

Target PQ (ecovyst) Virtual Investor Conference: April 8, 2021

KURT BITTING – ECOSERVICES

Slide 1: Introduction

Hello everyone, my name is Kurt Bitting, President of Ecoservices. It's great to be here with you today to introduce the business and share some of its attributes and strategic priorities.

Slide 2: Key Takeaways

- I'll start with a few basics. Our market is large, increasingly essential, and growing.
- Sulfuric acid is the most widely used commodity chemical in the world, and it plays a critical role in the production of key products for the new economy of the future.
- Ecoservices supports these markets with a century-old track record in Sulfuric Acid which has allowed us to align with industry leaders in growing markets and supports consistent revenues and high margins.
- We are excited about the markets we serve, and we plan to participate in the growth by using our core competitive advantages. We are executing on a plan that increases our top-line growth while expanding margins

Slide 3: Ecoservices Product Lines

- Let's review Ecoservices and its four key product lines
- First, Regeneration – We are the North American market leader in sulfuric acid regeneration, primarily supporting refinery alkylation.
- Next up is virgin acid and sulfur products. Here, we are the leading North American supplier of high-quality virgin sulfuric acid. This includes numerous specialty grade sulfuric acids that are required by our customers.

- In the lower right, we have the treatment services business. Here, we safely incinerate compatible and pumpable Hazardous and Non-Hazardous waste for our customers while recovering a significant energy value from the process.
- Last but not least is our newest business, Chem32, which is using a novel and proprietary technology to activate hydro-processing catalysts for refineries and renewable fuels producers.

Slide 4: Where Do We Play? Markets and End Uses Served

- This product tree represents how the processes interact to produce our valuable services and products.
- Like so many recipes, the ingredients come together in the oven – a furnace set to 1800F. Spent sulfuric acid is injected in the furnace along with sulfur and waste. Our process expertise enables us to balance the appropriate amount of Sulfur and waste, both of which contribute thermal energy, to minimize the natural gas usage required to incinerate the spent acid.
- The products from our furnace and production process are regenerated or recycled sulfuric acid, which goes back to the refinery, and high-quality virgin acid, which ships to a diverse set of industries, including nylon production and mining.
- The few byproducts that our process generates are converted into the sulfur coproducts. These are sold into the agriculture, paper, and water treatment markets.
- Chem32 uses patented sulfur technology to activate fresh catalysts for direct shipment and usage by refineries or renewable fuel plants.

Slide 5: Business Snapshot

- Let's look at a few more snapshot views of the business. We are the leading sulfuric acid regenerator in North America, servicing a bit more than half of the market. 95% of our regeneration sales are covered by long-

term agreements with capacity reservation fees or take-or-pay commitments. This gives us a terrific baseload for revenue and cash flow visibility.

- Ecoservices is also the market leader for virgin sulfuric acid, where we focus our sales into high-growth segments that require superior quality and reliability.
- In addition, both the regeneration and virgin acid lines have a very high degree of cost pass-through, which means that our high margins are also quite stable.
- While our regeneration, virgin acid, and treatment services businesses are all North American-based, our new business, Chem32, sells more than 50% in international markets,

Slide 6: Where We Operate

- In North America, two-thirds of refinery alkylation capacity rests in the U.S. Gulf and West Coasts, the regions where we have the majority of our capacity. Our customers also export their end products from these same regions.
- I want to emphasize that the regeneration industry utilization is above 90%, and here, our geographic concentration of plants, unrivaled production redundancy, and logistics assets lets us provide our customers with industry leading reliability.
- Our locations also give us great access to sulfur from refineries, which we convert to virgin acid to service the nylon and industrial applications in the Gulf Coast, and the rapidly growing mining segment in the Southwest.
- For the majority of our customers, we are their 100% supplier – and they depend on us to completely manage the supply chain. We remotely monitor their production and inventories with telemetry, and we push and pull shipments accordingly.

- We like to say that we create a pipeline between our plants and our customers utilizing our tailored logistics assets.

Slide 7: Virgin Sulfuric Acid Sources

- Sulfuric Acid has three primary areas of supply:
- First, copper, nickel, and lead smelters generate sulfuric acid as a by-product. This acid is generally lower quality due to a higher metals content – and it only comes in one generic strength. Smelters cannot regenerate.
- Next up: phosphate fertilizer producers do in fact produce most of the world’s commodity sulfuric acid, but this is low quality and stays “inside their fence lines.” Fertilizer plants also cannot regenerate.
- On the other hand, we produce sulfur-derived sulfuric acid in conjunction with our regeneration process. We are able to make multiple grades based on customer demand, and can produce the highest-quality products.

Slide 8: We Play in a Large Market That Supports an Important Service Across the Globe

- While sulfuric acid is the most widely used commodity chemical in the world, the majority of it is consumed for captive phosphate fertilizer production. That’s NOT where we play. Instead, we focus on customers that require a high degree of service and quality – and are willing to pay for it.
- Our plant locations are well aligned to service refining and industrials in the Gulf -- and refining and mining on the West Coast.

Slide 9: Macro Environment – What’s Going to Drive Future Trends

- A major avenue for future growth is sulfuric acid alkylation. Alkylate is a high octane product – and the cleanest fuel blending component.

