

## SUPPLY CHAIN MANAGEMENT:

# GAINING COST CONTROL, ENSURING HSSE COMPLIANCE

## Case Study: Managing Bulk Commodities for a Prominent Global Energy Company

### BACKGROUND

A leading global energy company and recognized pioneer in oil and gas exploration needed to turn major challenges into a huge opportunity. The frustration: logistical and Health, Safety, Security and the Environment (HSSE) compliance issues that threatened its relationship with local municipalities and the integrity of the brand. To earn the confidence of the company's customers, shareholders and the public, the company looked to Schneider to deliver on its commitment to HSSE while also saving logistics costs and improving performance efficiency.

### SITUATION

The company began hydraulic fracturing (better known as "fracking") operations on the Marcellus Shale in the eastern U.S. in summer 2010. As a previously untapped source of natural gas with a high-demand population nearby, the project held great promise. However, after a year of operations, the company's logistics were disorderly, congested and costly - creating headaches and HSSE compliance issues.

Its unwieldy fleet of 129 carriers hauling bulk commodities created major challenges, resulting in inefficient planning and high cost. Additionally, regulatory reporting miscues and mistakes created by inadequate HSSE controls were drawing unwelcome attention. As a highly visible business, operating within an industry that is constantly under intense public scrutiny, these issues could cast a dark cloud it could ill afford. The company was in dire need of bulk commodity planning capability in order to tighten HSSE compliance, help protect its brand, increase efficiency and lower logistics' costs.



## SCHNEIDER' SOLUTION

Beginning in July 2011, one year after the company's operations began on the Marcellus, Schneider's team of supply chain management experts quickly teamed with the company to develop an ideal model, reducing complexity and cost and achieving HSSE compliance.

The Schneider team drew on its broad experience in managing carrier operations and bulk commodities to craft a straightforward, four-part plan to streamline and tighten operations:

- 1 Using Schneider's proprietary Decision Support Tool, the team designed and put into action a customized bulk commodity demand forecast and inventory replenishment management system. The system ensures that optimal deliveries of materials are available to support fracking operations at more than 130 planned wells.
- 2 Driven by a culture of "safety first and always," the team focused on sourcing, qualifying and managing carriers to limit road exposure by reducing transportation miles and hours.
- 3 The plan was supported 24/7 by professional logisticians, who supported this highly dynamic operation while keeping costs low.
- 4 The team used consistent information-reporting systems to create visibility and transparency, including regulatory and operations reporting. This steady and reliable stream of information led to ongoing operational improvement and greater public trust, which helped preserve confidence in the brand.

## RESULTS

Schneider's planning expertise provides a streamlined logistics network that meets the challenge and delivers results:

- Schneider's "Safety First and Always" approach is an ideal match for the customer's commitment to HSSE. The team was able to put a newly qualified carrier base and network design into action, which limited road exposure by reducing transportation miles and hours.

**129** CARRIERS

**TO 13** CARRIERS

- Schneider's expertise and execution has provided the customer a 453% return on investment within 12 months and a net savings of \$23 million per year.

- With a new demand-planning system in place, Schneider reduced the number of carriers from 129 to just 13, which greatly simplifies operations and dramatically increases HSSE control.

- Time is money in this industry. With Schneider's Decision Support Tool, the customer's planning capabilities were dramatically improved. The delivery of the optimal amount of material ensures efficiency within fracking operations.

**reduced miles by**

**49%** 

**hours by 34%**

- Schneider' approach to bulk commodity management has reduced miles by 49% and hours by 34%. This reduction in road exposure and transportation cost was achieved through two primary initiatives:

- Load planning on a lane-by-lane basis and assigning water sources closest to the consuming point
- Reduction in double-hauling of water to intermediate points by increasing the percentage of direct shipments

**SCHNEIDER**<sup>™</sup>

Schneider eliminated the guesswork from the company's old, snarled bulk commodity management equation and delivered customized solutions that dramatically improved production efficiency. The supply chain experts from Schneider developed complex and creative networks, which now blend seamlessly into the company's daily business processes.

The bottom line? Today, the company has methodical HSSE policies in place, a much cleaner, efficient bulk commodity process and, most importantly, the reassurance of knowing it has saved millions by making the smart decision to partner with Schneider.