A SAFE(R) BET

Weyerhaeuser's New Safety Program Strives to Further Minimize Serious Injuries

by Sheila Cain

Weyerhaeuser has long been recognized as an industry leader in safety. The company's injury rate has consistently dropped and remains extremely low, and a number of its safety processes have been adopted or modeled extensively throughout the industry.

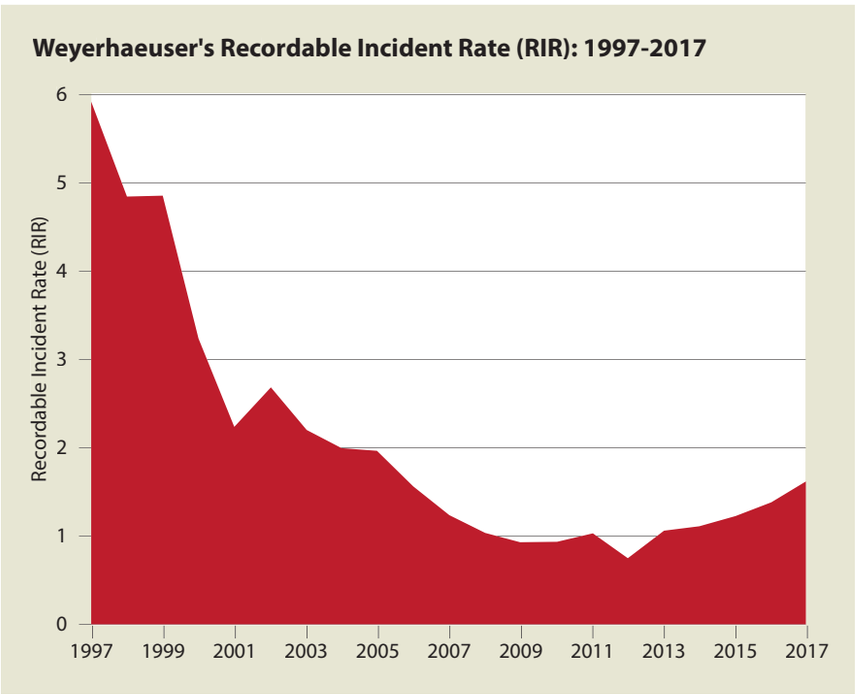
But company leaders were not satisfied. Minor "recordable" incidents had been significantly reduced, but serious incidents, though infrequent, were still occurring. Those numbers were not changing at a pace acceptable to the company.

"We had made great safety progress in the company in the last 20 years and achieved a recordable incident rate (RIR) of less than one by 2009, but we stalled there," says Greg Ellisor, Weyerhaeuser's corporate health and safety manager and safety liaison team leader. "We recognized that though we had driven down our RIR, we were still having too many serious injuries. We were also suffering an employee or contractor fatality every year or so, and one fatality is simply unacceptable, period."

Though it strives for zero injuries like most companies, Weyerhaeuser's business and safety leaders determined in 2015 that they could accept an RIR of around one, at least for the time being, recognizing that most of their recordables were minor in nature. At the same time, they agreed they needed a clear, actionable plan to prevent more serious injuries – such as fingertip amputations, permanent eye injuries, and fatalities – both in the mills and in the woods.

"We determined that we can accept the few minor recordable injuries, but we can't accept and allow life-altering injuries and fatalities," Ellisor says.

To address the issue, Weyerhaeuser – which owns more than 13 million acres of timberland in the U.S., manages 13 million acres in Canada, and operates 38 lumber and engineered wood product mills and 17 distribution centers throughout North America – turned its safety program on its head. The new program, phased in company-wide over several months last year, completely shifted the way injuries are tracked and placed its focus on preventing serious injuries and fatalities.



Statistics courtesy of Weyerhaeuser

Weyerhaeuser's recordable incident rate (RIR) has declined significantly over the past 20 years, but the company wanted to further lower serious injuries and fatalities. Its new safety plan was rolled out company-wide last October.

"Leading Indicators" Leading the Way

In safety speak, Weyerhaeuser's new program can best be described as a "risk-based" safety plan. In the past, the company tracked lagging safety indicators, which are metrics of injuries that had already occurred. Now Weyerhaeuser is tracking leading indicators, which are proactive measures to help prevent injuries. In a nutshell, Weyerhaeuser is implementing a revamped safety toolkit that streamlines processes and tools associated with higher-risk tasks and activities such as significant, non-routine upset conditions. While the implementation might vary depending on location (woods or mills), the end goal remains the same: drive the number of life-altering accidents down even further and eliminate fatalities.

