

## **Achieving a Zero Incident Safety Culture: Fact or Fiction**

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### **Introduction**

The 60 million dollar question is.... Can a zero incident safety culture actually be achieved? If it can be achieved then how can it be maintained?

The mission is (or should be) for every organization to drive and coordinate sustainable cost-effective solutions to common issues for their respective industries or businesses, its affiliates and communities toward this end.

Therefore, safety and health professionals, even with all the improvements that have been made over the years, are now in a position to drive for the ultimate goal: a *zero* incident safety culture where *no one* gets hurt at our work sites.

So, is it a fact, or is it fiction that this illusive goal is achievable?

This paper will describe a detailed process embarked on by group of safety and health professionals through the Greater Baton Rouge Industry Alliance (GBRIA), a beacon for improving safety performance in the industrial corridor between the capital of Baton Rouge, LA and New Orleans for the past 20 years. This process took place over two years, and the culmination resulted in substantial evidence that supports the position that zero injuries is achievable with the right mind set and cultural foundation.

This session will debunk the myths that accidents are just going to happen and are not always preventable and will *zero* in on best practices utilized in industry to successfully and economically achieve the seemingly elusive goal of the zero incident culture and sustain it!

## The Mission

A quest was embarked on to determine the key elements that make up a zero incident safety culture.

Surveys were conducted to gain an understanding of how many organizations currently have zero incident cultures/goals as well as what elements they have found to be key in achieving a zero incident culture.

## The Goals

The goal was to develop the input for the deliverables of a zero incident safety culture by:

- Conducting *surveys* with all association member companies;
- Conducting *focus groups* all association member companies;
- Develop ***a consensus standard*** of best practices to combat common barriers to establishing a zero incident safety culture through tried & proven methods;
- The surveys and focus groups developed the input for the deliverables for the zero incident safety culture initiative, which consisted of
  1. A list of elements of a zero incident safety culture;
  2. Definitions for these elements; and
  3. Best practices to support each element.

## Surveys

Surveys were an integral part of the information gathering process.

These surveys were conducted:

- at quarterly plant managers meetings;
- at quarterly safety, health and security technology exchanges; and
- at meetings of the local chapter of American Society of Safety Engineers (ASSE), as well as online surveys of area safety professionals.

The surveys results indicated that 84% of the companies surveyed indicated that zero incident safety culture is achievable.

Then the survey asked, “What are the top key elements needed to achieve a zero incident safety culture?”

The top five key elements with respondent’s definitions are listed below:

**1. Management Commitment:** Management’s commitment drives the company culture, and the company culture drives the safety process.

**2. Leadership:** Having the talent, skill, initiative and charisma to bring people in the desired direction.

3. **Employee Involvement:** Employees know “what is in it for them,” they assume ownership of the different aspects of safety in their respective area’s of responsibility and they care about themselves and their coworkers; they are their brother’s keeper.
4. **Accountability:** The obligation to meet performance expectations or bear the consequences for failure to perform as expected, when expectations are clearly communicated and agreed upon. Each of us is accountable for all of our actions, including the decision to take no action within the work environment if it is unsafe to do so.
5. **Training:** Equipping employees with the knowledge and skill to: a) perform their job safely; and b) perform the health and safety functions that aid organizations in reaching their overall health and safety goals through effective training solutions and techniques.

## Focus Groups

Zero incident safety culture focus group meetings were held with GBRIA plant managers and GBRIA safety, health and security representatives separately. The purpose of these meetings was to identify barriers and best practices to achieve a zero incident safety culture, utilizing the key elements.

One of these meetings was very insightful, and the results are detailed below, apart from the barriers and best practices presented later in this document.

Below are questions, which were presented to a panel. The topic was management commitment to safety. The meeting focused on solutions for communicating and demonstrating management commitment to safety, as well as believing that achieving a zero incident safety culture is possible. The panelists each brought different backgrounds to the discussion.

GBRIA member/plant/owner top managers and top managers from area construction and maintenance contractor companies participated. Each group of managers was given three questions to answer. The plant representatives opened up with the contractors closing. Following are the questions and answers that were given.

