Rube Goldberg Dream Machine - Metal Reclamation

oximes Full Scale Implementation OR oximes Pilot Scale/Study

1. Description of the project: What is the issue and how did you fix it?

We identified potentially recoverable tramp metal in our landfill-bound foundry residuals so we built a machine from spare parts to magnetically separate and sieve it out for re-melt.

2. Environmental Benefits: Conservation of raw materials or energy, reduction or elimination of emissions, wastes, toxics, water discharges, etc.

This machine helps us divert roughly 250 tons annually from the landfill to raw materials.

- 3. Other Benefits: Productivity, health and safety, employee morale, etc.
- 4. Cost Savings: Capital cost, operating cost, ROI or other pertinent cost information.

The capital cost is negligible since most of the machine is scavenged pieces of other machines. Annual savings is roughly \$100,000.

5. Applicability to other foundries and additional Comments

If you have a solid maintenance department, this should be an achievable project.

Green Foundry Project

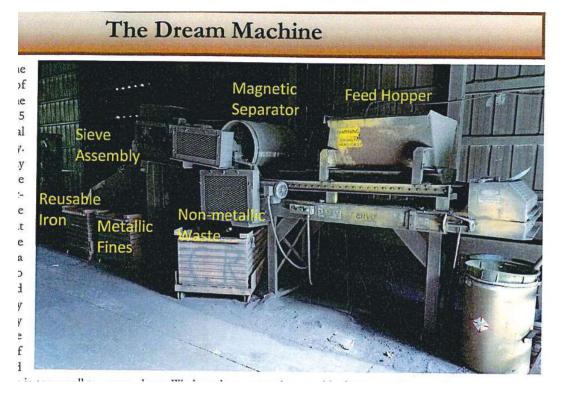
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6. Applicable Environmental Categories and Foundry Processes. Select all that apply.

\square Carbon (GHG) Emissions Measurement and Reduction							
\square Air Quality	□ Wateı	Use and D	Discharge		⊠ Waste Management		
\square Beneficial Use	□ Storm	water	ter 🗵 Material and Resource Conser			Conservation	
☐ Community Engagement							
Foundry Process(es) Impacted							
⊠ Melt □ Po	ur 🗆	Mold	\square Core		\square sand system/reclaim		
\square Shakeout \square	Heat Trea	at 🗆 Que	ench	☐ Fin	ishing	\square Shipping	
	☐ Casting Design						
\square Management Systems and Metrics							

7. Add photos to enhance your application, if applicable.

☐ Other, explain: ☐ Click or tap here to enter text. ☐



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