

“Fixing” Human Error - Part 2

The Life Saving Rule (LSR) Conundrum - Making a real difference or just more of the same?

In June 2015, the International Oil and Gas Producers (IOGP) published its annual safety performance indicators report for 2014. This report is recognized throughout the industry as an important tool in that it not only helps individual companies benchmark their own HSE performance, but also helps to identify important trends, correlations and general industry wide areas for improvement. Having recently been asked by a client to review the application and overall effectiveness of the Life Saving Rules (LSR's) across the E&P industry, the hope was that this report would provide some of the answers. The report clearly established that almost 70% of all fatalities across the industry were in some shape or form related to the LSR's. The initial take away from this is that all 18 of the LSR's supported by the IOGP are not only important, but are so critical that they should be embedded within every organization's safety culture. Why? Because clearly these are the very things that are still causing black marks across the industry's safety performance.

The principle of maintaining a few vital rules is not a new concept. DuPont have long established the idea of “cardinal rules” as the backstop and cornerstone of their overall approach to safety management. Within DuPont, employees recognize that these few vital rules require strict adherence and that there exists clear and severe consequences for anyone and everyone who bypass or circumvent their application - without exception. In more recent times, large international E&P companies have endeavored to replicate these kinds of rules for the oil and gas industry and in 2015, these are now widely established and accepted as the Life Saving Rules (LSR's) - see Figure 1.

Figure 1: IOGP Life Saving Rules



And yet despite the very best of intention, there's something that simply doesn't add up about their overall design and application. Why? Because to many, their underlying purpose still isn't explicitly clear. Are they a training tool? Are they designed to discipline workers after the fact? Are they designed to discipline workers before the fact? Are they intended to establish expectations? Or are they simply a reminder that many fatalities have occurred for such types of work and that this in itself, should be sufficient to change behavior(s)? My guess is that some will answer none of the above, but rather their purpose is to establish the right kind of operating culture such that fatalities in these work areas will be eliminated in the future.

In the case of DuPont, many of its operating environments are a little more certain than the often unpredictable nature of oil and gas exploration - an environment that is essentially dynamic in that it's constantly changing. Clearly there's a world of difference here - but what does that mean for the principle of cardinal rules and the cross over application to the oil and gas industry in the form of the LSR's? In other words, in an E&P environment - where operations can switch from running smooth and predictable one minute, to a full blown emergency situation the next - just how applicable are such definitive rules when challenging operational and production problems are encountered? Some would no doubt say it's *precisely* this environment that the LSR's are designed to manage. So if they're just as applicable - but perhaps a challenge to maintain in some situations - then what would be a realistic expectation for their application?

Would it be realistic for example to ask an employee at the coalface to call time out and exercise STOP Work Authority (SWA) by referencing the LSR's during moments of "high stress" (such as downtime or non-production time)? Well, if the necessary operating culture isn't first in place to support this behavior, this may well indeed be a stretch. What may first be required is a top down commitment for each and every application of the Life Saving Rules (LSR's) under every situation - and probably regardless of the financial impact. In other words, any deviation from their consistent application will likely create uncertainty and doubt among front line workers as to their true meaning and intent. So in essence, it's not the LSR's themselves that are singularly important, as much as the caliber of the operating and safety culture that will seemingly determine their overall effectiveness. Sadly, this fact may often be ignored and as a result, companies simply set themselves up for a fall given the harsh reality might just be that in some situations where the LSR's are not strictly followed, line supervisors (despite having full knowledge of the LSR's and their intent), will invariably look the other way if the situation demands it and where the operating culture tolerates it.

To support such assertions, let's go back to the very premise of safety management within the E&P industry. The operational risks associated with conducting international oil and gas exploration activities can vary enormously. Work such as planting geophones in a desert seismic operation is often considered (for the most part) to be relatively low risk (from an HSE perspective and where all other things are equal) and consequently, the work is often mated

to workforces with low literacy levels or formal education. In such an environment, the application of the LSR's in their current form (i.e. the visual communication of very important work practices) certainly has great benefit and is to be highly commended.