### Management Commitment to Safety: Panel Discussion

#### Plant/Owner Questions:

1. **As a top manager in your company, how do you achieve a balance between Management Commitment and Employee Empowerment?**
  - **Owner A:**
    - Management sets clear but non- restrictive boundaries
    - Being in compliance with regulatory requirements but going above and beyond
    - Creating internal guidelines
    - Including a sufficient safety budget
    - Incorporating complete ownership in our program, i.e., safety manual written by employees

- **Owner B:**
  - We strive to create ownership or total responsibility, accountability, and assessment for safety at the employee level.
  - Personal accountability
  - Leadership empowered employees to design a process called “Safe Start.” It includes 4(states) + 4(errors) (rushing, frustration, fatigue, and complacency) + (being in the line of fire, slip trip or fall, eyes not on task, and mind not on task)
- **Owner C:**
  - Strict guidelines on what people can change, but
  - Give flexibility as much as possible
  - Allow operators and technicians to review procedures and make changes
  - Provide unit safety committees with their own budget (no management involved)
  - For resolution have progression, feed back up to management & back down to employees.
  - Educate on what is acceptable to change and what is not
  - Having good boundaries
  - Involving employees in all aspects of procedures and changes

**2. How do you demonstrate (in words and actions) your commitment to health and safety to all personnel on your site?**

**Owner A:**

- By attending safety meetings, etc.
- By being visible in the field on a frequent basis
- Through operating decisions (patch or shut down, cut production to be safe, “ safety over production”

• **Owner B:**

- “Walk arounds” in all areas of the facilities
- Present in field audits- make sure everyone knows
- What’s expected (clear expectations)
- Set the expectation that all incidents are preventable.
- Personal involvement in meetings, starting all meetings, have safety first on the agenda
- Right resources applied
- Actions around safety over production
- Personally open all HAZOPs
- When visiting in the field, always discuss safety and health first before asking about production

• **Owner C:**

- Must constantly reinforce the importance of first-line supervision in the safety process
- Incident investigation and hazard recognition/correction studies
- Training, drills, etc.
- Having safety goals in all departments and for each person’s performance
- Actions on incident investigations “follow up on corrective action plans”

### 3. How do you measure that your employees know management is truly committed to each employee's health and safety?

- **Owner A:**

- Measure is not a good word—one can't really put a number to it, this assumes a target. Try to do this with two keys in mind:
  - 1) Survey employees
  - 2) Safety peer assist wage employees from another facility and benchmark. Out in the field, ask questions, and get feedback

- **Owner B:**

- Accountability assessments, twice a year HR Management and Safety Operations go to a plant and do an assessment afterwards
- Leading indicator for safety and health performance
- Culture of accountability
- Process to create accountability is "ISMEC:"
  - I—Identify the work
  - S—Set the expectation/standard
  - M—Measure
  - E—Evaluate the work versus the standard
  - C—Commend if expectations are met, correct if not

- **Owner C:**

- Ask/survey employees
- Employee participation

## Contractor Questions

### 1. What types of plant personnel behaviors can be contributed to a contractor incident occurrence?

- **Contractor A:**

- Work permitting process
- Be aware that contractors are not always familiar; there may be different rules within same site depending on job or section
- Not enforcing rules consistently
- Thorough pre-job safety planning, not rushing, and encouraging contractor to speak up with questions
- Outdated safety videos
- Not providing good area for safety meeting (hearing, comfort, harms' way)
- Not attending or participating in contractor safety meeting
- Having a poor job scope definition, taking mind off safety, and poor housekeeping
- Not answering questions in timely manner
- Shift change communication
- Know where contractors are
- Unclear communication about what is happening in unit
- Complaining of contractors presence (check sign-in book)

- **Contractor B:**

- The safety contradiction: “It won’t happen to me-us-them”
- Using old practices because they worked in past vs. the exact procedure
- Pressure to get back online
- Enabling behaviors: Rewarding an unsafe contractor for getting the job done quickly
- Rules not applied uniformly
- Production crisis—overshadow safety concerns/ requirements
- Contractor questions safety actions of plant personnel and is ignored “Going through the motions”( i.e., permitting (vague regarding specific dangers of tasks))

## 2 What do you communicate to your employee when getting conflicting information from different plants/owners?

- **Contractor A:**

- Follow *our* rules: If plant rules are different, we tell them to follow the more stringent one
- If in imminent danger, shut down work

