



Don Harrison BASF -

Training to suit

BEHAVIOURAL SAFETY USER CONFERENCE 2002

My names Don Harrison and I've worked at BASF about the last 25 years. Today I want to talk about our behavioural safety accident prevention programme. We have a high hazard location with about 570 BASF people on site and contractors. We have an alliance situation. We don't have a traditional contractor client relationship with companies. We have for instance a BASF production technician working on the plant working with a contractor on the day, working on the same kind of job. We've also been through a re-engineering process in the last few years, which has happened coincidentally alongside the behavioural safety programme.

The system that we used in 1995 was BST's Programme - Behavioural Accident Programme. It was a stand alone initiative without any real reference to the other Health & Safety systems on site. It was run by the steering committee from production personnel with everyone being involved. The steering committee themselves were very dedicated and worked long hours and did a really good job. A safety manager facilitated it. The BAT process from BST relies heavily on this facilitator of the process who will integrate with the observers doing the observations or measures and the company. The observers are all voluntary and run by a committee called "Bubbles". The problem that we had was that the steering committee became 'fixers. That was the structure between 1995 and 1999. It's a fairly hierarchical structure. We had a site director and a whole load of managers, the safety manager was a facilitator for the STS committee and then the STS committee ran the observations for the observers, a typical structure found in many organisations.

The whole point of running a behavioural safety approach is to reduce the accident rate; if it doesn't reduce the accident rate it is a waste of time. We needed to change our accident rate and when we did it went up from 5 to 5.5! It's quite emotive for me to stand here & say that we failed. It isn't that the BAT system isn't a good system because it is, but it didn't suit our workplace between 1995 and 1999 and I'll try & explain why that was.

At the site in the mid nineties it was my opinion that there was a mistaken belief that all our systems problems were solved, procedures in place, everyone was used to our procedures, all our handling safety systems were in place and all we now needed to do was to fix the people. So the only thing we could do to get past that plateau of 5 reported injuries per 1000 was safety behaviour modification. We couldn't make the plant safe for people so we needed to make the people safer around the plant. The people at the 'sharp end' could see the situation for what it was. In truth we employed a relatively expensive behavioural approach and bolted it on to our current safety systems with very little regard for how to interface them together and that clearly failed to have any impact on the injury rate, but it was cheaper than fixing the plant. The reason why BAT failed in my opinion is that we hadn't got to a plateau, we hadn't fixed all of our systems problems, we hadn't got our procedures up to date and the plant in part still had some hazards in it. Basically we had too many system issues to simply focus on the behaviour of people.

Then we went through re-engineering and duly we lost 40% of our workforce. We got a new team structure out of this. We have a site director and we've got these people with the strange title of process owners, which are just the managers. We have no one else and you won't see any supervisors, because we have none, nor first line managers, charge hands or anything like that. The guys who run the plant, the team members report directly to what you would normally call the executive manager and no-one supervising them. There really are no supervisors. They're the ones who were made redundant. The entire level of middle management was removed in 1999. We do have a guy called a Coach and his job is to work at improving the development of the work of the team members in order to function without the levels of supervision. So that's a brand new workplace so we needed a new behavioural philosophy especially as the old behavioural philosophy had failed to reduce the accident rate.

We decided on a vision statement called a Behavioural Philosophy that people develop at-risk behaviours to cope with defective equipment. So our philosophy is that people will not naturally behave in a dangerous way but will only do so when faced with a difficult or impossible situation that can only be overcome by behaving in an unsafe way. So how do we get over that? One way is to raise the awareness of safe working & the best way of doing that is by a behavioural approach. From the start we got a very low level of acceptance by the workforce. One of the ways we chose to overcome that was to make buy-in simple. The site bonus system at work was modified to include some simple safety, health and behavioural aspects. You could say that we are paying people to make observations and be safe, it's not as straight forward as that - although there is a link and I'll explain that in a minute. What we want to do in all of this is to attack all the risks on the site transparently and without the behavioural people, the STS observers and the STS steering committee, having to be fixers.

We've already got processes and systems in place to fix things that are wrong with the plant and those aspects of defective equipment. What we want the STS approach to do is to work on the behavioural improvements. The analogy I might use is one of reducing the risk density, used on site to help others understand what we are trying to achieve here. The analogy is that of a shark infested sea with the guy on the plant as the swimmer in the shark infested sea. We can do one or two things to reduce the risk of accident. We can teach them how to swim safer or we can move some of the sharks - but preferably both. The idea is that as we fix defective equipment on the plant, there are fewer sharks at the end of the day, so the behavioural programme will then hopefully work. We have a look at the shark and teach the swimmer to swim more safely.