- On average, alkylate makes up 13% of U.S. gasoline and is typically one of the top margin products for a refinery – it’s no surprise that some in the industry call it “liquid gold.” Because of this high value, refineries desire long-term regeneration supply contracts to support their alkylation.
- The demand for alkylation and the resulting sulfuric acid regeneration is being driven by tighter gasoline standards. In 2020, the US fully implemented a sulfur reduction in gasoline, dropping the allowable limit by two thirds. The refinery hydro treating process used to remove this sulfur also destroys octane. This requires adding back a high-octane, low-sulfur component, without putting another gasoline spec out of tolerance. Only Alkylate has the ability to do this.
- Higher fuel efficiency standards also encourage car makers to produce smaller turbo charged engines that deliver equivalent power but consume less fuel. These engines primarily consume premium grade gasoline which is 40 to 50% alkylate.
- The increasing demand for octane and premium fuels has resulted in a widening price spread between premium and regular gasoline.
- Finally, our Gulf Coast customers are taking advantage of growing gasoline exports, which are prized because they don’t require ethanol blending – but DO require alkylate.

Slide 10: Regeneration

- Sulfuric acid is used as a catalyst in the refinery alkylation process. The refineries require a high strength 99% sulfuric acid, use it in their process and return an 87% strength spent acid to Ecoservices, where we incinerate the contaminants and return the 99% fresh acid to them in a truly circular process.
- Over the past 50 years the overwhelming majority of refineries have permanently outsourced their acid regeneration needs in order to reduce their capital costs and increase regeneration reliability. Since the refinery acid storage capabilities are very low, and industry utilization is so high,

refineries need to partner with Ecoservices in long-term volume guaranteed contracts.

- Beginning in 2016, we commenced a debottlenecking program to add 35% more regeneration capacity to our Gulf Coast plants. This new capacity has added the equivalent of a new plant to our network. I'm pleased to say we will be fully utilizing all the added production and logistics capacity by the end of 2021, with the commencement of a new long-term customer agreement.

Slide 11: Virgin Acid – Differentiated by Strength, Quality and Reliability

- Our three unique Virgin Acid products are:
 - Oleum – which is used primarily for Nylon production.
 - High Strength Sulfuric Acid – Used primarily for copper and borate mining applications. These segments are linked to electrification, construction, and personal devices. Electric vehicles contain 3x more copper than a combustion-engine vehicle, which is driving increased mining activity in the US.
 - Our high purity or electrolyte sulfuric acid is used in many different industries that require stringent specifications. This includes the petrochemical and chemical industries concentrated in the energy advantaged Gulf Coast, along with “new economy” end uses such as batteries and semiconductors.

Slide 12: Treatment Services – Safely Converting Hazardous Waste to Energy

- We are the only North American regeneration producer that possesses RCRA hazardous waste permits.
- This allows our Treatment Services business to handle a variety of wastes, which provide a fuel source, as well as sulfur that we can recycle into sulfuric acid. This leads to a very high contribution margin for Treatment Services.

- The demand for waste offtake is growing, because waste generators want to stay away from deep welling and landfills where possible. Our plants in the Gulf Coast also sit in close proximity to customers, which cuts down on both the cost, and risk for the waste shipper.

Slide 13: Chem32: Preactivation Services

- Our newest business, Chem32 performs the refiners' catalyst activation "ex situ" – or offsite. This enables refiners to start up more quickly, eliminate safety and environmental hazards, and avoid the waste generation that comes with traditional on-site catalyst activation.
- The business is positioned to grow for several reasons.
 - First, Refineries increasingly lack in house expertise for on-site activation and they want to avoid the HSE and waste concerns
 - And the growing number of renewable fuels refineries lacks the ability to perform the on-site activation.

Slide 14: How We Support Our Customers through Sustainability

- At its core our business is rooted in sustainability.
 - The acid regeneration recovers 99% of the Sulfuric Acid in the process
 - Our production of Virgin Acid lowers our natural gas usage and GHG emissions, while producing 17 MWhs of green electricity with captured by product steam
 - Treatment services provides a fuel source while eliminating waste
 - And Chem32's technology greatly reduces the risks of on-site catalyst activation.

Slide 15: Strong Margins with Additional Room for Improvement

- While we like our growth projection, our superior process expertise will enable us to implement improvement initiatives to drive higher margins. These include:
 - Adding additional steam capture and green power generation;
 - Increasing our sulfur processing capacity, which will enable us to capitalize on the growing markets while lowering energy costs; and
 - Expanding our Treatment Service capacity to further lower energy consumption.

Slide 16: Organic Growth Projections

- We are excited and confident about our long-term growth potential.
- We have been preparing for this growth for several years now. We debottlenecked plants and logistics, which will allow us to better operate at high capacity utilization and serve the new large long-term customer and the growing demand at our other refinery customers driven by alkylation fundamentals.
- In addition, the rapidly growing demand for virgin acid in mining and other specialty sectors aligns very well with our locations and production capabilities.
- And Chem32 has an exciting future with a large untapped market of refineries still performing “in situ” activation and the rapidly growing renewable fuels demand.

Slide 17: Key Takeaways

- In summary, we will deliver shareholder value by:
 - Capitalizing on the growth of our diverse markets;

- Leveraging our process and logistics know how to target capital-efficient expansion, which allows us to continue our long-term partnerships with industry leaders and maintain strong, stable margins;
 - Continue to expand our focus on sustainable solutions;
 - And leverage our existing customer relationships and reputation for outstanding service, to grow inorganically.
- That's our story – we're an essential part of our customers' business, we have high and expanding margins, and we're committed to being a key engine in delivering value to our shareholders. Thanks for your time today!