- **Contractor B:**

- Empower employees to stop if they feel unsafe
- Train to recognize hazards
- Encourage to talk to plant personnel
- Shift change communication
- Know where contractors are
- Unclear communication about what is happening in unit
- Complaining of contractors presence (check sign-in book)

- **Contractor C:**

- The safety contradiction: “it won’t happen to me-us-them”
- Using old practices because they worked in past vs. the exact procedure
- Pressure to get back online
- Enabling behaviors: Rewarding an unsafe contractor for getting the job done quickly
- Rules not applied uniformly
- Production crisis: Overshadow safety concerns/ requirements
- Contractor questions safety actions of plant personnel and is ignored: “Going through the motions,” i.e., permitting (vague regarding specific dangers of tasks)
- When contractors see consistent actions of all employees, starting with management
- Plants that take time to include contractors, or give input at start of project
- Being open to ideas and suggestions from contractors
- Admitting to an issue or problem
- Safety over production
- Follow through
- Showing care and concern

- Good housekeeping
- Having a good process
- Rewarding safe behaviors
- Alignment/integration: when everyone at the plant is treated equal (plant personnel and contractors)
- Involvement: When plant personnel are truly involved in contractor safety meetings—monthly, weekly, daily
- Care and respect: When safety stops becoming “policing” and becomes “caring”
- Visuals/appearances and “feel”: On-boarding, logistics, facilities, and housekeeping

## Barriers and Best Practices

The following is the final product of GBRIA’s zero incident safety culture initiative. GBRIA’s Personnel Safety Committee coordinated the initiative and played an instrumental role in compiling the information to develop this guideline. The guideline below consists of the five key elements that create a zero incident safety culture, the definition of each element, the barriers existing in the workplace and the best practices to overcome these barriers. GBRIA and its Personnel Safety Committee encourage each member company to use this guide to create or enhance its own zero incident safety culture

### Management Commitment

*What it Means:* Management drives company culture, and company culture drives safety.

#### **Barriers**

Dollars (lack of funding)

#### **Philosophy**

(Differing, conflicting, non-existent or

#### **Best Practices**

- Sell the cost of safety improvement with cost savings
- Offer monetary incentives for achieving safety goals, may even tie bonus to zero incidents or first aids
- Use the pool of money that otherwise would be spent on incidents, on prevention and people instead
- Identify an activity where the unit spent money
- Make statements and perform actions showing that cost is “not an issue”
- Always act as a role model
- Have a set of “fundamental rules”
- Promote nothing other than *ZERO*
- Clearly illustrate vision of what a safety culture looks like
- Exude a passion for safety
- Remember that what interests the boss, interests the employee

- Entitle/empower each person to what it takes to be safe, including shutting down a unit or job
  - Treat/engage contractors the same as company employees with common safety requirements and expectations
- Company Silos
- Make safety part of every “silo’s” goals, thereby focusing everyone in the company on common safety goals (targets, objectives, etc.)
  - Provide a mechanism for business managers to ask about safety activities and for safety to input to business processes or reports
  - Recognize that safety advises management, but ultimately management must act
- Safety vs. Management, Production, Maintenance, etc.
- Lack of visibility/field Interaction
- Enable plant manager and staff to conduct safety audits in the plant or tours of the plant often, at least weekly
  - Select a topic and then audit: behavior, compliance, housekeeping, equipment, etc.
  - Use the last 10 minutes of staff safety meetings to assign a short audit and go out into the unit(s) at the same time. Use a “flooding effect.” Encourage walk-and-talk audits.
  - Hold a contractor forum by craft and involve contract management
  - Include contractor management in a joint committee
  - Personally address each employee/contractor entering the site
  - Assign ambassador safety focal points for employees to talk to, to bring out issues
  - Leadership engagement: Deliver observations in the field to reinforce expectations, provide positive recognition, attend tailgating meetings with key people prior to work
- Belief that zero is not possible and that “accidents are going happen” mindset
- Identify barriers and address with employees openly, allow employees to voice this belief and provide discussion forum for avenue to change
  - Get leadership and supervision to profess belief, others will get onboard (walk the talk)
  - Show examples where possible (i.e., airlines, where crashes are unacceptable)



Other Priorities

- Make safety the number one priority of everyone in the company
- Provide tools to help employees feel comfortable making each other aware of an impending bad decision (think of NASA Challenger).
- Complete thorough root cause analysis on incidents

Leadership

*What it Means:* Having the talent, skill, initiative and charisma to bring people in the desired direction.

