SLAG RUNNER

Editor: Erica Sandefur

UPCOMING MEETINGS

The National Slag Association welcomes and encourages active, allied, and associate members to attend committee meetings throughout the year.

Operations, Safety, and Purchasing meetings:

June 19 - June 20, 2019 - Buffalo, NY Hosted by Buffalo Wire Works

Environmental, Technical, and Marketing meetings:

June 12 - June 13, 2019 - Seven Fields, PA Hosted by Harsco Metals & Minerals

2019 Annual Meeting:

September 16 - September 20, 2019 Hilton Pensacola, Florida IN THIS ISSUE

CENTENNIAL CELEBRATION

BEEMSTORBOER AGGREGATES

THE ALLIED COMMITTEE

SPOTLIGHT RECOGNITION

ANNUAL MEETING

COMMEMORATING 100 YEARS!

One hundred years ago, the National Slag Association was created near Washington, DC with the goal of promoting the use of blast furnace and steel furnace slag. In September, the NSA traveled back to it's origin for a centennial celebration.

The general assembly welcomed speakers from around the globe detailing success stories, struggles, and innovative objectives for the success of industry. The annual safety award dinner was a host to significant industry representation such as Mr. Edward Levy Jr (Edward C. Levy Company) and Mr. Philip K. Bell (Steel Manufacturers Association).

Alan Langstone of Edward C. Levy Company, was the 2019 Safety slogan winner. Alan stated that the inspiration behind the safety slogan "Respect the Unexpected, Think Through Your Risks", is planning. He further explained that "through extensive planning, we could work in some of the most challenging environments, incident-free and profitable."

The Safety committee proudly presented awards to active members with the lowest incident rates and most improved locations across the association.

Every year, the association recognizes an Allied member for their service and dedication to both the NSA and the industry. Chris Navetta of TMS International presented the Allied Member of the Year award to American Chemical Technologies.



The National Slag Association wishes to thank its Corporate sponsors for making the Centennial Celebration a success. This event would not have been possible without the sponsors, members, and everyone involved.

Platinum Sponsors: Phoenix Services, Edward C. Levy Company, Bridgestone, TMS International, Harsco Metals & Minerals, RUD, and Titan.

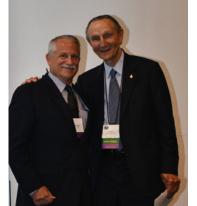
Gold Sponsors: MLTUS, Winkle, Harsco, The Stein Companies, American Chemical Technologies, Kress, RUD, and Edward C. Levy.

Silver Sponsors: Cincinnati Gasket, American Chemical Technologies, Safety Track, RUD, Kenco Engineering, Pewag, St Mary's Cement, and TMS International.

Stimulating Innovation through Continued Education









BEEMSTERBOER AGGREGATES TURNS SLAG SANDS INTO HIGH QUALITY AGLIME PRODUCTS

Beemsterboer Aggregates saw an opportunity to turn a legacy ACBF Sand pile at USS Gary Works into a new product (CalSil Blast) for the local agriculture market in 2016. The key to success was implementing a processing plant that would turn our coarse sand into a fine enough product to compete with the other coarse Aglime products being marketed by local quarries.

The chart below details out the CalSil Blast key characteristics versus local coarse Aglime products.

Material ACBF CalSil Blast	CCE	RNV	Ca %	Mg %
	95	54	28	6
Coarse Limestone Aglime	101 - 105	46 - 51	20 -21	12.9

Data obtained from Indiana Aglime Council 2016 Test Results

Beemsterboer CalSil Blast Aglime is now a premier product on the market due to several key advantages:

- CalSil Blast has a 3 9% higher RNV (Relative Neutralizing Value), leading to better results faster.
- CalSil Blast has an 8 7% higher Calcium content.
- CalSil Blast has a 6 7% lower Magnesium content and as such is a premium Low Mag alternative in the market. Years of applying High Mag Aglime have increased local soils beyond optimum levels.
- CalSil Blast can have up to 1% Sulfur. With the decline in local Industry emissions, soils are not naturally replenishing Sulfur. This change in market dynamics is causing farms to look for Sulfur alternatives to add to the soil. CalSil Blast is one of those solutions!
- CalSil Blast remains coarse enough to not clump together and cause extreme dusting when applied. This leads to less downtime cleaning out clogged spreaders and more product reaching the soils with less airborne emissions.

