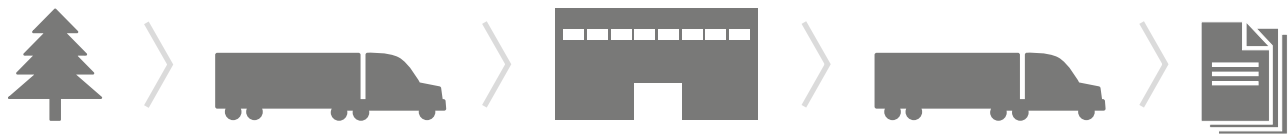


PAPER MANUFACTURER STREAMLINES ITS SUPPLY CHAIN BY LEVERAGING TECH AND EXPERTISE OF SCHNEIDER BULK

Every day, the lives of billions of people across the globe are improved by a variety of goods with deep roots — quite literally. Roughly 68 million trees are used to produce paper and paper products annually in America. From books to bathroom necessities to paper crafts and handwritten letters, there are endless ways that a paper product meets a human need for convenience, knowledge, and creativity.

With paper goods so crucial to consumers across the nation, it's paramount that the supply chain that moves the products is as strong as the roots from where they begin. In the heart of Wisconsin's paper production arena, one manufacturer noticed a breakdown in the careful process of loading and unloading hazardous product that's required for it to produce and deliver an assortment of paper necessities to consumers across the nation.

PAPER MANUFACTURING PROCESS



THE HAZARDS OF HAULING BLACK LIQUOR

Black liquor is a unique liquid byproduct that is produced during the paper manufacturing process — and it created a series of difficulties for the paper manufacturer, as well as its logistics and freight providers. The hazardous nature of this unavoidable material makes it tough to handle without correct safety procedures. It's challenging to load and unload in accurate quantities without the right technology.

The paper manufacturer's existing carriers were using old, manual weighing practices when moving the black liquor, leading to inefficiencies in reaching the required fill amounts in the tanks. As the paper manufacturer continued to lose money and valuable time through a clunky transportation process, it looked to its logistics provider to bring in a transportation provider that could take the paper manufacturer's business — and bottom line — to a new level.



WHAT IS BLACK LIQUOR?

This hazardous liquid is produced from the process of turning wood pulp into paper pulp. It is then concentrated and transported to a new area of the manufacturing plant to be burned for energy that powers the paper product production.

GETTING BACK IN THE BLACK: A CALL FOR IMPROVED PROCESSES AND RELATIONSHIPS

It was clear to the paper manufacturer and logistics company that the procedures carried out by the multiple existing small carriers resulted in wasted product and time, hurting the manufacturer's bottom line and reputation.

After investigating further, the manufacturer recognized that tanks were either being overfilled or underfilled in an effort to get to the optimal level. This manual, uneven approach led to increased operational costs and a reduction in on-time deliveries within its network.

To make matters worse, the logistics provider also noticed that improper handling of the product was putting the health of the smaller carriers' drivers and manufacturing plant employees at risk: puddles of black liquor were found around loading and unloading sites and the pumps and hoses were often old and in poor condition. This material is toxic and can cause chemical burns to the skin and eyes if touched or can lead to breathing problems when inhaled.

The logistics provider knew it needed help from an experienced carrier to reduce the cost burden on the paper manufacturing company, as well as reduce the growing tension in the relationship between the logistics provider and the manufacturer — due largely to poor communication and execution of operational and safety practices within the network.

When considering potential candidates to address the challenge, the logistics provider had one standout in mind. This company is known for its investment in shipper technologies, expertly coordinating thousands of loads of hazardous material per year, and for helping the logistics provider move loads via van truckload and intermodal assets since the 1940s.

The logistics provider called Schneider Bulk Transportation to help clean up its loading procedures and delivery processes.



AN ORANGE APPROACH: TECH IMPROVEMENTS AND PROACTIVE COMMUNICATION PAVE THE WAY FOR SUCCESS

Now that the logistics provider had connected the paper manufacturing company with a top-rated bulk transportation solution, the only thing left to do was let Schneider roll up its sleeves and get to work.

Schneider started by evaluating and identifying existing facilities, practices and equipment that would pose safety-related risks for its drivers and the paper manufacturer's employees. Schneider then developed in-house safety training and procedures designed for a dedicated team of drivers that would be handling the daily work. This training taught drivers to effectively operate the customer's equipment, including: safely loading and unloading the hazardous chemicals, identifying faulty equipment and how to prevent spillage in transfer areas.

After a few weeks of operations with the Dedicated Fleet, some issues surfaced with the amount of time needed for loading and scaling of each shipment. Loading was often exceeding four to five hours, per shipment, which added operational costs and reduced on-time deliveries. A cost-effective, timesaving solution was needed, and Schneider began by retrofitting its trailers with special load sensors with Bluetooth capabilities that metered and ensured maximum load efficiency of the difficult-to-handle chemical product. This reduced load time to less than one hour per tank and allowed nearby personnel to assess the status of a tank's volume from their tablet or smartphone.

PEACE OF MIND AND DELIVERIES MADE ON TIME: SCHNEIDER'S TECH AND BULK TEAM DELIVERS

By carefully choosing a safety-focused, tech-forward and operationally experienced freight provider like Schneider Bulk, the logistics provider enabled the paper manufacturer to streamline a significant part of its supply chain. With Schneider, the paper manufacturer increased load efficiency and improved processes to handle the black liquor more quickly and safely. More specifically, the solutions resulted in:

**Decreased Operational Costs**

- The new load meter technology and Bluetooth capability reduced the loading time for each trailer from over four hours to an average of 45 minutes, saving the company hundreds of hours in labor.
- Enhanced training procedures decreased processing and cleanup time.

**Increased Efficiency**

- Schneider's streamlined process helped achieve a 95% on-time pick up and 90% on-time delivery, thanks to decreased load times.
- Precision loading and unloading processes ensured reduced waste of product and increased the manufacturer's bottom line.

**Consistent Proactive Communication**

- Schneider's history with handling bulk transport brought serious expertise to the table, and its experience helped influence communication between the companies.
- Streamlined processes and paperwork resulted in fewer last-minute communications.

With people counting on the manufacturer's essential paper products, the logistics provider knew that efficiency in all aspects of the production process was not a wish-for, but a requirement. Schneider Bulk's technology and process improvement work powered the paper manufacturer forward. After joining forces with Schneider Bulk, the manufacturer finally received an optimized amount of black liquor, kept production moving on time and achieved productivity results that strengthened its reputation.

The logistics provider continues to rely on the expertise of Schneider's Bulk team to ensure efficient transportation of hazardous materials.

If you're interested in what Schneider Bulk can do for your business, contact solutions@schneider.com.