<b>Barriers</b>	<b>Best Practices</b>
Leaders and managers don't have the correct skills	<ul style="list-style-type: none"> <li>• Teach the 3 Ps (power, politics, polish) and the 3 C's (credible, competent, committed)</li> <li>• Help managers engage with employees by using different skills to make interactions personal</li> <li>• Hire the best people as managers by defining the process to find the talent that matches the job</li> <li>• Assign mentors/coaches for managers</li> <li>• Provide management and leadership training for new managers and leaders and help them understand the difference between management and leadership</li> </ul>
Antagonistic environments Us vs. them, Union vs. mgmt., production vs. maintenance, etc.	<ul style="list-style-type: none"> <li>• Create employee networks to identify and address safety issues without involvement of company political lines</li> <li>• Forget us vs. them - it's about how you treat people</li> <li>• Provide a mechanism where all employees contribute to goals, plans and solutions (safety or otherwise), thereby helping to create a place where employees enjoy their work</li> </ul>
Shifting or inconsistent priorities/direction	<ul style="list-style-type: none"> <li>• Include safety as the first topic on EVERY meeting agenda</li> <li>• Leaders sometimes have to make the tough decisions and shut down a unit and challenge the business</li> <li>• Keep consistent safety and health messages as you get involved in new initiatives</li> </ul>

Unclear vision or poorly communicated	<ul style="list-style-type: none"> <li>• Define your vision, and refer to it often</li> <li>• Consistent sincere commitment and visibility in the plant</li> <li>• Don't settle for small continuous improvement vs. a large jump, strive for both</li> <li>• Keep people calibrated to what is important by continuously being visible through engagement</li> <li>• Keep score and keep the score visible to all</li> </ul>
Safety is everyone's responsibility	<ul style="list-style-type: none"> <li>• Management empowers everyone</li> <li>• Empower everyone to be a safety leader</li> </ul>
Safety at home and work are different	<ul style="list-style-type: none"> <li>• Participate or create a program to emphasize the importance of safety at both home and work (i.e. Think Safe Think Family program by the Safety Council)</li> </ul>
Developed habits and winning over belief of a new message	<ul style="list-style-type: none"> <li>• Consistently reinforce a new program to establish new habits</li> <li>• Hold meetings where employees can discuss existing safety program elements and map those elements to the new system/terminology/program, etc.</li> </ul>

### Employee Involvement

*What it Means:* Employees know “what is in it for them,” they own the different aspects of safety in their area and care about themselves and their coworkers — they feel responsible for each other.

<b>Barriers</b>	<b>Best Practices</b>
No connection to “What’s In It For Me”	<ul style="list-style-type: none"> <li>• Hold meetings where employees are asked to discuss “what’s in it for them” to be safe</li> <li>• Train with a purpose, explain “what’s in it for them,” and allow open discussion</li> <li>• Make safety personal and relevant to help them internalize</li> </ul>
Safety’s not my job	<ul style="list-style-type: none"> <li>• Ask employees “what is your job?” “Why do you work?” “Are your kids ok with unsafe acts?” If your coworker gets hurt and you could have prevented it, are you REALLY ok with that?”</li> </ul>

	<ul style="list-style-type: none"> <li>• For monthly training, engage the employees by having them research and present relevant topics to the group</li> </ul>
Mandated “safety programs”	<ul style="list-style-type: none"> <li>• Involve all employees to gain buy in to new/mandated safety programs before their implementation. Allow employees to map the process for changeover or startup.</li> <li>• Implement an employee owned and developed safety observation process</li> <li>• Involve everyone in incident investigations by holding open discussions and gaining employee feedback on how we can prevent in the future</li> </ul>
<b>Barriers</b>	<b>Best Practices</b>
Lack of ownership of Programs & Unclear expectations	<ul style="list-style-type: none"> <li>• Encourage employees to care about safety by relating safety to their specific job, work unit or team and family (Black light example: Employees at a particular plant making products with lead were given black lights to take home to see whether they were carrying home lead, i.e. showing how the employee’s actions at work affected his or her family)</li> <li>• Foster a family atmosphere</li> <li>• Form safety focus teams whether there is a problem or not</li> <li>• Periodically determine whether there is a need for programs or not</li> <li>• Build ownership in programs by enabling employees to enjoy their work</li> </ul>
We’ve been safe/the problem is someone else	<ul style="list-style-type: none"> <li>• Be a mentor and provide mentoring opportunities for employees</li> <li>• Help employees connect their job and safety and the fact that safety is everyone’s job</li> <li>• Help employees work together as a team. Provide training in team dynamics.</li> </ul>

