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PRESIDENT'S MESSAGE

I was in attendance at the America Society of Safety Engineers Conference in San Antonio and heard first hand the words of Secretary of Labor Solis when she said "The Department of Labor is back in the enforcement business".

A Texan Safety professional told it to me this way: He said "Robert, you've got to remember that a snake is always a snake (I take it there are a lot of these in Texas). They are neither good nor bad, they are just a snake and if you don't handle them right they are going to bite you, and just because they may not bite you right away, doesn't mean they won't".

I thought about this piece of Texan wisdom in the context of the Secretary's speech. I thought, too, that the agency has always had a mission to enforce safety and health regulations. Companies that have always paid attention to safe work processes and hazard management don't have big worries. Companies that have allowed regulatory enforcement pressure to determine the level of their accomplishment of safety metrics now have more incentive to do so.

I think the point is this: Well managed companies aren't afraid of snakes, they stay away from them in the open with management systems that promote efficiency and well being, and these companies aren't afraid to make profit-oriented decisions that won't compromise safety.

Other companies have ill-defined systems and human resource processes that hide amongst the cracks and crevices of un-unified safety leadership, I think these are the ones to whom Secretary was speaking to, these folks are about to experience a regulatory bite.

Robert Baldwin CEO

Safety Resources, Inc. 4555 Northwestern Dr. Zionsville, IN 46077

800-641-5990 317-871-8155 – P 317-871-8148 – F

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Energy conservation is an issue that everyone needs to look at from paying your own utility bills to running a multimillion dollar company. Energy conservation is the practice of decreasing the quantity of energy used and it can be achieved through efficient energy use and habits. Here are some easy to do tips to conserve energy:

Office Equipment

- Turn off PCs, monitors, printers, copiers, and lights every night and every weekend, If you can't turn off the whole computer, turn off the monitor and the printer
- When purchasing PCs, monitors, printers, fax machines and copiers, consider Energy Star models that "power down" after a user specified period of inactivity
- Enable the energy savings options on existing office equipment
- If appropriate, use ink jet printers they consume 90% less energy than laser printers
- Implement paper reducing strategies such as double sided printing as a default
- Use e-mail instead of sending memos and faxing documents
- Use shared LAN laser printers instead of individual laser printers
- Use central departmental coffee makers and refrigerators instead of personal units

Lighting

- Turn off all personal task lighting every night and every weekend
- If you are the last person leaving a bathroom or conference room, turn off the lights
- Turn off all unnecessary lighting in corridors
- Replace incandescent light bulbs with compact fluorescents
- Use light colors when redecorating your office space
- Use day lighting from windows or skylights, instead of electrical lighting, when you can

Heating, Ventilating and Air Conditioning

- Do not tamper with locking thermostat covers
- Where you have control of your thermostat, set the heating set point no greater than 68 degrees and cooling to no less that 74 degrees
- Do not use personal electric strip heaters or personal "window" air conditioning units
- Use blinds to control solar heat gains
- Make sure all heating and air conditioning systems under your control are turned off every night and every weekend

Large administrative building air conditioning and heating systems should be off at night and weekends, so if you plan to work during these times, dress warmly or appropriately for the conditions

Elevators

Avoid using elevators; use stairs.

Summary

Energy conservation has become an issue that everyone can help with. Using these simple tips can reduce energy costs within your households and companies.



"Energy conservation is the practice of decreasing the quantity of energy used and it can be achieved through efficient energy use and habits"





POWDER ACTUATED TOOL SAFETY

Powder actuated tools are nothing more than a gun that fires a stud into a wall. The safety rules that apply to firearm safety should almost always apply to the use of powder actuated tools. No one will be allowed to operate a powder actuated tool without proper training.

Basic General Rules

Allow only qualified workers trained and have a qualified operator card for operating powder activated tools.

- Inspect the tool before each use.
- Test the tool before each use.
- Always follow the manufacturer's specifications for operation.
- Always study and determine the proper charge.
- Know what is on the other side of the work surface.
- Know what is on the work surface.
- Don't allow other workers on the other side of the work surface.
- Know what can't be shot into, such as cast iron, high carbon steel, armor plate, glazed brick, glass, or tile. See manufacturer's instructions.
- Load just prior to shooting.
- Always wear eye protection.
- Store the tools, charges and studs safely and securely.
- Don't try to fix jams and misfires.

