TESTIMONY

Before

The United States House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines, and Hazardous Materials

Hearing on

"Railroad and Hazardous Materials Transportation Programs:
Reforms & Improvements to Reduce Regulatory Burdens"

Presented By

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April 7, 2011

Chairman Shuster, Ranking Member Brown, and other members of the Subcommittee on Railroads, Pipelines, and Hazardous Materials, I greatly appreciate the opportunity to appear before you at this hearing. I am Gary Self, Vice President and General Manager, for Nelson Brothers, Inc. I have worked for Nelson Brothers since 1971 in many capacities, starting out as a truck driver.

Nelson Brothers is one of the Nation's largest manufacturers and distributors of Division 1.5 and 5.1 bulk emulsion blasting agents. From sites in AL, KY, OK, VA, WV, and WY, we supply customers in 26 states with over a billion pounds of these bulk materials annually by cargo tank and specialized, container straight trucks. Nelson Brothers has never had a fatality or a serious injury attributable to these hazardous materials in the 55 years that we have been in operation.

I have been asked to present testimony about our recent efforts to comply with requirements imposed on companies engaged in the bulk transport of emulsion blasting agents and related hazardous materials by the Pipeline and Hazardous Materials Transportation Administration (PHMSA) through the "Special Permits" program. It is a cautionary tale that resulted in near disastrous consequences for our company, and underscores the grave concern our company and the commercial explosives industry has with the agency's use of its special permit authority to mandate unproven and untested technologies on motor vehicles transporting explosives and blasting agents.

The safety and security of the materials we manufacture, distribute and transport is a company philosophy and paramount to our ability to survive as a company. We are closely regulated by a variety of governmental agencies, including PHMSA. Lapses in our regulatory responsibilities could compromise any aspect of our operations. For example, the specialized bulk trucks we operate are not configured to transport other types of freight. These vehicles would be idled without PHMSA's special permits. It is Nelson Brothers' rigorous attention to our compliance obligations that compels us to share our experience today as you contemplate reforms and improvements to reduce regulatory burdens of PHMSA's hazardous materials program.

Background

In the late 1970s, the explosives industry was swept by innovations promising safety and efficiency gains through bulk material transportation. Bulk transportation and the fitting of vehicles with specialized processing equipment allowed less sensitive, safer materials to be transported on highways to job sites where mixing and sensitizing of products would occur. Since bulk transportation of these less sensitive products was not provided for in the regulations, companies requested "special permits" to allow for this activity. Since that time, 95 percent of commercial explosives products are now transported in bulk. During this time, no death or serious injury has been attributed to incidents involving these bulk materials.
While special permits are important regulatory tools PHMSA can use to allow the introduction of innovations that can provide equivalent or greater levels of safety, they do not come with the same cost/benefit protections that are afforded by notice and comment rulemaking. For

that reason, Congress never intended that special permits be long-term regulatory solutions for the activities they authorize.

Under the special permit program, PHMSA has power to modify permits with new conditions without the cost/benefit analysis that would be required for rulemaking. In August of 2009, PHMSA issued notices to holders of four of the eight special permits that authorize bulk explosives vehicles that it was modifying the conditions of the permits. Among the new conditions was one requiring battery disconnect switches. Between August and December 2009, the "battery disconnect" standard was rewritten three times. Despite the uncertainty, Nelson Brothers decided in January 2010 that it would begin the process of complying with 22nd revision of Special Permit 8554 issued December 30, 2009. The 22nd revision set a deadline for battery disconnect systems to be installed by January 1, 2011. We wanted to pursue a installation schedule that would be the least disruptive to our operations and customers.

After engaging in a global search, we were able to identify only one foreign-sourced supplier of a battery disconnect system that promised to meet the performance standards stated in the special permit. This system was designed for off-road mining equipment, but we were assured it could be adapted for use with our bulk explosives vehicle fleet. This high-end aftermarket battery disconnect system used a constant duty solenoid to disengage the alternator from the electrical system, ensuring engine shutdown per PHMSA's special permit requirements. Company engineers, OEM engineers and technicians, and disconnect manufacturers and technicians were involved in the initial installation. Testing was successfully completed in early March 2010, and the completed system was subsequently installed on three company vehicles that ran for two weeks without incident. Subsequently, all affected company vehicles were retrofitted with the disconnect system at a cost, including engineering, testing, installation, routine testing, and maintenance of approximately $5000 per vehicle. Total company cost approached $500,000.

Operating Experience and Malfunction

Event 1: Initial problems began in January of 2011 with excessive corrosion of and around the poles of the constant duty solenoid. Five failures were indicated with subsequent controlled shutdown of equipment or resulting non-starting failures. Replacement of solenoids and protection of both negative and positive poles appeared to address these problems. A program was put into place to protect all solenoid poles upon the next inspection.