### **Accountability**

*What it Means:* The obligation to meet performance expectations or bear the consequences for failure to perform as expected, when expectations are clearly communicated and agreed upon. Each person is accountable for everyone’s actions, including the decision to take no action within

Barriers	Best Practices
Inconsistent enforcement	<ul style="list-style-type: none"> <li>• Be willing to discipline good employee for bad behavior, as well as the less exemplary employees</li> <li>• Safety Recovery Plan - put people or a contract company in a safety recovery plan when unsafe issues or trends are observed, before an incident occurs. Insist they develop a roadmap for improvement</li> <li>• Document and communicate a clear discipline progression policy and communicate (i.e. Safety Recovery Plan)</li> <li>• For days off, ask employees to explain in writing why they should not be fired upon return to job - then follow up with a verbal explanation</li> </ul>
Leadership reluctance to coach or confront	<ul style="list-style-type: none"> <li>• Train leaders on how to effectively confront negative behaviors, and use role-playing to increase confidence with</li> <li>• Train leaders to discipline unsafe behaviors before an incident occurs, in order to avoid the more uncomfortable discussion after the injury</li> <li>• Encourage more quality safety observations. Practice identifying issues and coaching during observations geared toward empowerment of capability</li> <li>• Positive feedback/reinforcement</li> <li>• Provide mentor for new supervisors in coaching</li> </ul>
Not placing high enough significance on safety	<ul style="list-style-type: none"> <li>• Hold a top company management (at corporate level) review with employees or supervisor involved in significant incidents</li> <li>• Plant manager personally visit with employees or supervisor involved in significant incident</li> </ul>
Peers reluctant to intervene	<ul style="list-style-type: none"> <li>• Management should communicate that peer intervention is an expectation of an employee's job</li> <li>• Enact a no-discipline policy for safety observations</li> <li>• Comply, intervene and respect</li> <li>• Have management and peers recognize employees for correcting unsafe behaviors in others and for helping peers to improve safety</li> </ul>

	<ul style="list-style-type: none"> <li>• Train peers to intervene before an incident occurs, in order to avoid the more uncomfortable discussion after the injury</li> <li>• Encourage walk and talk audits</li> </ul>
Allowing Unsafe Behaviors	<ul style="list-style-type: none"> <li>• Policies vs. Practices: say what you mean and mean what you say</li> <li>• Discipline behaviors leading to potential injury consistently, whether injury occurs or not. Don't just discipline the injury after it happens</li> <li>• Exert family pressure. Explain to family the importance of certain safety procedures to apply indirect pressure toward compliance (i.e., a letter to family, "My daddy works here" sign, etc.)</li> </ul>

### Training

*What it Means:* Equipping employees with the knowledge and skill to 1) perform their job safely and 2) perform the health and safety functions that aid organizations in reaching their overall health and safety goals.

<b>Barriers</b>	<b>Best Practices</b>
Time	<ul style="list-style-type: none"> <li>• Know your audience and develop a schedule accordingly</li> <li>• Schedule at most effective times, you may have to try a variety of times to figure out what suits your situation the best</li> <li>• Training must begin with management commitment</li> </ul>
Quality	<ul style="list-style-type: none"> <li>• Individual(s) developing/preparing and conducting the training should be qualified subject matter experts</li> <li>• An effective trainer is one by a combination of degree, experience and train the trainer experience</li> <li>• Use consultants on generic /universal type of training (i.e. BBP, Hearing Conservation, First Aid /CPR, etc.</li> <li>• Use in house trainers for Site-Specific experience and Life Critical training topics (i.e. LOTO, CSE , Fall Protection, and PPE)</li> </ul>