Hazard Examples:

Flying particles Studs being shot through the work area Studs ricocheting Fire hazards





PPF

Operators need to wear proper personal protective equipment, including approved safety goggles. A hard hat and hearing protection are also recommended. Never point a powder-actuated tool toward anyone. Prior to firing the tool, make sure you know what you are firing into, that no one is on the other side, and that the area is clear. Insert the firing cartridge when you are ready to fire. Never ignore safety devices on powder-actuated tools, and always dispose of spent cartridges properly.





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Accidents and illnesses are expensive. Preventing these incidents will save your company or organization time and money. The smaller your business the bigger the impact will be if an employee is injured or develops an illness. It can even put you out of business.

There are several important areas to consider if you want to reduce the cost of workplace accidents and illnesses.

<u>Absence</u>

The most costly type of absence for a business is sick leave due to illness, or accidents caused by work.

Here are some ways where less employee absence can save money:

- Save money spent on the direct costs of absence. These include paying the salary of the absent employee, any overtime incurred by other employees covering for the absent employee, any loss of output incurred by the absent employee and the costs of hiring temporary cover
- Keep valued staff and avoid unnecessary recruitment and training costs
- Keep your business productive, maintaining your client-base with uninterrupted employeeclient relations
- Save money on the indirect costs of absence. These include the time taken for a replacement to learn the new role and become productive; possible diminished services and product quality; loss of business, continuity and reputation

Save money due to less time spent arranging and providing cover, training and providing support to other staff.

Improving health and safety measures at the workplace reduces the likelihood that people will need sick leave in the fist place, and bringing them back to work quicker means less disruption in the long run.



Insurance and Compensation

As the employer you are responsible for the health and safety of your employees while they are at work. With very few exceptions, employers must have Worker Compensation Insurance to cover for injuries and ill health experienced by their employees while at work.

Employers may also have insurance for accidents involving vehicles, and possibly third-party and buildings insurance. However, insurance policies only cover a small proportion of the costs of accidents. Costs that are not covered by insurance may include:

- Sick pay
- Lost time
- Damage or loss of product and raw materials
- Repairs to equipment
- Overtime working and temporary labor
- Production delays
- Insurance investigation time
- Fines
- Loss of contracts
- Legal costs

Loss of business reputation

Uninsured costs can outweigh the insured costs – and these uninsured costs come straight off the company's 'bottom-line' profits.

Saving on the cost of employee accidents and ill health is an investment in the future of your business. Poor health and safety procedures could mean increased insurance premiums or difficulty in obtaining future insurance coverage.

For these reasons, maintaining a good standard of health and safety in the workplace can mean lower insurance premiums and more money in the bank.

Reputation Damage

You have worked hard to establish a positive and respectable image for your business and your business thrives on good public relations – increasing sales and generating more leads. But when bad things happen to your good name, it can be a costly experience, resulting in a loss of revenue and depressed profits. Whether your business is large or small, a bad reputation puts people off. It's vital that your business maintains a good name.

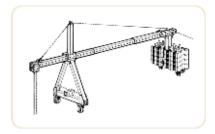
However, it's easy to prevent damage to your health and safety reputation by implementing a simple and effective safety program. Preventing accidents and ill health at work saves you time and money and contributes to your good reputation with your workers, their friends and associates.





SUSPENSION SCAFFOLD SAFETY

BY CHRIS HALL, SAFETY CONSULTANT

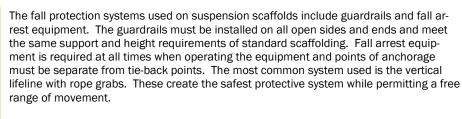


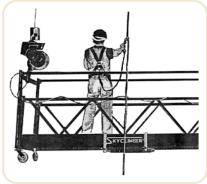
Every year there are tens of thousands of scaffolding accidents in the construction industry. OSHA mandates that employees using scaffold systems are trained and that a competent person oversee all aspects of the work and performs regular inspections of the equipment. Suspension scaffold systems, by their nature, are one of the most dangerous types of elevated work systems in use today. Whether you are using single point, two-point, or multi-point suspension systems, proper training and assembly can take some of that risk out of the work.

Assembly of the equipment must be performed by trained personnel familiar with the equipment and all applicable regulations. OSHA's scaffold standard has detailed rules for the scaffold and support system set-up, but it is also important to follow all of the manufacturer's requirements for assembly and disassembly. Most systems are not interchangeable with others, so it is crucial that you are only using equipment approved by the manufacturer.

