













## THOMAS C. BRACKEN

Chairman of the Board, Delaware Advancement Corporation







## **CHRIS COTTERILL**

**Executive Vice President & COO, Indiana Economic Development Corporation** 







## **DENNIS TYLER**

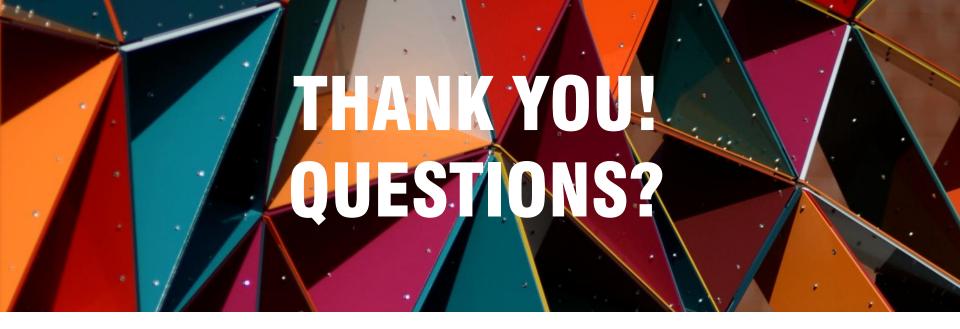
**Mayor, City of Muncie** 





## **NIGEL MORRISON**

President, Pizo Technologies, Heritage Environmental















## Introduction to Waelz Sustainable Products LLC



## Heritage Background

## The Heritage Group's History

The Heritage Group has been building lasting relationships with its partners for over 80 years.

4 Generations of family management

**250+** Fortune 500 customers

7,000+ Employees

\$8 Billion Total Revenue

#### The Heritage Group

#### Heritage Research Group

#### Environmental Group



- Heritage
   Environmental
- Heritage
   Thermal
- Heritage Interactive





#### Other Environmental



- Heritage Crystal Clean (Nasdaq: HCCI)
- Micronutrients (sold Q1 2016)
- PIZO Technologies





#### Oil Refining & Marketing



- Calumet Specialty Products (Nasdaq: CLMT)
- Landmark Resources





#### Asphalt Refining



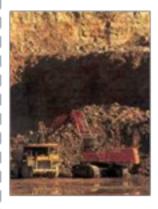
- Asphalt Materials
- Bituminous Materials
- Emulsicoat
- Laketon Refining
- Heritage Asphalt







#### Aggregate Industries



- US Aggregates
- **USAGGREGATES**

#### Construction



- Milestone Contractors
- Wabash Valley Asphalt
- Walsh & Kelly
- Champaign Asphalt





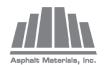
#### Monument Chemical



- Houston, TX
- Baytown, TX
- Antwerp, Belgium
- Brandenburg, KY



## **THG Family of Companies**























































## Zinc Nacional Background

### **Zinc Nacional Profile**

Zinc Nacional is one of 10 entities owned by the Alverde family's 4<sup>th</sup> generation family diversified holding company, Grupo Promax. Based in Monterrey, Mexico with focus in production and commercialization of gypsum products, wall plaster, drywall, zinc derivatives and recycled paperboard.







#### **Overview:**

- Founded in 1917
- Based in Monterrey, Mexico with 3,000+ employees
- The largest manufacturer of wall plaster and industrial and ceramic gypsum in Mexico
- The largest manufacturer of Zinc Oxide and Zinc Sulfate in Latin America
- The largest producer of gypsum drywall in Latin America
- The largest supplier of light-weight construction systems in Mexico
- Products sold in over 25 countries across the globe
- Own and operate Waelz kilns with the best technology available in the U.S., Mexico, Turkey and South Korea

### **Zinc Nacional Profile**

ZN, SDR, TURKMEX, and GSDK represent Grupo PROMAX's proven waelz kiln technology for processing metallurgical feedstocks across the globe.

ZINC NACIONAL	<ul> <li>Location: Monterrey, Mexico</li> <li>Main Products: Zinc Oxide, Zinc Sulfate and recycled Paperboard</li> <li>Founded in 1952</li> </ul>	
SOR.	<ul> <li>Location: Millport, Alabama</li> <li>Main Products: Waelz Zinc Oxide, Iron Concentrate</li> <li>Acquired in 2009</li> </ul>	
TURKMEX	<ul> <li>Location: Aliaga, Izmir, Turkey</li> <li>Main Products: Waelz Zinc Oxide, Iron Concentrate</li> <li>Started operations in February 2017</li> </ul>	
GSDK	<ul> <li>Location: Suncheon, South Korea</li> <li>Main Products: Waelz Zinc Oxide, Iron Concentrate</li> <li>Started operations in June 2017</li> </ul>	



## WSP Plant Specifics

#### **Investment and Jobs**

#### Investment

Phase 1 Investment: \$50MM

60+ Employees

Phase 2 Investment: 25MM

30+ Employees

#### 60 to 90+ Direct jobs

- 401K
- Profit Sharing
- Great Benefits
- Incentivized Bonus Plan

#### **50+ Indirect Jobs**

- Mechanical, electrical, electronic contractors
- Civil and refractory contractors
- IT Support
- Freight/Logistics company (rail & trucking)
- Railroad service providers
- Utilities companies
- Mail and courier services

