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Health and Safety News

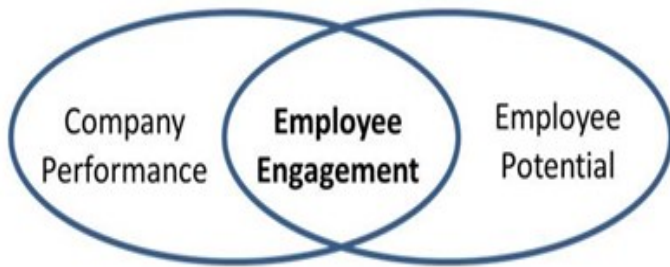
As environmental consultants, it is our goal to provide the highest quality environmental services to our clients. In order to provide the best service, it is paramount to ensure the continuing health and safety of our employees and subcontractors. The health and safety success of our team assures the success of our projects. At Roux Associates, we are dedicated to promoting a positive safety culture in the field, within our offices, and throughout our personal lives.

– Roux Associates

Employee Engagement and Safety Performance *Cascade*

An "engaged employee" is one who is fully involved in and enthusiastic about his or her safe work, and will extend desired effort in ways that align his or her organization's interests with their own.

Research confirms that organizations with high levels of employee engagement excel in safety, productivity, and operational efficiency. Fact: Employee engagement plays a critical role in an organization's safety performance.



Architecture:

The most important step is developing a process and clearly defining the rules of engagement that work in concert with your organization's safety initiatives, which will in turn result in a workplace free of recognized hazards.

An effective, yet relatively easy tool that combines employee engagement with a workplace free of recognized hazards is a Hazard Observation Program. At Cascade Environmental, one of our primary goals is to foster a culture of safety through employee engagement.

The Cascade Card is one of the strongest programs we have at Cascade Environmental. The Cascade Card is a hazard recognition and employee hazard risk development program that we've developed internally. It enables field crews to actively report and mitigate safety hazards they observe while performing various drilling and remediation tasks, including an element of defensive driving as they travel to and from jobsites.

This program gives our teammates a real-time vehicle for reporting a hazard. It enables individuals to take a moment and assess the situation, implement a corrective action, and then proceed to complete the task safely.

A company can expand the benefits of a hazard observation process beyond the direct mitigation of jobsite hazards and the trending of data through analyzing their employee's input—this aids in determining which employees have developed risk assessment and control skills, and which employees might need some additional coaching.

There is a misconception that jobsite safety is common sense, but that's not necessarily true. If you relied solely on an individual's common sense to assess and mitigate hazards, you'd quickly find yourself filling out as many incident reports as time sheets. An effective hazard observation process enables you to both report on and mitigate safety hazards, along with training new or underperforming team members in mitigation techniques.

Typical Observation Tool

What unsafe act or condition did you observe?

What did you do to intervene or correct it?

Select a root cause and category that best describes it.

How soon after observing the unsafe act or condition did you intervene and/or correct it?

An employee's performance can now be substantiated by quantifying effort, as opposed to the archaic method of just using lagging indicators like incident history. Employees engage and remain engaged, since the data supplied by them through the observation vehicle is used as their individual performance review.

Implement an employee-generated hazard observation program, and increase engagement while eliminating jobsite risk.

Results in a Win-Win



Protecting Our Young Workers

Bancker Construction

Heinrich famously stated that 88% of all accidents are caused by “unsafe acts of persons.” A 2005 study conducted by Haslam, Hide and Gibb, narrowed this statistic to 70%. While there is no consensus regarding these statistics, it is undeniable that human behavior is a significant factor in accident causation. This is evident by the fact that younger, less experienced workers are as much as three times more likely to be involved in workplace accidents. This is an alarming statistic considering that the U.S. workforce has been getting younger.

So, how do we protect our young workers? A strong behavior-based safety system is a great start. One essential key element to a behavior-based system, which helps protect young and new employees, is mentoring. It is important to note, however, that an effective mentor doesn't just instruct new employees in their job duties. A mentor should share personal lessons, which can save the employee from learning the “hard way” and thereby reduce losses. An effective mentor also acts as a sounding board. This makes the new employee much more likely to ask questions and seek advice. This communication should be two-way, with the mentor soliciting feedback from the employee. This can be accomplished by asking open-ended questions like “What do you think is the safest way to perform this task?” Lastly, mentors should offer continuous coaching on important skills. One such skill is maintaining situational awareness, which is commonly lacking among young workers.



Some might say that younger people are simply greater risk takers; and there may be a logical reason to support this truism. However, the reason is probably not poor attitude on the part of the employee (as is often assumed), but their lack of experience. Inexperienced workers are less likely to recognize hazards in the workplace and therefore appear to take greater risk. They also haven't yet acquired the requisite skills and knowledge to perform safely. In contrast, experienced workers have more training and are more likely to have been involved in past incidents or near losses/misses (teachable moments). These lessons-learned teach workers the value of safe work procedures.

While mentors should be assigned to all new employees as a best practice, not all mentoring needs to be formal. Often it is a bystander or a passerby who can offer valuable insight to the task at hand. So, the next time you see a new or young employee who may not be fully aware, stop for a moment and offer the benefits of your experience—you may just save a life.