<u>Check out our</u> <u>website</u> <u>www.safetyresources.com</u> It all starts with ensuring that there is proper anchorage of the support system. Whether you are using a counterweight system or tying the outriggers directly into the roof structure, anchorage has to be able to support at least 4 times the load imposed on the system by the greater of either the rated load of the hoist or $1\frac{1}{2}$ times the stall capacity of the hoist itself. This support requirement also applies to the amount of manufacturer approved counterweights placed on the outrigger, if a counterweight system is being used. The outriggers of the system must also be positioned perpendicular to the face of the structure for which it is set, supported by bearing blocks, and secured against any type of movement. Then the system must be protected by running tie-backs which must be at least equivalent in strength to the suspension ropes. These must also be run perpendicular to the roof edge, and secured to a structural member or other adequate support. If tie-backs cannot be run perpendicular, then multiple, opposing angle tie-backs must be used.

The suspension ropes used must be capable of supporting at least 6 times the intended load applied to the ropes while operating at either the rated hoist load or twice the stall load of the hoist. Suspension ropes must be the type and lay as designated by the manufacturer and equipped with proper-size thimbles and secured by eye splicing or other equivalent means. The ropes must be inspected daily, or before each shift by the competent person onsite, and removed for any reason which would compromise the integrity of the rope.





This short topic essay in no way describes all of the requirements of assembling and using suspension scaffolds, but does start to explain some of the most basic requirements. All too often companies have been cited by OSHA by providing the equipment without adequate set-up or training for their employees. These violations are always viewed a serious due to the nature of the work and risks to the employees. A full list of OSHA's requirements can be found in the scaffold regulations [1926.451 and 1926.452(o, p, & q)]



NUCLEAR POWER PLANT OUTAGE SAFETY BY JOE BALDWIN, DIRECTOR OF BUSINESS DEVELOPMENT

ARTICLE 1 OF 2

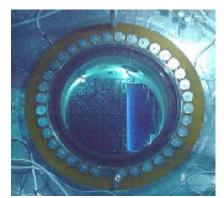
Michael Faraday is often credited as the Father of modern Electrical Generation. The seemingly simple process of turning a magnet inside of a coil of wire is a very unlikely source of electrical power, but in theory, it's that straight forward. The complexity of applying this theory is more like rocket science. There are two basic principles applied in electrical generation. First is the harnessing of natural occurring energy, examples include energy sources like wind, water, geo-thermal and sun light, which are used to turn turbines, energize photo-electric cells, etc. These energy sources are sometimes referred to as "Renewable" or "Green" energy. They are repetitively inexpensive sources of energy, and plentiful, but their full potential remains secondary in supplying the demand required by an energy thirsty nation. Hydroelectric power generation has been around for decades and wind energy is taking a greater market share. We are exploring other, new, forms of "Green" energy for mass electrical production. As technology advances, I believe hydrogen fuel cells, solar-electric and magnetic induction may soon become a major source of electrical power supply.

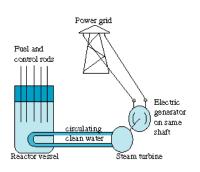
The other energy sources commonly referred to as "expendable" or "consumable" energy. Consumable energy is expended "released, or burned" inside a boiler to support the "steam water cycle". In a modern boiler, energy from a fuel source, is converted or released and generates enormous amounts of heat energy. This heat energy is absorbed into water converting it to high pressure / high temperature steam. Steam energy or thermo-dynamic energy is released inside a turbine converting it to mechanical energy. Mechanical energy is converted into electrical by the magnet turning inside a coil of wire. We get huge amounts of electrical energy to light our homes, cook our food and to fuel industry that provides us with the all the other necessities of modern life.

The steam, after it has released its energy, is condensed back into water and the cycle continues thousands of times a day in a closed loop system. This diagram above illustrates the steam water cycle a fossil fueled power plant.

Understand the steam water cycle is a major element in understanding how and where safety fits into the equation. A Power Plant is a complex system of process flows. The flow of Fuel, Air, Water, & Heat, all combine to produce the flow of energy we know as Electricity.

