

August 2011

Homburg Contractors, Inc. – No-Idling Policy

The Homburg companies are a family-run small business with a full line of services and over 60 employees. Homburg Contractors specializes in design-build site work projects, from small parking lot rebuilds to large industrial and commercial developments and major public infrastructure projects.

Challenge

Homburg Contractors' mainline construction equipment includes excavators, front-end loaders, compactors, motor graders, bulldozers, haul trucks, and motor scrapers, all powered by diesel engines. Traditionally diesel engines were difficult to start up, requiring the use of an internal starter motor ("pony engine") and a long warm-up time. This meant that once diesel-powered equipment had been started up, operators were reluctant to shut it down when it wasn't needed for short periods, instead letting the engine idle. New diesel engines no longer require pony engines or long warm-ups, but the practice of idling persists.

Idling construction equipment wastes diesel fuel, creates unnecessary air and noise pollution, and is an "attractive nuisance," tempting unauthorized users to take a joy ride. There is also a risk of engine burnout if a critical engine component fails while no one is around to immediately shut the equipment down. However, changing the work culture of Homburg's employees faced two main challenges: Construction culture is set by the most senior operators, who have the most established work practices, and successful construction workers are by nature independent thinkers, resistant to being told how to work.

Strategy

In 2005, Homburg's senior management instituted a no-idling policy to save diesel fuel, reduce job-site pollution, and reduce the risks associated with construction equipment idling unattended. This policy required that operators shut down equipment any time they would be more than 25 feet from it.

Homburg's senior management first tried to get buy-in for the new policy from their job site supervisors, who would implement the policy on their job sites. Then the policy was presented to all operators as a new work expectation, just like wearing hard hats and following other safety and quality requirements. Homburg included written information about the new no-idling policy with employees' checks, made new operators aware of the policy, and reinforced the policy at annual safety meetings.

Chris Homburg, Vice President of Homburg Contractors, observed the level of compliance with the no-idling policy when he visited job sites. He interviewed job site supervisors about employees' adoption of the policy and reinforced its importance and the company's expectations when buy-in wasn't complete.



An idling diesel engine produces unpleasant smoke

Although some construction equipment does have idle sensors that detect how long the equipment has idled, Homburg does not use these to measure compliance with the no-idling policy. Some construction tasks like installing pipe and placing bedding stone require the use of idling equipment. Work at construction sites proceeds at varying paces, which affects the amount of (in-use) idling the equipment experiences. Finally, most of the equipment that monitors idle time also has automatic idle-down circuitry to conserve fuel and reduce pollution, so even in production phases of construction the equipment will still show substantial time idling.

Results

The no-idling policy was adopted by some Homburg employees as soon as it was implemented, and additional buy-in was achieved through continuous communication and reinforcement. Now, about six years later, Chris Homburg feels the policy has been satisfactorily adopted. He notes that newer, younger employees were quickest to adopt the policy, so its acceptance will continue to grow as these employees gain experience and become keepers of the Homburg culture.

One Homburg supervisor became an advocate for the no-idling policy after an interaction with someone from outside the company. The supervisor was volunteering at the registration station for the Midwest Horse Fair, speaking to the drivers of one truck after another in a long line of horse trailers with loud diesel engines. The supervisor noticed that one driver was turning off his engine after each time he moved forward in line. When he got to the registration station, the Homburg volunteer asked him about it. The driver said that he ran a major trucking company and, in addition to avoiding unnecessary noise, he knew the fuel savings possible from not idling. This unexpected conversation made the Homburg employee a major supporter of the no-idling policy.

The financial impact of the no-idling policy is difficult to quantify. Homburg has been continually upgrading its equipment for the past 15 years and has realized substantial fuel savings over that time; fuel savings from the no-idling policy are a small part of this. However, any additional efficiencies are helpful to a business in a down economy, which the construction industry has experienced over the last several years. The unlikely but significant cost of engine burnout from an unattended idling machine is also avoided.

The value of safety, reputation, and avoided accidents is also difficult to quantify but significant. The no-idling policy reduces the likelihood that unattended idling equipment will injure job-site workers or create liability through unauthorized joy riding. Any such incident is potentially costly to Homburg's finances and reputation. Additionally, Homburg does a lot of its work in urban settings, where idling engines disturb neighbors with noise, odor, and pollution; the no-idling policy reduces these negative impacts.

By shutting down and restarting their diesel engines more often, Homburg acknowledges that the engines' starters and turbochargers have experienced additional wear and tear, and that winter-time combustion efficiency can be reduced. However, their newer machines have rarely needed new starters or turbos, so the additional wear and tear is not significant. Some variance to this policy is allowed in the winter to account for proper warm-up and maintenance of equipment, but since the majority of heavy construction work is performed during warm weather this is not a significant factor.

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