

## Nuclear facility installs radar signs for forklift safety

**At Lawrence Livermore National Laboratory (LLNL), where nuclear waste is treated and temporarily stored, radar speed signs help ensure safety compliance for forklift operators.**

By Kristin Atwater

Radar speed signs, which display driver's traveling speed, have traditionally been used on city streets to ensure safety in residential areas, around schools or near road construction zones. However, the signs are currently gaining ground in indoor sites such as warehouses.

For instance, Lawrence Livermore National Laboratory, which is part of the National Nuclear Security Administration (NNSA) within the U.S. Department of Energy, installed the radar signs in its nuclear facility to enhance forklift safety.

Located in Livermore, Calif., the laboratory is managed by the University of California for the federal government. On any given day, forklifts travel within a fenced-in compound, transporting drums of radioactive material from the facility's research and development lab to a holding building. At this building, the nuclear waste is properly packaged, labeled and loaded onto trucks for shipment to disposal facilities.

When transporting hazardous materials, safety is a paramount concern for forklift operators. Rigorous studies conducted by the federal government concluded that 15 mph is the maximum speed that the forklifts could safely travel within the compound. Although forklift operators consistently obeyed the speed limit, proof of [compliance](#) was necessary for federal safety regulators who frequently visited the site.

"We first installed governors on the engines of each forklift to ensure the trucks couldn't over accelerate, but that wasn't enough," said Jay Morris, department superintendent at LLNL. "As a nuclear facility, safety inspections are both frequent and thorough. One issue that kept coming up was our ability to positively document forklift speed compliance. What if someone tampered with the engines? What if an outside forklift was being used? What if we bought new forklifts and forgot to install the speed-regulating equipment?"

Then, Morris noticed radar speed signs around the facility's outdoor campus, and he realized that the signs could ensure compliance for safety inspectors documenting forklift speed.

Morris spearheaded the installation of two radar speed signs within the fenced-in hazardous waste compound. Now, safety inspectors can see for themselves that drivers are traveling at the proper speed. In addition, because forklift trucks do not have speedometers, the signs serve as feedback for drivers. Internal [data](#) collecting technology onboard each sign can provide a detailed history of traffic flow and the speed at which the forklifts are traveling.

Made by Information Display Co., based in Beaverton, Ore., the radar signs come in a range of styles, including portable, permanent or trailer-mounted models.

For more information about the company's radar speed signs, visit <http://www.informationdisplay.com/>.