### **TURA Experiences at AlphaGary**





www.alphagary.com

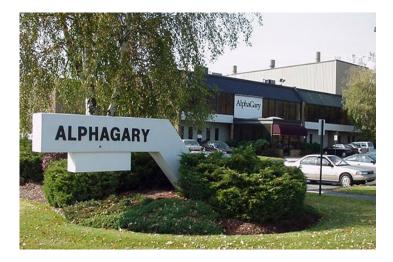




#### **Company Overview:**

- Develop and manufacture specialty thermoplastic materials
- Diverse polymer portfolio for various enduse applications
- Versatile manufacturing
- Technically demanding applications
- Global markets; multinational customers
- AlphaGary is a subsidiary of Rockwood Specialties Group, Inc.







Group Headquarters: Leominster, MA USA

AlphaGary

Melton Mowbray, Leicestershire UK

#### **Globally Positioned, Locally Responsive**





AlphaGary Canada, Stoney Creek, Ontario

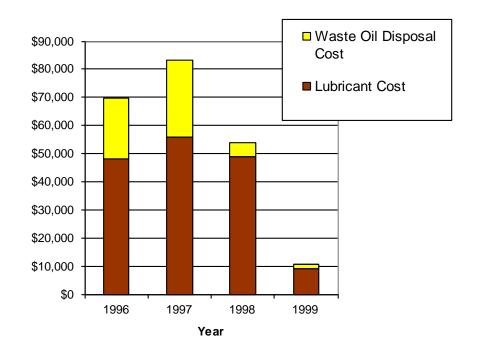
Pineville, NC USA



#### Building upon success Examples of applying TUR Techniques...

Although not reportable substances required to be included in TUR Plan, this project illustrated benefit from opportunity considered as process improvement - modernization

Cost of purchased lube and haz waste disposal



- Reductions due to;
  Class A Regulated Recycle Permit Lube-less Dust Stop Rings
- Additional benefits not quantified;
  Drum deposit charge
  Reduced environmental exposure
  Quality of product (reduced black specs)
  Maintenance of dust stop seals



## TUR Accomplishments Reduced processing of Lead compounds

- Leominster, MA RY 1999 Pb cmpds (lead stabilizers processed)
  - $\Box$  ~ 2MM lbs
  - About 0.025 lb Pb per lb of product (> 80MM lbs produced)
- Leominster, MA RY 2008 Pb cmpds
  - □ ~ 60K lbs
  - □ About 0.001 lb Pb per lb of product (> 60MM lbs produced)
- Lead reduction trend continues...
  - Market demands
  - Production scheduling
- Corporate objectives involve reducing Pb compounds
  - Pineville, NC facility established as Pb-free





#### Injecting TUR techniques into the process



- process modernization
  - automation
  - blender shaft seals eliminating leakage / by-product
  - mixer seals dust stops, reducing haz waste generation at source
- procedures and practices in blending area
- best practices / engineering controls
  - minimizing fugitive dust & personal exposure

Integrating TUR principles into daily business and capital projects





#### Company objectives seemingly linked with TURA requirements...

- Technically demanding end-use applications for specialty materials Emphasis on developing new products Eliminating substances of concern = input substitution
- Intense focus on service and satisfying multinational customer requirements

Competitive markets, continuously evolving Incorporated in planning process

• Operating versatile manufacturing facilities

People / Assets Minimizing personal exposure and byproduct generation Managing risk and going beyond compliance

Economic goals and objectives

Yield improvement

Emphasized cost impact while quantifying material balance





## Leominster, MA Facility Highlights

- ~ 145 full time employees
- Commitment to SH&E
  - Recognition by RSGI for superior safety performance
  - ☑ >5 million man-hours since LTA
  - Cooperation with local authorities
  - ☑ Efforts recognized by Commonwealth and EPA





#### The evolution...

From challenging times;

- o Transition from TURA representing burden of compliance and cost
- o Experience of NOVs and ACO

To understanding principles;

- Recognized value of planning and realizing TUR was consistent with company objectives
- ✓ Advancing materials, developing competitive advantage

And cooperatively working with stakeholders;

- Collaboration with stakeholders
- Supply chain champions

Realizing;

- Value to paying fees ?
- Resource conservation = another value opportunity !





#### Today... TURA at AlphaGary

Activities are integrated into daily business routine Complimentary to quality management system Supply chain collaboration accelerates advances Continuous improvement Evolving process, Not an endpoint

Contributes to maintaining a competitive position within our industry



# Thank you!

## **Questions?**

www.alphagary.com