In 2017, ArcelorMittal East Chicago Plant management approached Beemsterboer Aggregates about another legacy pile of low grade high sulfur Iron Fines and waste lime being landfilled. Based on our success with CalSil Blast, we determined that with the proper processing we could create a Low Sulfur Sinter Plant Iron product and utilize the now upgraded high sulfur nonmagnetic slag and lime fines to create a new product.



BEEMSTERBOER AGGREGATES, NORTHWEST INDIANA (CONTINUED)

This product is CalSil Blast Plus (Nonmagnetic Iron Fines and Spent Lime Waste).

The chart below details out the key characteristics of CalSil Blast Plus vs higher value fine limestone Aglime products within the local market.

Material	CCE	RNV	Ca %	Mg %
ACBF CalSil Blast Plus (Lime)	109	54	30	4
Fine Limestone Aglime	101 - 105	71 - 76	20 -21	12.9

Data obtained from 2017-2018 Indiana Aglime Council Test Results

CalSil Blast Plus will make its debut during the 2018 Fall liming season and is now listed on the Indiana Aglime Council 2018-19 source listings. Beemsterboer Aggregates has no doubt that CalSil Blast Plus will fill the niche we are missing out on with CalSil Blast due to these distinct advantages:

- CalSil Blast Plus has an 8-4% better CCE Value than other Aglime in the Fine Limestone category.
- 9-10% better Calcium % than competing Aglime.
- 8-9% Lower Magnesium content. CalSil Blast now competes with best Low Mag Aglime on market.
- Up to 1-2% Sulfur added, making it even more attractive to sulfur deficient soils.
- Slag blend with lime gives CalSil Blast Plus the same spread ability customers have come to expect from CalSil Blast.

A detailed evaluation of the farm acreage in NWI (Northwest Indiana) revealed that approximately 90,000 tons of Aglime was applied annually in Lake and Porter Counties where USS and ArcelorMittal operate steel mills. When the market area is expanded to include all the counties that surrounded Lake and Porter, this total annual usage skyrockets to over 500,000 tons annually.

Beemsterboer Aggregates has grown this segment from a 1% market share in 2016 to over 5% in 2017, and a 10% forecast in 2018!

If you make it, they will come!



ALLIED MEMBER COMMITTEE INTRODUCTION



Jim Alexander Kenco Engineering, Inc COMMITTEE CO-CHAIR

Jim Simons
Hitachi Construction Machinery Loaders America, Inc.
COMMITTEE CO-CHAIR

Any organizations success can truly be measured by the quality of its members and their roles within the organization. The National Slag Association has truly benefited from the dedicated energy and time devoted by its members. Over the years our Allied members have been a vital part of our association and the NSA is very fortunate to have such thoughtful and dedicated members supporting the organization. Recognizing the need to enhance the NSA core mission of promoting the iron and steel slag industry as we navigate the ever-increasing challenges we face, it is only fitting that we tap into the expertise and talents available within our Allied member community.

As such the NSA has now created an Allied member committee to complement the seven other committees that include the Planning, Safety, Operations, Purchasing, Marketing, Technical, and Environmental Committees. This new Allied member committee will be co-chaired by Jim Alexander of Kenco Engineering, and Jim Simons of Hitachi Construction Machinery both of whom are long standing members of the NSA.

Please join me in welcoming both these gentlemen in their new roles and I kindly ask that you give them all the support they need to ensure that they achieve the success that we will all benefit from.





