

SECURING THE SCRAPYARD



n the past few months, thieves have stolen 44,000 pounds of copper in Tennessee, 13,000 pounds in Louisiana, and 10,000 pounds in Colorado. They took 13 tons of used beverage containers in several thefts in Georgia. And they stole 32,000 pounds of aluminum in Pennsylvania. The common element in all these crimes? The materials were stolen from scrapyards. Those reports are most likely just the tip of the iceberg. Theft from scrapyards is common and not always reported to local authorities, says Chuck Carr, ISRI's vice president of member services, meetings, marketing, and communica-

and Missouri, and two employees "with full-time responsibilities to protect our assets from theft," Brown notes.

You can start looking at the big picture of security by answering these 10 questions:

1. How well do I know my employees? Employees are a scrapyard's first line of defense, but they're also a potential security weakness. Wise employers find out as much as they can about potential workers using background checks and alcohol and drug tests.

Some scrap processors believe that hiring people who live nearby can help security. "Most of our employees live in everyone else and to work more efficiently and do their jobs right."

2. How well do I know my neighbors? Stand in the middle of your yard and look around to see who your neighbors are. If you don't know and talk with them, now's a good time to start. You might be able to work together to monitor the back and sides of everyone's property or even share a security system.

"We're going to partner with the Tesoro Corp. of San Antonio, which owns the Salt Lake City Refinery behind us," says Mark Lewon, vice president of operations for Utah Metal Works Inc. (Salt Lake City). "We have

AS SCRAP PRICES RISE, SCRAP THEFTS SEEM TO BECOME MORE COMMON—AND MORE BRAZEN. KEEP YOUR ASSETS FROM GOING AWOL WITH THE RIGHT SECURITY TECHNOLOGY, SYSTEMS, AND INFORMATION. BY ROSALIE E. LEPOSKY

tions, who coordinates the ISRI Theft Alert e-mail system.

Scrapyard security technology can be as basic as a high fence with barbed wire, a nighttime security guard, and a few surveillance cameras, or as sophisticated as motion-sensing detectors attached to cameras that can be monitored via the Internet. The best systems combine technology tools with knowledge of the company's materials, its people, and its surroundings to get a multifaceted understanding of security.

Galamba Metals Group (Kansas City, Mo.) is one example of a company that takes a big-picture approach. "Our asset-management program covers many fronts," says President and CEO Raynard Brown, "from the fencing around most of our properties to secure buildings we can lock; alarm systems that are on and working; security guards, some of whom are off-duty local police officers; and surveillance cameras. If we have a problem, there is a good chance it has been recorded on one of our camera systems. We have some sense of what is going on." The firm has 14 locations, ranging in size from 5 to 20 acres, in Arkansas, Kansas,

the neighborhood and are likely to hear about the 'buggy pushers' stealing from scrapyards," says Doug Kramer, president of Kramer Metals Inc. (Los Angeles). But scrapyards that are adjacent to residential areas can be in tough neighborhoods, where residents might have a history of arrests and alcohol or drug use.

Some scrap dealers are willing to hire workers with criminal records, but only after knowing the nature of the crime and only after applicants pass alcohol and drug tests, either upon acceptance or continually throughout their employment. "When we installed our drugtesting program, some of our employees quit because they knew they couldn't pass," says Jim Gallup, president of Golden Steel & Recycling in Billings, Mont. "The drug program has been the best change we have made in the company," he adds. "The employees are proud to work in a drug-free workplace, and the environment is much safer."

Gallup considers his firm's quarterly profit-sharing program another deterrent to internal theft. "If one employee is stealing from me, he's also stealing from everyone else," he says. "Profitsharing encourages everyone to watch some common property lines and we both use the same security company. They are subject to many of the new homeland security rules and regulations and have 24-hour security. Between us, we control access to the areas between our properties."

In the same vein, "our neighbors three chemical plants—watch us and we watch them," says Bruce Blue, president of Freedom Metals Inc. (Louisville, Ky.). "They notify us if they see someone stealing and help to catch them." **3. How good is my inventory accounting system?** Scrap dealers should know at any time what assets they have in their yard and buildings, where everything is stored, and where it came from. Some inventory control systems can even save photos of the seller, the loads entering and exiting the yard, and the vehicle's driver, Carr says.

"If we start to have a problem, good records help us to quickly detect [discrepancies] in our books and physical inventory," Galamba's Brown says. Further, he adds, all of the company's trucks have a global positioning system to monitor the location of employees and the scrap they're transporting.



Freedom Metals Vice President Spencer Blue says that last year, after a 20-year employee was caught stealing, the firm invested in a computerized inventory system that "updates our inventory daily, so we will know if and when we show a shortage."

Another way to improve inventory control—and reduce a yard's attractiveness to thieves—is to "get out of the cash business," Carr says. "If you're paying by check or by ATM," he notes, "there is a record of the transaction and more opportunities [to capture] photos of the individual selling the material. Not only that, but scrapyards are occasionally robbed for their cash. If you don't have the cash accessible, there's less chance of being a target."

4. Does my fence deter entry? These days, just about every scrapyard has a fence around it, but "fences are not a 100-percent deterrent," says Bill Fredrick, regional manager for Perimeter Security Systems in Ventura, Calif. "If someone wants to get through, he will." In fact, he says, "most fences you can drive a car through." Where fences are being compromised at night and on weekends, scrapyard owners should consider stronger fencing materials, such as those able to withstand a truck running into them at 75 mph, plus other technologies.

