#### 

#### **SELEE Corporation**





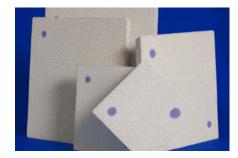






### **SELEE** Corporation

- SELEE is a technical ceramics company
- Applications of our productions include:
  - Filtering molten metals
  - Investment casting
  - Thermal processing









### **SELEE Corporation**

- Hendersonville, NC
  - Wuhan, China
  - Gilberts, IL

In 1995, SELEE joined Porvair plc and became part of Porvair Corporation in the United States.



In Hendersonville, NC since 1979





## Goals & Objectives

- Zero Landfill by 2025
- Reduce solid waste to landfill by 3% annually
- Implement an EMS/ ISO 14001 Functionally Equivalent by 2020
- Conduct an energy audit





#### Solid Waste Assessment

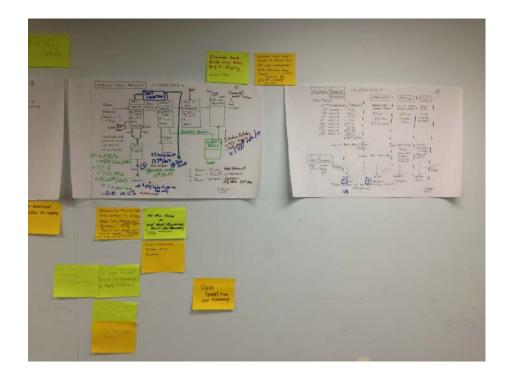
#### **Summary of Potential Waste Reduction Options**

Waste Type	Reduction Measure	Reduction Potential (tons/year)
Filter cake	Recycle through Ardleigh Minerals or Compost with Earth Farms	250
Saw trimmings	Recycle into Green Leaf Brick (found by SELEE)	250
Alumina scrap, Si C, ceramic filters, ceramic rollers	Recycle through Ardleigh Minerals	44
IBCs and drums	Recycle through one of the companies identified in this report	TBD
Gloves and rags	Launder through one of the companies identified in this report	TBD
TOTAL		544 tons/year





#### Lean & Green Workshop



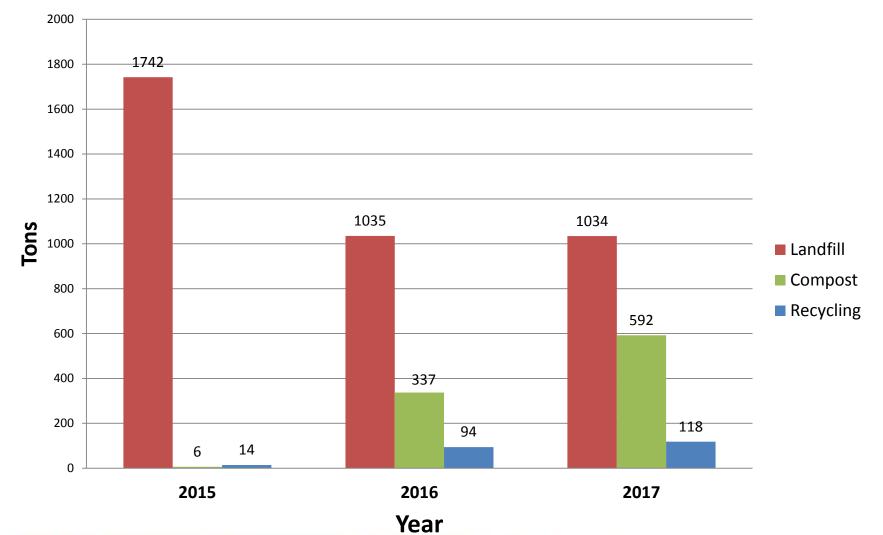
3.75 hour workshop

To improve efficiencies, competitiveness, and environmental performance of SELEE.



#### 

#### **SELEE Solid Waste**





#### Potential Waste Reduction Options

- Alar waste
- IAF saw trimmings
- Mullite rollers
- Setter Tape
- Plastic blue backing
- Micromass trimmings
- SiC plates
- Poly drums

- Mineral powder paper bags
- Large plastic bags
- Used garnet
- Paper towels with slurry
- Gloves





#### Successes

# In 2017, SELEE kept **1,481,828 pounds** out of the landfill through recycling & compost programs.





#### Compost

- Alar Filter cake
- Saw trimmings
- Raw Material Paper bags
- Cotton
- Food
- Other

Savings of ~\$5K/month Over 2 million Ibs since May 2016!









## Silicon Carbide/Alumina

- 73 tons since June 2016.
- Zero cost & savings







#### Gloves

- Began in October 2016
- Over 1 ton recycled







97,900 pairs of gloves in 2017!





### Cardboard

- Installed February 2017
- Earned \$7K in first year
- No disposal/hauling costs













#### SELEE's Green Team













#### Challenges

- \$\$\$
- Space
- Culture/Mindset





### What's Next

- Updated Waste Matrix
- 2018 Focus: Fired Scrap