The Prevost Hubbard Award is presented to a member or former member of Committee D04. The recipient is someone who has performed outstanding work in the Committee and in the field of Bituminous Road and Paving Materials. The award, established in 1972, honors Prevost Hubbard, a distinguished member of Committee D04 for 63 years and who served as committee secretary for 38 years.

This year's recipient, John Yzenas, holds a degree in Civil Engineering which was earned while attending Miami-Dade College & University of Miami. From 1969 to 1975, he served in the US Navy as a Hull Maintenance Technician. During his service he achieved Petty Officer 2nd Class and served three years at sea during the Vietnam War on the USS Coral Sea. From 1979 to 1983 he worked for Kuhlman Corporation in Ohio as a Plant Manager and in 1983, he began work as Operation Manager for Martin Block in Lansing, Michigan. After getting experience as a plant and operations manager, he began work for WR Grace in Brighton, MI where he started as a Sales Engineer and was promoted to District Manager for Michigan and Ohio. In 1990 he began his tenure with the Edward C Levy Company, where he has successfully implemented a Technical Marketing division for the company, changing the mindset from making rock to marketing a valuable and sustainable product.

In 1988, he married his wife Cynthia and together they have seven kids and six grandkids. As his children were growing up, he coached the girls High School and Travel soccer teams for 17 years resulting in several championship wins including back to back 2005 and 2006 Girls Championship winners for the Lake Athletic Conference and the Travel Premier League took a 2nd place win in the 2003 USA Cup. When he's not working, he is spending as much free time as possible on Lake Michigan working or sailing on his Sailboat Queenie.

In 1991, he joined ASTM with C09, and the following year, D04. For over 26 years, he has been an advocate for the ASTM community, providing leadership and guidance in the development of standards. He has received several ASTM awards including D04 Distinguished Service Award in 2003, C09 Award of Appreciation in 2006 and 2011, ASTM Society Award of Merit in 2011, C09 Honorary Committee Member in 2012 and E60 Award of Appreciation in 2013. In this time, he has actively participated on 21 committees and subcommittees. He has held various offices within ASTM including Membership Secretary of C09, Sub Chairman of D04.99, D04.41, D04.51 and D04.93, and Vice Chairman and Chairman of D04. During his service to ASTM he has completed over 50 different work items, such as

D5106 Specification for Steel Slag Aggregates for Bituminous Paving Mixtures, D6155 Specification for Nontraditional Coarse Aggregates for Bituminous Paving Mixtures, and the newest guide, Guide for Blast Furnace and Steel Furnace Slag as Produced During the Manufacture of Iron and Steel. It is through the participation on these 21 committees and subcommittees, his various offices held within ASTM and the advocacy of the 50+ work items he has worked on that we see the true dedication he has given to ASTM and the use of Sustainable products.

Please join us in congratulating John Yzenas on receiving the 2018 Prevost Hubbard Award for over 26 years of dedicated service and outstanding leadership in the development of standards in the field of sustainable asphalt materials.

The National Slag Association

ANNUAL MEETING

Hilton Pensacola, Florida



September 16,2019 - September 19, 2019

Jeff Butler - Keynote Speaker



Internationally respected speaker and consultant, Jeff Butler helps bridge generational gaps between Millennials and companies looking for their talent and patronage.

Butler has quickly built his reputation as a memorable presenter with tangible solutions for attracting, retaining, and engaging Millennials as employees and customers. Within just the past three years, he has spoken at two TEDx events and multiple Fortune 500 companies like Google, Amazon, and LinkedIn.

Butler is a third-generational Silicon Valley entrepreneur and has founded three companies at the age of 27. He grew up in the era with the highest employee turnover rate in American history...a rate which shows no signs of reversal. As a computer science major at U.C. Berkeley, whose program was ranked second in the country, he experienced the ongoing parade of companies and recruiters trying to woo him and his classmates.

Butler spent the first years of his career at some of the world's fastest-charging startups and tech companies before launching his consulting company in 2016. He is the author of two books The Authentic Workplace and The Key to the New You.