But as the level of risk goes up, it's reasonable to suggest that so should the level of competence and literacy of the workforce. In other words, why would you find it necessary to communicate something pictorially (such as a requirement to follow a PtW), if that same person is required to read, understand and then confirm that the stated controls on the permit are in place and fit for purpose. In other words, if you need to use the LSR's to communicate to a scaffolder to wear a harness when working above 1.8m (6ft.), it may be that you've just hired the wrong scaffolder. So to be clear, as the level of risk associated with the work or contract goes up, the direct applicability and relevance of the LSR's to individuals in providing knowledge and / or information should likely go in the opposite direction - given that employees should already be fully conversant with important policies and procedures related to their work.

But let's return to the IOGP report for a moment. It certainly connects the dots between the *circumstances* of fatalities and the LSR's. But establishing that connection in itself doesn't necessarily mean there's a direct correlation to a knowledge gap around the rule. Take gas testing requirements for example. If someone is about to enter a tank without performing a gas test, then the role of the LSR could be to work as a reminder, a prompt or an awareness tool to change behavior(s) at that point. But that only works if there's a genuine ability shortfall. I.e. they simply didn't know the requirement, or don't know how to perform the requirement. It really doesn't help if the person already *knows* they have to perform a gas test and are perfectly capable of doing so. At this point you have a different problem. You have a motivation problem. So how does the use of the LSR directly address this? Perhaps in reminding people of the fatalities incurred while performing such work may help individuals think twice about their next actions. However, this principle doesn't address the powerful influences that may be brought to bear from peers, the environment and the overall operating culture at that moment. Combined, these influences are often sufficient to outweigh any personal biases, beliefs or values.

So simply choosing not to follow the LSR's - for whatever reason - is much more a product of the operating culture rather than the design or application of LSR's themselves. And so we come full circle.... To fully leverage the effectiveness of the LSR's (and especially when the expectation is that front line employees already know key policies and procedures), you may need to start by targeting behaviors closer to the C-suite, rather than behaviors close to the worksite. In other words, if there's not consistent application of the LSR's at ***all*** levels of the organization then don't be surprised if the overall desired results from the LSR's at the worksite fall significantly short of expectations.

By example, ask the following question....If a serious safety incident is incurred at the worksite as a result of an LSR not being followed (but known and understood), would some form of disciplinary action be taken? My guess is that most organizations would reply in the positive. Now similar question, different scenario. What if a *potential* serious safety event occurs, involving the behaviors of a senior executive - such as speeding to get to the airport. Would that result in *exactly* the same type of disciplinary action? My guess is that far fewer organizations would reply in the positive.

Clearly then, if there's inconsistent application of the LSR's, then their overall effectiveness will be seriously undermined. Worse still, if the resultant disciplinary action for a senior manager not following the LSR's is in any way less than that for someone closer to the front line doing the exact same thing, then the very people accountable for shaping the operating culture are seen as not only not walking the talk, but worse still, are undermining the very foundation necessary for the effective application of the LSR's. In other words, the operating environment follows something of a do as I say, rather than a do as I do culture, which is often enough in itself to create a backlash of cynicism and resentment towards the use of any company standards. Therefore, to presume that simply introducing a single rule will somehow be sufficient in its own right to significantly change behavior(s) at the sharp end, may be a little naive and even somewhat misguided.

What may really be needed are rules that also create the *environment* which will enable the right choices to be made by all employees. And to do this, you need to start by looking both at line managers / supervisors and the pressures they inevitably face in any given circumstance from further up the food chain - and then tackle the origins and source of these behaviors also. And as discussed in a previous article on Human Error, attempting to short circuit this process by demanding the strict adherence of the LSR's for one half of the organization only without first requiring the exact same thing from the other half, is a bit like asking an Olympic two man rowing team to win a gold medal when only one person is doing the rowing!