<p>Poor Delivery Method</p>	<ul style="list-style-type: none"> <li>• Computer Based Training (CBT) is an excellent method of managing reoccurring training as a refresher; however it should not be used as the only source of training.</li> <li>• CBT should be a part of the total training program, but OSHA has indicated that it should never be 100% of the training effort</li> <li>• Training evaluation for target audience considering diversification regarding: age, reading/writing comprehension, foreign language issues/concerns, etc</li> <li>• Provide an appropriate location that is conducive to learning (i.e. quiet, remote, low traffic</li> <li>• Consider a change in the training venue to impress upon employees the importance of safety training</li> <li>• Presentations should be well developed with minimum verbiage on each slide and large enough to be seen from the back of the room</li> <li>• Be interactive both verbally and hands on, and include good solid questions to prompt positive feedback. For example using taped up body parts while trying to do daily tasks to demonstrate what it would be like if a limb was lost.</li> <li>• Use a variety of combinations to cater to multi-sensory learning groups</li> <li>• Consider using an offsite venue to test for effectiveness</li> <li>• For offsite training the subject matter should be immediately applicable to the employees job function. Generic/non-specific training will quickly be seen as non-relevant.</li> </ul>
<p>Standard training not specific to plant</p>	<ul style="list-style-type: none"> <li>• Use subject matter expert to customize for site</li> <li>• Combine the generic training with site-specific questions</li> </ul>
<p>Not holding people accountable to complete training</p>	<ul style="list-style-type: none"> <li>• Send out a training notice preferably with emphasis from the plant manager indicating this is mandatory training</li> <li>• Only reasonable pre-approved reasons/excuses for not attending will be allowed, followed by the schedule sent to supervisors and to employees</li> <li>• Send out any needed reminder notices for those that missed, and get them signed up for one of the remaining classes</li> <li>• Schedule for approved make-ups with understanding that if they miss these they will not be allowed to perform that particular regulatory function until they do</li> <li>• Hold immediate supervisor accountable along with the employee for compliance</li> <li>• Require 100% passage on life critical training. What answer, when it comes to life critical training, would be acceptable for them to miss, that might get them or their co-worker hurt or killed</li> </ul>

<p>Making a Connection &amp; Implementation</p>	<ul style="list-style-type: none"> <li>• A key element in industrial training is to immediately translate the training experience to behavioral change in the field</li> <li>• The employee should be challenged upon return to the jobsite to implement the newly acquired skills/ideas so that they are assimilated into his/her daily routine</li> <li>• The training expectations where possible should be rendered into a physical document. For example, if ladder safety is the topic of a particular training session use this as a focal point for that months “Job Safety Analysis” or “on the site observations”</li> <li>• Do not loose the work and data generated by your employees. Take the Job Safety Analysis and compile the observational data. This data can then be tracked or plotted in graphical form to use in future safety meetings thus re-enforcing the training that may have taken place the month or several months before.</li> <li>• Data from the tracked observations can further be used to select future training topics</li> </ul>
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## SUMMARY

This process and the results coming out of this project were shared with member companies through several methods. It was covered by a panel of safety professionals from the development team in a quarterly safety forum, through a printed booklet that was provided at no cost to members and was also a presentation at the Louisiana’s Governors’ Safety Expo in 2009 with very favorable feed back and positive comments.

It was the general consensus of those businesses and industries participating and/or benefitting from the results of this research project, that it was time and effort well spent and proved convincingly that if this model was followed in part or totality that the likely hood of achieving a zero incident safety culture was greatly enhanced and the ability to sustain it was even greater.

## Resources

The following list is a compilation of resources provided by members, which aided in productive and safe work practices.

**1. Risk-Based Incident: Mike O’Keefe, Albemarle:** Table 1 is used to determine the probability variable (P-0 or P-1) of the incident. The probability variable is based on the potential for reoccurrence of the event.

**Table 1.**

<u>P = Probability of the incident</u>	
P-0 = Happened once per year or more	(incident is expected to, or has happened repetitively)
P-1 = Happened once every 10 years	(incident happened once, but very unlikely to repeat)
<u>S = Potential severity of the incident</u>	
S-1 = Potential for one or more fatalities	
S-2 = Potential for one or more serious(irreversible) injuries	
S-3 = Potential for a lost time injury	
S-4 = Potential for a minor/recordable injury	S=worst outcome that would not be surprising
S-5 = Potential is for first aid injury or really no injury	

The variables are defined as follows:

EH =Extremely High Risk,

H = High Risk,

L = Low Risk, and

EL = Extremely Low Risk.

