After the funeral, my mom came to my house and spent a few days before returning home. Years ago she set me off on my life of hamburgers so it was nice to have them made "the way I remembered them". And of course, the skillet was made of cast iron. I remember her looking at the skillet and saying 'I wondered where this got off to!"

So what kind of castings do you have around the house? Well let's start with the car, truck or minivan. As with most moving machinery, you have engine, manifold and brake castings to name a few items. Have a lawnmower, chain saw or gas trimmer? Then you have another half dozen castings. Have one of the top of the line tablet or laptop PC's? Well you may have a computer built around a high alloy casting which provides strength, rigidity and a high quality appearance. On the fourth of July, most of my neighborhood sets out their American flags which are mounted to the house via small aluminum casting.

So, as you can see, castings and the foundries that produce them are a fundamental part of our American lifestyle. Castings are used in food production and preparation, transportation, defense, high technology and numerous other national endeavors. What we as an industry must do is educate our leaders as to the fundamental role we provide in American society. We cannot send our foundries off to another country without being at the mercy of that country. We must educate our legislators and environmental regulators on our part in recycling, employment and product innovation for our country's industrial base. •