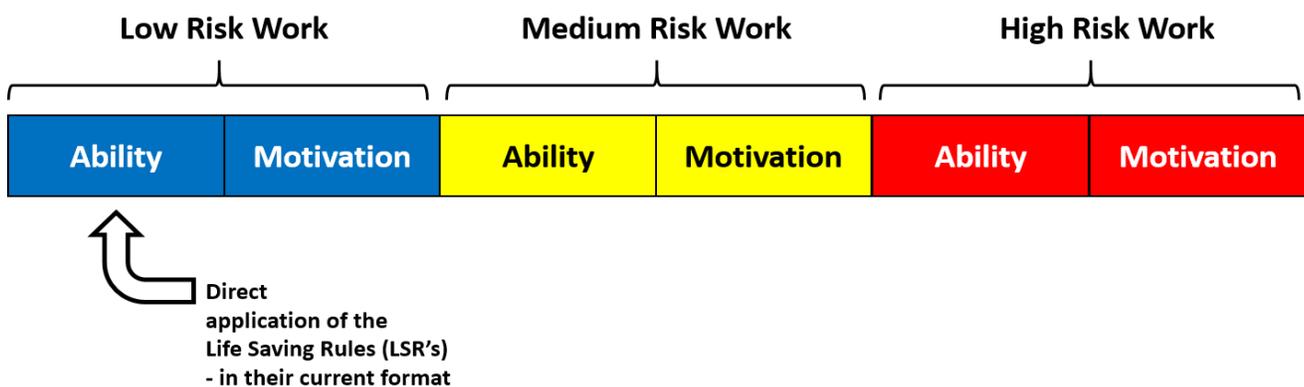
To be effective then, Life Saving Rules (LSR's) may equally have to spell out the actions required to create the right conditions and / or environment that makes it easier for front line employees to make the right choices - every time and in every given circumstance. Almost a set of LSR's for supervisors and managers so to speak. But the LSR's in their current form are a long way from doing this. Furthermore, holding senior managers and executives to account for the exact same behaviors demanded from employees at the sharp end, isn't something that always sits well with organizations. In "Fixing" Human Error in Major Hazard Events (MHE), the subject was raised about the importance of measuring how work is executed - as opposed to simply measuring the negative consequences or outcomes of a job being performed. In which case, one of the keys to getting the desired behaviors is for the supervisor to have an early warning system of when and where people are taking short cuts and risks rather than simply waiting until the inevitable happens, and then applying the Life Saving

Rules (LSR) to provide the context for any follow on disciplinary action. This simply results in the same old story about the individual who was considered to be a stellar employee one minute and then completely alienated the next. This resulted when they apparently did something so seemingly out of character when they circumvented a well-known procedure (a behavior of course which only the day before, they had effectively been rewarded for exhibiting when it saved time and / or money and didn't result in any negative outcomes).

In support of this reasoning in having LSR's for supervisors and managers, it's reasonable to suggest that you might end up with a LSR along the lines of **“Conduct MBWA's during all high risk work”** (where high risk work is known and understood by all employees - a starting point may be the work currently identified via the LSR's or maintaining barrier integrity as part of the management of Major Hazard Events). In this way, supervisors would equally be held to account for proactively identifying when individuals first decided to deviate from procedures - for any reason - and then address the root causes of that behavior(s) ever before the situation escalated. If they did, they might be surprised to learn that circumventing LSR's (and other key standards) isn't only widespread and systemic - and at critical times - but that the reason for these behavior(s) is equally owned by others than just those on the front line.

So to conclude, if you have low risk work / contract and you have individuals with specific ability gaps in the form of knowledge and or skill, then the LSR's (in their current format) certainly have a place. However, it is estimated that this represents probably less than 20% of all cases - see Figure 2.

Figure 2: Direct application of the Life Saving Rules (LSR's) to the management of Operational Risk



The other >80% is either tied to a motivation challenge, or where the risk of the work / contract is sufficient that the expectation - certainly in terms of ability - is so much greater than having to remember and apply a few Life Saving Rules (LSR's).

In summary then....

- Life Saving Rules (LSR's) in their current form likely only have <20% direct applicability and relevance (i.e. in a low risk work environment where a low literacy workforce has a genuine knowledge gap around work standards / practices);
- In situations where the work carries a higher level of risk, the expectation must be that employees are already familiar and knowledgeable of all key operating procedures;
- For all other situations where a motivational rather than an ability issue prevails, the key to success becomes the caliber of the operating and safety culture, rather than the design and application of the Life Saving Rules (LSR's) directly;
- Actions following a failure to strictly follow a Life Saving Rule (LSR) must be consistent regardless of actual consequence and regardless of the person / position in question (front line worker vs. CEO);
- If the key to success is ultimately the operating and safety culture, then why wouldn't you develop some Life Saving Rules (LSR's) for line supervisors and managers that creates the conditions and environment where consistently applying the LSR's simply becomes the easy thing to do;