**Table 2**

Probability	S-1	S-2	S-3	S-4	S-5
P-0	EH	H	L	L	EL
P-1	H	H	L	EL	EL

**2. Hearts & Minds Tool Kit – P.J. Boyle, Criterion Catalysts & Technologies:** It is a copyrighted program. The link below takes you to their website on Hearts and Minds:

<http://www.energyinst.org.uk/heartsandminds/>

The following link takes you to some sample pages from the “Managing Rule Breaking” brochure. The diagram covering consequence management is shown in section 6.0, page 12.

<http://www.energyinst.org.uk/heartsandminds/docs/rule.pdf>



The following link is the “Managing Rule Breaking” page and has several other links to materials from this module. This page contains the link above.

<http://www.energyinst.org.uk/heartsandminds/rule.cfm#Introduction>

### **3. The Accident Projection Techniques Process (APTs) – Todd Rybicki, Honeywell**

The APTs process provides all personnel with the opportunity to use their knowledge, skills, intuition, and experience to project the results of their own actions and those of their coworkers.

The APTs process includes a series of activities that have been designed to assist all employees in making safety observations, recognizing hazards, envisioning hazardous situations, and projecting a sequence of actions and/or physical factors that could cause an accident. It is a proactive process designed to project accidents that are “apt” to happen and prevent them.

For additional information go to the following link.

[http://www.thesrigroup.com/services\\_accident\\_protection.html](http://www.thesrigroup.com/services_accident_protection.html)

### **4. Coors Safety Incentives**

Safety Accountability For Employees (SAFE) and is marketed by EHS Management Solutions, Centennial, CO. Anne Bevington developed the concept while she was working at Coors Brewing. It was subsequently passed to EHSMS for development and marketing.

<http://www.ehsms.com/>

SAFE is a non-customized version of the Safety Management Process (SMP) program that Coors Brewing Company has been using to track safety metrics since late 2002. Since implementation of this program, Coors’ Golden Brewery has:

Reduced their OSHA rate by over 300%

From 2003 to 2005, the number of workers’ compensation claims has been reduced from 135 to 86.

Workers’ compensation costs have been reduced at the Golden Brewery during 2004-2005 is more than 4.2 million dollars. At Coors Brewery Company, the cost savings is over 6.8 million dollars. SAFE/SMP has been tested in real world applications and when implemented properly, is proven to be effective in decreasing OSHA injury rates, decreasing the number of workers’ compensation claims and injury costs and, more importantly, increasing worker safety.

Anne Bevington, formerly with Coors Brewing Company, now with Sara Lee, gave a presentation on this program at the 2007 National Safety Council Congress.

**5. Pocket Tool Box: J. W. Toups, J.W. Toups, Inc.,**

[http://www.jwtoups.com/pocket\\_tool\\_box.htm](http://www.jwtoups.com/pocket_tool_box.htm)

**6. Hooked on Safety with Billy Robbins: A Safety video about being “your brothers’ keeper:”**

<http://www.hookedonsafety.com/>

**7. The Safety Performance Coach: E. Scott Geller,**

<http://www.spcoach.com/index.htm>

**8. Safety and Common Sense—Effective Training Methods: D. Michael Parker-CSP, Regional Safety and Technical Training Manager, NRG Energy & GBRIA Plant Personnel Safety Committee: [michael.parker@nrgenergy.com](mailto:michael.parker@nrgenergy.com)**

**9. Recognition & Incentive—The Do’s & Don’ts for Effective Implementation: D. Michael Parker, CSP, Regional Safety and Technical Training Manager. NRG Energy & GBRIA Plant Personnel Safety Committee: [michael.parker@nrgenergy.com](mailto:michael.parker@nrgenergy.com)**

**10. The Safety Council of the Louisiana Capital Area:** There is a library of free resources for members:

[www.safetylca.org](http://www.safetylca.org)

**11. The Safe Nation Radio Broadcast:** Eric Bertolet,

[www.safenation.org](http://www.safenation.org)

**12. Baudville: Putting Applause on Paper:** A great way to show recognition:

[www.baudville.com](http://www.baudville.com)