Scrapyards that have electric fences find them a reliable theft deterrent, but some scrap processors worry about liability if an electric shock injures someone. "We assume all liability for use of our electric fences," says Bill Mullis, owner and founder of Sentry Security Systems LLC (Columbia, S.C.), which sells the Electric Guard Dog brand of electrified fence. The cost of such a fence, which is installed inside a traditional fence and powered by solarcharged batteries, starts at \$275 a month and varies based on the size of the perimeter. The system notifies local police if something interrupts the fence voltage for three seconds. One client, Phoenix Metal Trading (Phoenix), calls the system a good deterrent. "Someone jumping the fence in off hours is a liability and a financial problem," General Manager Barry Tuttleman says. 5. How well lit are my yard and buildings? Building interiors should have enough light so that nothing is in shadow, and vards should have enough light to eliminate shadows after dark. "Our local power company installed poles with lights, for which we pay a minimal monthly fee," says Freedom Metals' Bruce Blue. "We don't have enough coverage, so we plan to install more." 6. Do my security cameras work, and how well do they work? A closed-circuit camera system can monitor the yard and take pictures of drivers and vehicles. Such pho-

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tos "will not only help prevent theft, [they] could provide key evidence needed to identify the thief," Carr says. "Since we know that it is nearly impossible to tell the difference between stolen scrap and legitimate scrap, having photos of the crime, the thief, and/or the vehicles involved can be important to police and prosecutors."

Perimeter Security Systems' installations "often include cameras mounted on the sides of buildings and on posts," Fredrick says. "They are in weatherproof cases, and in cold regions they have built-in heaters to keep the cameras from fogging up."

Scrap processors should know their cameras' manufacturer, model, and imaging capabilities, even if the equipment was purchased long ago or supplied by an outside security firm. Many older cameras don't provide sharp enough images for clear identification of a thief's facial features. New ones do, but they're expensive. In fact, not everyone is convinced that cameras are worth their cost. "I've reviewed a couple of proposals for cameras, but we have not installed anything because I'm not convinced of all the supposed benefits of putting cameras in," Lewon says. He questions the likelihood of capturing a sharp-enough image to identify a specific person or vehicle involved in a crime.

7. Who's watching the cameras? Online access to security-camera images has been available for more than a decade. "We have a closed-circuit camera system that records what our cameras see on a computer that we can look at at any time," Spencer Blue says. "The computer and camera record the time and date [of the image], and the computer holds the images for two months. I can view what's going on at home with my laptop."

8. Should I use motion detectors or other sensing technologies? "A California scrap dealer who handles lots of copper and had his fences cut repeatedly wanted better fencing," Fredrick says. "We suggested sensors, cameras, and monitoring systems inside his buildings and a dedicated night watchman to watch the monitors." Motion detectors can secure areas that cameras don't cover, but they also can create false alarms. "We use motion detectors that a dog or a bird will not set off," says Golden Steel's Gallup. "When the alarm is triggered, I can use my home computer to see if it's a false alarm or real. We normally have only a couple of false alarms per year."

Utah Metal Works' Lewon says his security service provides photoelectric, motion-sensing beams in addition to the perimeter fence.

9. Am I taking common-sense measures to keep my assets secure? Some practices that save time can end up costing you money by leaving scrap vulnerable to theft particularly if it's already packaged for transit. That's an important consideration when a trailer full of copper can be worth more than \$150,000.

To keep loaded trailers secure, "always back them up with their fifthwheel locks to the building walls," Spencer Blue advises. "Don't park trucks outside a yard's fence overnight, and never leave keys in parked trucks," he cautions. A loaded truck is practically an invitation to crime, he says. "Always load trucks and drive them away. Never leave a loaded truck overnight for nextday delivery, even inside your fence." Trucks and trailers en route to their destination are even more vulnerable.

Further, keep your most valuable scrap in locked buildings with limited access to visitors. "Just as you wouldn't leave strangers with your valuables at home, if you have visitors in the yard going near your high-priced scrap, make sure they are accompanied by an employee," Carr says.

10. Am I budgeting enough for security? Consider whether your security budget is adequate given the market value of the scrap, mobile equipment, and other assets in your yard.

Some scrapyards outsource security to a firm that specializes in providing such services. The local Yellow Pages and Chamber of Commerce are good places to start looking for such companies. Request bids from and interview several firms, and be sure to examine the equipment they recommend to protect your property. Ask local lawenforcement agencies about the reliability and track record of the bidders and the products they propose to use at your yard, and perhaps even hire an independent security consultant to help you evaluate the bids.

The other option is to purchase the equipment and provide the monitoring yourself. Though each scrapyard has unique security challenges, Perimeter's Fredrick estimates he can design a basic

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system for a small yard for about \$8,000 that might include an access-control system for the front gates that uses access cards and card readers or a keypad entry code, cameras, and transmitters. For a small yard with about \$20,000 to spend, he would add more cameras, more substantial fencing or dual fence lines, and in-ground motion sensors.

Determine what it would cost to make your security system even better and whether the investment is worth it. "In 1997 we had theft problems and spent \$11,000 on a surveillance system," Gallup says. Even though the system "allows me to use my home computer to see what's going on in our yard," he says, "we need to upgrade our camera system [and] vard lighting, probably put additional cameras on our gates, and update our computer time system so we have a better idea where employees are." Freedom Metals plans to spend \$20,000 "to install a better surveillance system one where we can read license plate numbers," Spencer Blue says.

Installing security equipment is only the beginning, Fredrick notes. Maintenance and training are equally important. "Turned off or broken, your security gear won't work for you," he says. In addition, "many scrapyards have existing security systems or access to controls, but they don't have any current employees who know how to operate what they have." His firm will train workers on how to operate existing security systems, he says—but he tends to get such calls only after a security breach. "Once a yard is ripped off," he says, "they want us to come."

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