In the past, employees in Weyerhaeuser's lumber and engineered wood product mills followed a safety plan unique to each site.

"Many were too broad and not focused on serious injury," says Ellisor. "For example, they may have been focused on a new safety initiative or a type of safety training they were planning to do that year."

Now, mills are expected to compile a risk-based safety plan that lists its riskiest activities and implements a detailed plan to mitigate or eliminate those risks.

One example of such a risk in a lumber mill is how jams are addressed on log

ladders and infeeds. As logs are brought into the facility on a step feeder, they can become crossed. In the past, employees had to shut down the machinery and physically dislodge and straighten the log with tools. This put employees in danger if the log, tool or worker slipped. Weyerhaeuser mills addressed the problem by redesigning the process to implement a new machine that would mechanically reposition the logs, eliminating the need for physical human intervention.

Another significant risk that the new safety plan has helped address is the matter of pedestrian safety in facilities with heavy mobile equipment traffic. To minimize accidents, mill teams established a series of "In-the-Clear" measures such as requiring communication between pedestrians and equipment operators before entering high-traffic areas; designating pedestrian walkways and installing hard barriers where necessary; installing flashing lights and alarms that can be activated by pedestrians as they enter high-risk areas; and implementing state-of-the-art pedestrian collision-avoidance technology inside mobile equipment.

Safety in the Woods

While mills can be dangerous places, many of Weyerhaeuser's most serious accidents happen in the woods, particularly when trees or rocks fall on loggers or equipment operators on steep slopes. Unlike in a mill, where designating a pedestrian walkway out of the path of heavy machinery can greatly minimize an accident, the workspace in the woods is constantly moving.

"The hazard profile shifts throughout the day," says Marc Cannon, safety and EMS manager for Weyerhaeuser's Western Timberlands. "Take five steps in any direction and you are faced with an entirely different hazard."

The implementation of Weyerhaeuser's new risk-based safety program looks a bit different in the field than it does in the mills. Because nearly all of the company's logging operations are done by contractors, Weyerhaeuser can't simply impose its own safety culture on those companies. Instead, Weyerhaeuser has invested considerable effort into encouraging contractors to subscribe to safe practices because it's the right thing to do and not just for the sake of complying with Weyerhaeuser's rules.

"The dialogue is changing," says Cannon. "Historically, we have been very compliance-driven. You could call us heavy-handed at times. Now, we are creating a dialogue and trying to promote an atmosphere of doing things for the right reasons."

Contractors are asked to play a large role in promoting safety among their employees, says Cannon. A site leader

Image courtesy of Weyerhaeuser

Weyerhaeuser recently shifted to a "risk-based" safety plan. In the past, the company tracked lagging safety indicators, which are metrics of injuries that had already occurred. Now Weyerhaeuser is tracking leading indicators, which are proactive measures to help prevent injuries.