So what has that got us? Observers are now observing. Out of 577 people on the site, 200 of them are doing behavioural observations. With that number of observers training issues can be highlighted. Equipment problems are recorded entirely separately to the behavioural process, so if a behavioural observation is taking place and an equipment problem is raised, it's reported separately from the behavioural report and we put in what's called a non-conformist sheet. Remedial action is co-ordinated by the 'responsible care' team. One of the things that the original implementation of BAT thing didn't do was it didn't equate the behavioural safety with the site and the health & safety culture. Now, the 'responsible care team' are involved very closely. Actions emerging from the behavioural or plant issues are dealt with by a system called CATS, our site central action tracking system. Looking at the screen, (addresses projection screen) this part shows how our health and safety behavioural STS works. There is a pre-observation discussion between the observer and the person to be observed, and then the observation takes place where the observer completes the observation form. Safe behaviours and at-risk behaviours are noted.

At the end of it we get a percentage of safe behaviour and that gives us a metric to discern are we getting worse or are we getting better? We have a computer system that we use to analyse the statistics. It's an interactive tracking pack so that all of those practical plant issues can be fixed, external to this system. Finally we generate statistics, we do reports and we link through to key performance indicators. Let me explain how that works. It consists of a pot of money. In January the pot is empty and the site earns money to put into the pot by achieving gain share goals, which there are 18 of them. One of them concerns that the site carries out behavioural safety observations. So by doing enough behavioural observations a year, the site can fill that pot of money so that by December it could be full. At the end of the year that money is distributed to individual teams, not individuals, using key performance indicators who share that pot at the end of the year. There are two ways, an input and an output method by which people can receive money by doing behavioural observations, reporting and cleaning up non-conformities as well as running the plant profitably and economically. In other words the whole thing is completely integrated with the behavioural approach integrated with the way we do business.

This is our current reportable injuries graph (indicates to projection screen) shows a dramatic decrease in the rates of reportable injuries. In fact in October of 1991 we reached a million hours without a report of injury, the first time in the sites 30-year history. We've only had one reportable injury in 2001 and 2002 we haven't had a reportable injury and we've just passed a million hours. To me this shows us that we are achieving the right results. This graph (indicates to projection screen) shows all injuries. Back in 1998 it was running at a rate of about 40 per million and now we are slowly niggling away at it. It's still early but we've done this for a year now and we are starting to get some good results.

So where are we going in the future? As I have said ours is an alliance site. We've many people from different places working on the same site, often interchangeable in the same skills. In 2002 our main site contractors - alliance partner - started doing behavioural safety observations with us, being observed and being observers. We're going to continue our training as this is a

never-ending process and we're always training new observers. We'd like everyone to be an observer. We're going to continue to put more definition of items on our site web pages and these pages contain things like 'line of fire' and a 'lack of three point contact' for going down steps.

'Route cause analysis'. We find that by bringing in a behavioural element into it, which involves using observers in accident investigations, which gives us a new perspective as we discover incidents and root causes that we never thought of before.

Finally and most importantly we are concentrating on the quality of our observers. We need the quantity of observations as a base line but if the quality is not there, then there's not much point in doing the work, so we need to improve the quality of our observations. That's all I want to say to give you an idea of an approach that has failed and then was resurrected. Thank you.

Questions

"Why did accidents go up?"

Don. I think that there are more factors than one in place there. Co incidental of the re-engineering was that, in a safety group we realised that arranging the company, especially to do with the process of re-engineering itself, could easily cause stress and possibly increase the rate of injury. So we had a real push that people reported everything. It might be that the severity of injuries wasn't as high, but we do have examples of accident and incidents caused by people not having their eye on the job and in my opinion a re-engineering exercise, especially one that involves making lots of people redundant, is a potentially highly hazardous thing to carry out.

"Were you worried about observers cheating?"

Don. Yes, terrified. We've got a thing in there called a 'circuit breaker'. If anyone is found to be manufacturing false observations, or let me say sabotaging the plant in order to gain bonus points, then the whole of that gain share is forfeited.

"How do you control that?"

Don. Members of the 'responsible care team' - or you call them safety officers; enter all the non-conformities into the system. And one of their duties is to police the system. Those guys actually work with the people in the plant in the same locations and what they can do is to ensure that there is no fooling the system.

"Do you think that you have the same number of volunteers as you have on paper? How genuine are they?"

Don. It comes down to management commitment. If the management isn't there 110% - then it will fail. It's a two dimensional situation because if management are committed they will release the people. If the management are not committed and they don't release the people it fails and that's one of the things that went wrong in 1995. Without releasing the people to do observations it's bound to fail. The problem is that it is very difficult to get cash strapped managers to release people, especially when there are budget cuts around. The only way to do it is to point to the success.

"How long does it take to complete your observations?"

Don. About 10 minutes to a quarter of an hour.