Event 2: On January 27, 2011, a moisture buildup in a three pin control cable of the battery disconnect caused a failure of the battery disconnect with subsequent non-controlled shutdown of the truck. The vehicle, on a delivery run and on a public highway, was completely shutdown while traveling at speed. The driver was skillfully able to get the vehicle off the roadway without incident. A review of the incident indicated that, in addition to the manufacturer's recommended maintenance, extra or replacement dielectric grease was needed in the three pin connector to protect it from moisture. Again, a plan was put into place to add dielectric grease during the next inspection, according to vehicle schedule, for all trucks.

Event 3: Finally, on February 1, 2011, a company vehicle with this system installed experienced a system failure with uncontrolled shutdown. The failure was traced to a butt connector that connected the constant duty solenoid by a small wire used to disengage the alternator. The butt connector corroded and came loose. The vehicle was traveling at speed on a public highway. The driver was again able to get the truck from the roadway without incident.

Due to the risk posed to the public and to company personnel, a subsequent meeting of company personnel resulted in the decision to immediately disconnect the retrofitted system from all vehicles.

Conclusion

Nelson Brothers engaged in a good-faith effort to comply with PHMSA's battery disconnect standard in advance of the January 1, 2011 installation deadline. In December 2010, PHMSA again rewrote the standard and pushed the compliance date to July 1, 2011. In light of our experience and with installation questions still looming, Nelson Brothers, other affected companies, and vehicle and chassis manufacturers met with PHMSA on March 1, 2011. At this meeting, PHMSA engineers were unable to show how they would configure a disconnect system to comply with their own standard. PHMSA did say, however, that the agency was rewriting the four remaining bulk truck special permits with the same standards.

Nelson Brothers respectfully submits that the type of sophisticated shutdown systems envisioned by PHMSA in the modified special permits are currently not sufficiently advanced to be safely and reliably used with today's highly complicated vehicular mechanical and electrical systems. Furthermore, we also submit that to go forward with a remote or self-actuated, or multiple battery disconnect requirement without major research would be placing the public at grave risk of harm.

We have learned over the years to pay attention to close calls or near misses. These "lessons learned" are not ignored by the commercial explosives industry. Perhaps no other factor is more responsible in the last century for reducing the frequency of fatal accidents from explosives by a hundred times while consumption of explosives has increased tenfold. These warning signs should not be ignored by PHMSA, or Congress. Rather than continue the rewriting of the eight affected special permits to impose unproven technology, PHMSA should be focused on incorporating into the regulations current industry standards that have demonstrated, over decades, the safe operation of bulk explosives trucks.

We would be grateful to the members of the Subcommittee for your intervention to direct PHMSA to refrain from its demands to retrofit vehicles carrying explosives with untested technology in light of the industry's stellar safety record.

Thank you.

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

Truth in Testimony Disclosure

Pursuant to clause 2(g)(5) of House Rule XI, in the case of a witness appearing in a nongovernmental capacity, a written statement of proposed testimony shall include: (1) a curriculum vitae; and (2) a disclosure of the amount and source (by agency and program) of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) received during the current fiscal year or either of the two previous fiscal years by the witness or by an entity represented by the witness. Such statements, with appropriate redaction to protect the privacy of the witness, shall be made publicly available in electronic form not later than one day after the witness appears.

(1) Name:

Nelson Brothers, Incorporated

(2) Other than yourself, name of entity you are representing:

IME

(3) Are you testifying on behalf of an entity other than a Government (federal, state, local) entity?

****YES **** **If yes, please provide the information requested below and attach your curriculum vitae.**

NO

(4) Please list the amount and source (by agency and program) of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) received during the current fiscal year or either of the two previous fiscal years by you or by the entity you are representing:

Does not apply.

Signature

4-5-2011

Date

GARY SELF
VICE PRESIDENT & GENERAL MANAGER

Nelson Brothers, Inc.
Birmingham, AL

Mr. Self has been involved with safety and compliance, product development, and technical applications in the commercial explosives industry for 40 years.

After attending Walker Junior College in Jasper, AL, Mr. Self began his career with Nelson Brothers as a truck driver/plant helper in 1971. Nelson Brothers promoted Mr. Self to various management positions in Alabama, Tennessee, Georgia, and Kentucky. In 1998, Mr. Self was named Vice President & General Manager of Nelson Brothers. In this capacity, Mr. Self oversees all manufacturing and transportation operations for Nelson Brothers' companies in the United States.

Mr. Self is a Life Member of the International Society of Explosives Engineers (ISEE). He helped start the Alabama chapter of ISEE. Mr. Self has published technical papers on blasting in the ISEE magazine and at annual conferences. He also currently serves on the Board of Directors of the Manufacturers & Services Division of the National Mining Association, and as the Alternate for Nelson Brothers on the Institute of Makers of Explosives' Board of Governors.

Mr. Self served six years in the Alabama National Guard.

April 2011