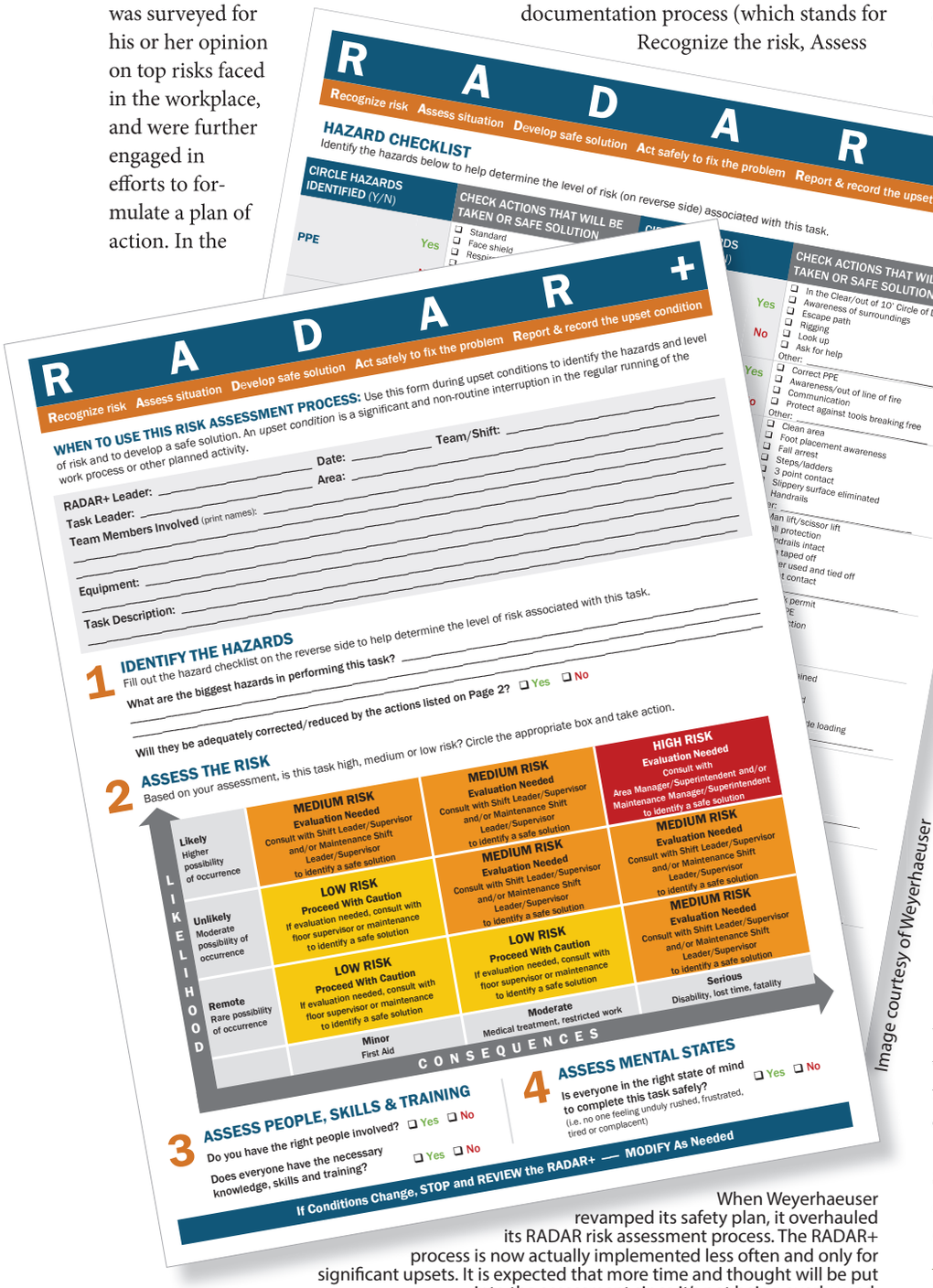
must be present at each jobsite, and the contractor must supply a risk-based business safety plan that details actions they will take to ward off serious injury. Contractors must also show that their workers are practiced in recognizing risks, assessing options, then moving toward a safe solution.

One of the major differences between Weyerhaeuser's former safety plan and its new program is the focus on employee engagement. In the mills, every employee was surveyed for his or her opinion on top risks faced in the workplace, and were further engaged in efforts to formulate a plan of action. In the woods, contractors and their employees have been similarly included in safety discussions and the formulation of action plans.

"Buy-in is key," says Cannon. "Once you have buy-in, you can have more conversations."

Revamping RADAR

To better assess and address risks, Weyerhaeuser has also fine-tuned its "RADAR" risk assessment process. The documentation process (which stands for Recognize the risk, Assess the situation, Develop a safe solution, Act safely to address the upset and Report the condition) had been used whenever a condition occurred to upset the safe work environment in the mills or in the woods. Company leaders realized, however, that RADAR was actually being used above and beyond its intended purpose, for thousands of routine, lower-risk upsets that had already been sufficiently assessed. This was watering down the system and producing very low-quality risk assessments. In response, the company developed the next generation of RADAR — RADAR+. The enhanced tool is now used to assess only significant, non-routine or first-seen upsets and high-risk tasks. The desired outcome of the revamped RADAR is that more time and thought will be put into the assessment since it's not being overused.



When Weyerhaeuser revamped its safety plan, it overhauled its RADAR risk assessment process. The RADAR+ process is now actually implemented less often and only for significant upsets. It is expected that more time and thought will be put into the assessment since it's not being overly used.

Image courtesy of Weyerhaeuser

Positive Feedback

The rollout of Weyerhaeuser's new safety plan started in August 2016, and was implemented company-wide by the following October. Because it is so new, the company has not yet been able to offer any statistics regarding its efficacy. But so far, say Cannon and Ellisor, employees are embracing it. Company leaders are expected to convene late in the fourth quarter or early first quarter to discuss how the program is working out and make adjustments as necessary.

"We're getting really good feedback so far," says Ellisor, who believes the positive response has much to do with how employees were included in the process. "They're not just a part of the initial process of giving input—most of the time they are also involved in the actions put in place to mitigate the risks. When employees see their input and hard work leading directly to improved safety, the whole team is energized and grows closer together—everyone wins."

Sheila Cain (scain@engineeredwood.org) is communications director of the Engineered Wood Technology Association and editor of its **Engineered Wood Journal.**