## Plant Specifics: Waelz Plant

#### **Key Assumptions:**

- Plant Capacity
  - Phase 1: (1st Kiln)
  - Phase 2: (2<sup>nd</sup> Kiln)
- Finished Products: Zinc Oxide &

Iron Concentrate

**Project Timing** 

#### Required Utilities:

- Electric Power
- Natural Gas
- Water
- Railroad Spur
- Connection to major highways
- Heavy Industry zoning

	Year 1: 2018						Year 2: 2019													Year 3: 2020					
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Site Selection																									
Permits																									
Engineering																									
Equipment																									
Construction																									
Commissioning & Start up																									

## Other Waelz Plant Images for Reference



Waelz Kiln Plant in Aliaga, Turkey



Millport, AL



Waelz Kiln Plant in Monterrey, Mexico



# State-of-the-Art Waelz Kiln Technology

## Metallurgical Feedstock from Steel Mini Mills

Waelz kilns process a metallurgical feedstock that is a byproduct of steel mills, to create Zinc Oxide – a widely used additive in numerous products such as rubber, plastics, ceramics, glass, cement, lubricants, paints, sunscreen lotion, adhesives, sealants, pigments, micronutrients, batteries, and more.

#### FURNACE

## **BAGHOUSE COLLECTION**

#### METALLURGICAL FEEDSTOCK





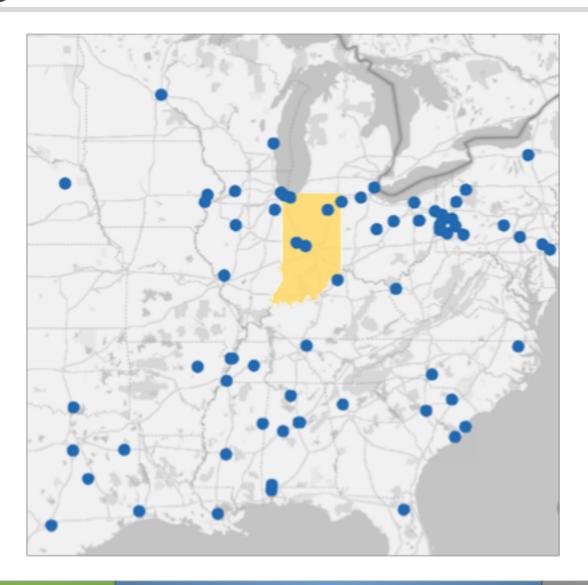


#### Metallurgical Feedstock Collection: Electric Arc

Furnaces like Nucor Steel or Steel Dynamics, typically referred to as "mini mills", melt a blend of scrap metal, including a large amount of galvanized scrap metal which contains zinc. In the melt stage, zinc is evaporated and trapped in the air handling (baghouses) of mills.

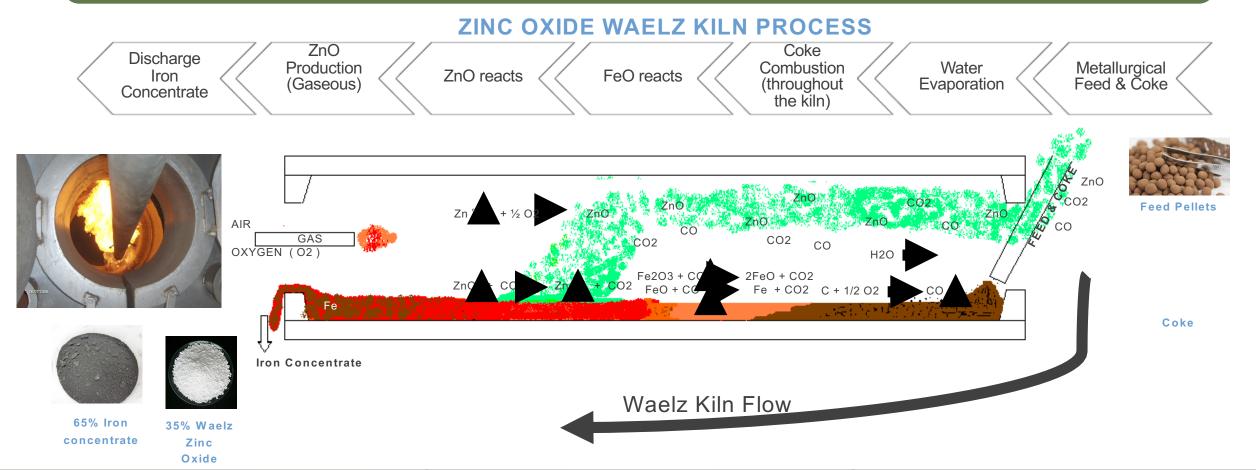


## Metallurgical Feedstock Sources



### The Waelz Process

The Waelz process is a method of recovering zinc and other relatively low boiling point metals from metallurgical feedstocks, mined ores and other recycled materials using a rotary kiln (waelz kiln).