Process Safety combines the elements of a comprehensive safety program and applies them to the managing of systems. Lock-out / Tag-out, double block and bleed and Line Breaking Procedures are vital safety elements when overhauling a fuel delivery system in a power plant. What do you do when the fuel is in the form of fuel rods inside a Nuclear Power Plant? Things change a bit. Understanding the systems and how they inter-relate is vital to human safety and guarding against permanent environmental impact. Nuclear Power Plants have been around for several years. They are extremely safe due to extraordinary safety efforts employed by the owners and the government and the design of their construction. Nuclear power plants built in the United States have two basic sides to them, the Hot Side and Cold Side. The Hot side is relative to where radioactivity may be found and the Cold side is non-radioactive. Nuke Plants are designed with a two loop system flow pattern, where as fossil fuel plants utilize a single loop steam water cycle system. The diagram illustrates this concept. The heat transfer medium is heated by the Core makes up cycle #1, but the water heated to steam that actually flows through the turbine makes up cycle #2. This two closed loop system makes modern power plants much safer to operate and to maintain. The likelihood of any radiation bleeding over into the turbine and support equipment is almost non-existent. Different kinds of reactors use different types of fuel elements. For example, the light-water reactor (LWR), which is the most widely used variety for commercial power generation in the United States, employs fuel pellets of sintered uranium dioxide loaded into cladding tubes of zirconium alloy. These rods measure about one centimeter in diameter and roughly three to four meters long. These tubes, called pins, are bundled together into a fuel assembly, with the pins arranged in a square lattice. The uranium used in the fuel is 3- to 4-percent enriched, such enrichment is crucial to the generation of heat by nuclear reaction. Since light (ordinarily) water tends to absorb more neutrons than other moderators, water is preferred as a heat transfer.





A variety of substances, including light water, heavy water, air, carbon dioxide, helium, liquid sodium, liquid sodium-potassium alloy, and hydrocarbons (oils), have been used as coolants. Such substances are good conductors of heat and serve to carry the thermal energy produced by fission from the core to the steam-generating equipment of the nuclear power plant.

In many cases, the same substance functions as both coolant and moderator, as in the case of light and heavy water. The moderator slows down the fast (high-energy) neutrons emitted in fission to speeds at which they are more likely to induce fission. In doing so, the moderator helps initiate and sustain a fission chain reaction.



NUCLEAR POWER PLANT OUTAGE SAFETY (CONTINUED) BY JOE BALDWIN, DIRECTOR OF BUSINESS DEVELOPMENT

"Power plant outages, overhauls and shut downs are necessary to insure the reliability and safe Operation of a Nuclear power plant. Unlike your car, run to failure is not an option afforded to a nuclear power plant"



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Power plant outages, overhauls and shut downs are necessary to insure the reliability and safe operation of a Nuclear power plant. Mechanical equipment can only operate for so long under the tremendous demand placed on them before they wear out or break down. Unlike your car, run to failure is not an option afforded to a nuclear power plant. Therefore, regular Outages are scheduled for repair and updates and replacement of critical support equipment.

The 104 existing reactors account for only 0.6% of the total 17,342 power plants in the United States. However they supply 20.8% of U.S. electricity. The relatively low number of nuclear plants compared to their total generation capacity is a good indication of just how large these plants plant really are.



SAFETY RESOURCES HAS GONE GREEN!!



Did you know that recycling one aluminum can saves enough energy to run a television for four hours? SRI is proud to announce our efforts in helping preserve our planet. Listed below are some ways we are helping out:

- Recycle all cans, plastic bottles, and batteries.
- Wait until the copier is needed before turning it on.
- Keep lights turned off in rooms not being used.
- Use natural light instead of energy. We have a skylight in our conference room that allows for plenty of sunshine.
- Open our windows instead of using energy on AC.
- Do all the work we can electronically so we don't waste paper.
- Re-use scrap paper. We turn the paper to the blank side, cut it into halves and staple together to use as message pads, etc.
- When purging old documents, we take the time to keep paperclips, binder clips, folders and re-use them
- Re-use all manila and hanging file folders

Refuse, Reuse and Recycle!!!





- 1. Customer takes can to a recycling center or puts it into a recycling bin.
- 2. The can is transported to a processing facility.
- 3. A giant magnet lifts out cans that are made of metals such as steel. Since aluminum cans aren't magnetic, they drop down to a conveyor belt and are gathered.
- 4. The aluminum is shredded, washed and turned into aluminum chips.
- 5. The chips are melted in a large furnace.
- 6. The melted aluminum is poured into molds called "ingots".
- 7. The ingots are taken to a factory where they're melted into rolls of thin, flat sheets.
- 8. From the sheets, manufacturers make new products, including new beverage cans, pie pans, license plate frames and aluminum foil.
- 9. Beverage companies fill the cans and deliver them to the grocery stores for customers to purchase.
- 10. Customers take used cans to a recycling center and the process starts all over again.



NEWS AND EVENTS







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SRI would like to congratulate Chris Hall and for completing the Crane class from the Crane Institute of America!

SRI celebrated 3 years of service with Chris Hall and Matt McCreery during the 2nd quarter.

The company hosted a "fun day" at the track on May 15th. We had a picnic lunch and enjoyed watching the Indy cars practice on a beautiful day.



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