Regardless of the size of the project, construction sites inherently present numerous dangerous scenarios not only for the workers, but also visitors, spectators, or those just passing by. This danger only increases, perhaps exponentially, when contaminants are present and remediation is a required component of the project. Although federal, state, and local regulations have evolved over the years to address many environmental and health and safety concerns within the confines of these construction/remediation sites, they do not necessarily fully address public safety. As a result, the burden of public safety falls, in part, on the shoulders of the public themselves, while the liability and consequences almost entirely remain with the contractor or client.

With the increased potential for liability claims and other repercussions, it is important for the contractor to evaluate and understand both known and potential risks to public safety at the onset of the project. Proper planning is an essential component, with an understanding that the public consists of a broad demographic. The elderly, children, and people with certain disabilities are especially vulnerable. Children are of concern since they are curious by

nature, and are typically drawn to such sites, particularly after-hours. They cannot be expected to be aware of the hazards associated with a construction and/or remediation site. While the number of children (and others) killed at construction sites has reduced dramatically over time, each year children continue to die or get injured while gaining unauthorized access to these sites.

With the potential for unauthorized entry into sites, it is essential for contractors to go above and beyond the currently established standards for safeguarding the public in and around the project site. This involves special consideration, particularly around high-traffic and high-risk areas. These higher risk areas include, but are not limited to, the following: occupied buildings; urban streets; near schools, parks, or playgrounds; residential areas; hospitals; and more. The prime goal is to ensure the site is secure,



through the use of exclusion zones and providing proper barriers; the likelihood for unauthorized entry will be mitigated if these are properly carried out. The establishment of these zones will also mitigate the potential for members of the public to be exposed to hazards such as falling objects, potential chemical exposures, openings and excavations, heavy equipment, and more. Therefore, the construction of a secure, competent, and maintained barrier or fence around a construction zone is of utmost importance.

Site workers and support staff need to be heavily involved and invested in the safety procedures needed to protect the public. In-house training programs should include a component for the best practices and overall awareness required to protect the public, and keep a safe zone both within and beyond the established construction boundary. These efforts will go a long way in reducing overall liability and preventing the public from dangerous and potentially devastating incidents.





Whenever working at a construction site with heavy equipment, specifically when excavating, there will be times when it will be necessary to approach the operator/excavator. However, in the act of doing this do we stop and think of the best way to approach? Do we communicate to everyone on the site what we are planning to do? Do we maintain a line of sight with the operator when we approach? Do we approach only when the operator has stopped what he is doing? If you answer yes to these questions then "well done"! However, not everyone stops and thinks before performing this simple act.

Between 1992-2000 [NIOSH 2002] the Bureau of Labor Statistics (BLS) Census of Fatal Occupational Injuries (CFOI) data identified 346 deaths associated with excavators/backhoe loaders. The majority of these deaths were attributed to 1) being struck by the moving machine, swinging booms, or other machine components, or 2) being struck by quick-disconnect excavator buckets that unexpectedly detached from the excavator stick. Other causes included rollovers, electrocutions, and slides into trenches after cave-ins. Unfortunately, the numbers of incidents over recent years have not decreased.



Working around heavy equipment inherently produces risks and hazards. As part of our health and safety plans it is important to properly define an "Exclusion Zone" which is integral to our standard operating procedures. The Exclusion Zone is defined as

the area where people are restricted from entering and it is established through the risk assessment process. It can be defined by visible markers (i.e. caution tape, marking paint), or via points of reference (i.e. east of parking area). Remember that the construction site is a constantly evolving and changing environment and what may be considered safe one minute, may not be 10 minutes later. Respecting the Exclusion Zone can significantly limit the number of near misses and incidents that can occur on a job site.

- Maintain a safe distance from the machinery, keeping out of the boom radius of the machine. This distance should be specified in our JSAs.
- Approach the machine only after communicating with the operator. This can be in the form of eye contact with hand signals, or verbal communication via electronic devices (i.e. walkie talkies). Only after the operator signals for a person to approach, and removes his/her hands from the controls, should you approach the machine.
- Keep in mind that the operator's field of vision is very limited. Stay in an area where he/she can see you.
- One should never walk behind a large piece of equipment within its swing radius.
- The exclusion zone can also serve to protect the operator. It can establish limits to prevent equipment from getting close to sensitive receptors (i.e. power lines, above ground structures, etc.).

Removing workers from areas that pose higher risks and hazards greatly increases the chance of keeping them safe. With June being National Safety Month, let's kick it off by helping remove workers from dangerous situations.

2nd Quarter H&S Message

Brian Hobbs, CIH, CSP, Senior Health and Safety Manager - Roux Associates

As we close out the 2nd quarter of the year, we'd like to share some advancements made to our Health and Safety Program, which have been occurring behind the scenes.

- We have begun to centralize our Health and Safety training records for the entire organization within our Human Resources Information System (Epicor). This streamlined approach will provide a central repository for all Health and Safety training records with the ability to run comprehensive reports, to ensure we maintain not only compliance, but also ensure client-specific training requirements are current. We are looking to have this released on August 1st.
- We are currently working to update and release our Corporate Health and Safety Manual, which will include our H&S Policies and Programs, formally known as SOPs, which are posted on Clarity. This document will provide a standardized framework for Health and Safety within the organization and can be provided to clients upon request.
- Our Health and Safety Plan (HASP) Template is under development, we have been working with the Massachusetts Office to shorten the current long-form HASP without compromising federal requirements. This new template will allow for a more efficient method for developing HASPs for projects big and small. We are targeting a mid-August release.

As we strive to continually improve the Health and Safety Program, we always try and balance robust protection of our workers and teammates, with efficiency and fit for purpose implementation.

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