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

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

3.75 hour workshop

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Landfill</th>
<th>Compost</th>
<th>Recycling</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1742</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>2016</td>
<td>1035</td>
<td>337</td>
<td>94</td>
</tr>
<tr>
<td>2017</td>
<td>1034</td>
<td>592</td>
<td>118</td>
</tr>
</tbody>
</table>

Tons
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 lbs 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
Signage/Education
SELEE's Green Team
Challenges

- $$$
- Space
- Culture/Mindset
What’s Next

• Updated Waste Matrix
• 2018 Focus: Fired Scrap