

INDUSTRY Consumer Goods Industry

LOCATION Barberton, Ohio

KEY CHALLENGES

- High travel costs
- Lack of flexibility in delivery schedule

SOLUTION

- Supply chain route analysis
- Transload product from railcar to tanker

BUSINESS BENEFITS

- Lowered travel costs by \$435,000 annually
- Greater control on delivery schedule
- Reduced product cost due to volume per load change
- 68.5% reduction in greenhouse gas emissions annually



How Peoples Services Helps a Consumer Goods Client Save "Over Half a Million" Dollars Annually

Customer focused on shipping from point A to point B as many manufacturers in the country still do. As a result of Peoples Services' (PSI) analysis of the client's supply chain, they determined an alternative shipping mode. The customer never considered using rail to ship or receive material. PSI's experience with transloading and packaging intrigued the customer to the possibility of using railcars to transport the Ethanol they used in production. The proposed solution offered the customer reduced travel cost, reduced product cost, better control of their shipping schedule, and decreased greenhouse gas emissions caused by shipping their supplies.

The Challenge

Shipping liquid material for production created multiple challenges for the manufacturer. The logistics group focused on tanker trucks as the mode of transportation. The production levels for the consumer goods customer was up and down. They frequently needed to adjust the delivery schedule based on available space in their silo. Truckloads sent from their Illinois and Indiana suppliers could not be canceled once they were en route. Additionally, liquid tanker drivers are a specialty and consequently a higher cost to transport using the truck. When the tankers would arrive at the Ohio based plant, trailers would have to sit and wait until space was available in their storage tanks causing them to incur demurrage and delay the drivers. Likewise, if an emergency load was needed, it took 1-2 days for the truck to arrive adding more constraints on their production schedule.

The Solution

PSI undertook a collaborative approach, through which it sought to understand the challenges facing the Ohio based manufacturer. It was the first time that the company's logistics and procurement teams had met to share their experiences with a third party logistics company like Peoples Services. The shipping route was analyzed, and PSI was able to find a cost savings solution that also offered the client better control of their production plan and reduced the impact to the environment trucking causes. The Ethanol product is shipped from the client's Indiana and Illinois suppliers using tanker trucks and loaded into their silos in Ohio. Material rates were built on the quantity shipped,



which equated to the volume of one truckload or 6,500 gallons. Each location sent an average 500 truckloads per year or 2 trucks per business day to the Ohio plant.

After analyzing the manufacturer's shipping route, PSI was able to propose a solution that would reduce total travel costs, increase available production capacity, and reduce greenhouse gas emissions. Using a two-phase shipping solution, where the product is transported via railcar to a transloading facility in Ohio then transferred into a liquid tanker for the final stage of the transit. Due to the proximity to the client's plant, only one bulk tanker driver would be needed to transport the 30,000 gallons to the plant.

The Business Benefits

Transit costs for the Ethanol were reduced by 21% or \$435K annually by using the two-step transit solution. Additionally, PSI's rail spurs allow the client to stage their railcars pending a delivery request. This allows greater control on when the product is delivered to their facility. With PSI assuming all transportation from the rail line to plant, the manufacturer can focus on its core competencies.

An added benefit was found in the order volume the manufacturer now had available to them. Ordering product at the 30,000-gallon amount, which is 4.5 times larger than the traditional trucking route provides added cost savings. A further benefit was the reduction in the client's environmental footprint. Shipping by rail and truck reduces the estimated greenhouse gas emissions by 1,017,000 tons of $CO_{2}e$ emissions annually, which is a 68.5% reduction.

Estimated CO₂e emissions per shipment:



By shipping rail instead of truck the estimated CO_2e emissions was reduced by

1,115 tons



By shipping rail instead of truck the estimated CO_2e emissions was reduced by

919 tons