## Community Involvement

## **Grupo Promax Foundation**



We are an association formed by the companies Zinc Nacional, Yesera Monterrey and Panel Rey, committed to help communities in vulnerable situations, located mainly in the state of Nuevo León. Improve their standard of living and well-being through community development programs, education, health and welfare

We annually help between 60 to 80 Organizations related to:

 Health associations, summer camps, scholarships, charity organizations, donations, etc..







## Zinc Nacional and the community

Through regular meetings with the neighbors that surround Zinc Nacional, we work together to attend mutual needs and improve the relationship between our company and the community.

Inviting our neighbors to a tour of our plant, so they can know the facilities and the security with which we work, as well as the benefits of the product we manufacture.

1992















1996

### Zinc Nacional and Education

Alliance for Citizen Education for Nuevo León
Zinc Nacional supports quality education, in conjunction with the Ministry of Education
adopts 3 schools to generate positive impact and turn them into public schools high quality



#### Support in:

- Development programs
- Integration and impact to the community
- Educational Excellence
- Infrastructure: soccer courts, dining rooms, library, computer room

AECNL. Alianza Educativa Ciudadana por Nuevo león

Initiative that seeks to improve the quality of education in the state. Its Mission is to Develop High Quality Public Schools (EPAC) through the application of the Escuela Virtuoso.





## **Recent Community Outreach**

**Memorial Day Volunteers** 



Veterans' support – Serve those who served us by donating and serving meals for Veterans' Day and Memorial Day events.

Recipients of \$6,500 in environmental grants distributed on Earth Day



City Sweep – Free annual collection of household hazardous waste has recycled or disposed of more than 216 tons from East Liverpool residents since 1997.

## Heritage Group in the Community

The Heritage Group and Fehsenfeld family have historically supported a wide variety of causes. Our initiatives include:

#### Children's Museum STEM Center

The Heritage Group has partnered with The Children's Museum of Indianapolis to establish The Heritage Group Center for Family Learning in STEM, which provides science programs for teachers, school groups, children, and families with the goal of sparking curiosity and interest in STEM subjects.

#### Celebrate Science Indiana

Celebrate Science Indiana is an annual event that encourages young Hoosiers to pursue exciting, rewarding careers in science. Both Heritage Research Group and Monument Chemical are active supporters of and participants in the event.

#### Hoosier Science & Engineering Fair

In 2018, The Center hosted more than 200 Indiana students for the 30th Annual Hoosier Science and Engineering Fair. Many Heritage Group employees participated as judges, where they had the opportunity to encourage students to become future leaders in science and engineering fields.

#### Purdue Polytechnic High School

Purdue Polytechnic High School was founded in 2017 with the mission of o ering an educational experience for students who want to pursue tech and STEM-related careers. The School was created through the vision of leaders at Purdue University and the City of Indianapolis along with several community partners, including The Heritage Group.

#### Kids Science Camp

The Heritage Group hosts an annual Kids Science Camp for children of THG employees. The camp engages children in science, engineering, and technology and reflects The Heritage Group's investment in developing future STEM leaders.

#### · Women's Fund of Central Indiana

The Women's Fund of Central Indiana is focused on creating transformative and sustainable change for women and girls in our community. The Heritage Group is an active contributor and supporter of the organization, and our president serves on its Board of Directors.

## **Community Engagement & Support**

- Environmental Grants We have distributed grants to community and school groups for environmental projects since 1998.
- Job Training Program At our plant in East Liverpool, Ohio we assist special-needs students in transitioning from the classroom to the workplace. Students obtain basic job skills working during the school year in administration and housekeeping.
- Schools We donate bikes for attendance incentives, distribute winter clothing and participate in back-to-school events.
- Public School Lab-Pack Program Segregate, pack, transport and dispose of laboratory chemicals from local public-school districts free of charge.

## **Community Engagement & Support**

- Community Emergency Response 28 employees serve as volunteer firefighters and/or emergency-medical technicians, providing OSHA-trained hazmat response expertise to their communities.
- Public Tours We host frequent visitors to our facilities; guests range from local school students to international government officials.
- Community Advisory Panel We initiated a formal process to meet with community leaders to discuss plant activities and topics of mutual interest at several of our facility locations.

## **Community Engagement & Support**

- Community Sponsorship We proudly sponsor local non-profits and, e.g., 4-H, East Liverpool's Got Talent, Pottery Festival, Oktoberfest, Trunk or Treat (Halloween), Christmas Parade.
- Charitable Giving Employees have logged countless hours volunteering with local civic organizations, church groups and youth sports teams. We volunteer or donate to: Walk 4 Autism, Relay for Life, Red Cross, American Cancer Society, Wreaths Across America, Ronald McDonald House Breakfasts, Habitat for Humanity, Timmy Global Health, Feeding America and the Salvation Army Angel Tree.

Heritage donates over \$150k annually to charitable organizations