



## Ryder Marsh

### The Psychology of Industrial Safety

#### **BG - India**

#### **\*\*RUNNER UP\*\***

BEHAVIOURAL SAFETY USER CONFERENCE 2006

#### **Hyrsh**

Thank you Neil. Good afternoon ladies and gentleman, please all allow me to introduce myself, my name is Hyrsh and I have come from India to represent my company BG Exploration and Production India Limited.

Ladies and gentlemen, we have seen good behaviours shape good cultures; today I am going to share with all of you how is it that they are implement and sustained the behaviour based safety processes in our offshore assets for the past three years. I myself work as a process engineer off shore and being a part of the core group that manages and monitors the process I have had many opportunities to feel the (unclear) of the process from close quarters.

So let me begin by telling you who we are and what our business is. BG Exploration and Production India Limited or BGPIIL is a part of BG Group which is one of the leading natural gas exploration and production companies in the world. In India we are currently operating in 2 offshore oil and gas fields as a part of a joint venture. One field is called Panamuktar and the other field is called Dapti and both are situated off the west coast of India as you can see in this map. Ladies and gentlemen these fields that you see account for 10% of India's total oil and gas production; we also currently undergoing a major expansion phase and through all our operations and expansion what remains critical to us, what remains absolutely vital to us is the safety of our people. And that is why I take great pride in saying that we in India were among the first in BG Group to implement a behaviour based safety programme back in 2003 so these logos which you see on the screen were a result of a competition which was held among our employees at that point in time. Today these logos have come to symbolise the process in our assets and they are very close to our hearts.

Since the introduction of the process we have a long way but we were faced with challenges when we introduced the process. So I am sure you would agree when I say that whenever it that we start something new or get into a new venture we are faced with challenges and it was no different from us either.

The first challenge was faced was that of our culture. Ladies and gentlemen India is a land of great variety; we speak 27 languages and 130 dialects so all the people who come and work with us they are all from very very different backgrounds so to get all these people to change their behaviours and align them to what we expect out of them to the high standards, high standards of safety that BG has set was a big challenge. There of course no offshore installation can work without the contractors playing their major role so how do we manage and modify their behaviours is I am sure a challenge faced by a lot of industries. Working offshore presents its own set of (unclear). We have tried to control and minimise them but we can not totally do all that, deal with those results, for example there's no way that we can join two metal pieces using a glue stick, we have to get a hot welding torch and melt the metal to fuse so these and there are a lot of other jobs which come with their share of risks, so and the only way that we can minimise the possibility of an incident happening is by changing behaviours.

Also since we are undergoing an expansion phase we have these periods of intense activities where the number of people working on the platform at any point in time is very high and the nature of jobs, the risk level associated with those jobs that also escalates so how do we ensure safety performance during those periods is a challenge for us.

Ladies and gentleman overcoming these challenges is easier said than done but at BG PIL we have been able to do it and do it successfully to a large extent; so what is the model that we use? How is it that we have implemented the behavioural safety process? Right. First of all its us the workforce who owns the process, we don't take any orders; we begin by training our people in taking observations so these people when they go out in the field and they observe

people's behaviours as they engage in their day to day activities so one example if I am observer who goes out in the field and if I see a person doing a job safely taking all possible precautions then I walk up to him and I commend him, I praise him for that, when I say praise it can just mean a little thumbs up and a smile you know which tells a person that, which makes the person doing that job safely feel good about it and that reinforces his safe behaviour.

Similarly if I see an unsafe behaviour then I try to give the corrective feedback in the nicest way possible right? Then these behaviours that are observed there are recorded in a checklist, this checklist are nothing but a means to measure and objectify those behaviours; we also have a steering committee which is a core group of members who's job is to analyse these unsafe behaviours to a ABC or antecedent behaviour consequences analysis to find out what are the triggers for these unsafe behaviours and what can be the possible causes for these unsafe behaviours so after we do an ABC analysis we do a root cause analysis to find out what is it that lies at the root of the unsafe behaviours and then we take actions to try and eliminate the root causes for those unsafe behaviours so this essentially is the framework within which we operate the process.

Ladies and gentlemen I am sure all of you would agree when I say that no behaviour based safety process can succeed without involving all its people; the reason is simple, peer pressure so if people around me are doing their jobs safely then its very difficult for me to do my job in an unsafe way so the most effective tool that we employ to make sure that all the people are on board are the morning meetings, so every morning at 7 o'clock the first thing we do before heading off to work is gather together in our common hall and we discuss the observations of the previous day, the safe observations they are praised in that common forum and they are clapped for, and feedback is given on unsafe observations; everybody who is present at that meeting is encouraged to speak up and voice their concerns and a lot of times we have found solutions to problems, solutions to unsafe behaviours emerged from that discussion. The best bit about these morning meetings is that the first thing which you discuss or hear every morning is safety and you carry that message to your workplace, that indeed safety comes first.

Ladies and gentlemen our experiences in the last 3 years have taught, have taught us that recognition of contribution is very important, important not just to raise the motivation levels but also to induce a sense of healthy competition. And one of the ways we do that is by giving out the observer the quarter award so in this photograph you can see our managing director and our executive vice president giving the award to one of employees (unclear). So here is a man who was worked as a mechanic with us for past 10 years and he is truly an example of a guy who has truly internalised the process. He has come into the process and has believed in the systems is truly exemplary. This slide gives you an overview of our platform and what you can see here are the arrows which point at various locations on the platform so what this essentially is telling us is that this man has filled in checklists from every corner of the platform and not just his own work area, now every observer on the platform is turning in similar kind of wide range of observations so at every point in time we have a very clear idea of where is it example that we stand in terms of our safety performance and what the concern areas are. Right.

Ladies and gentleman (unclear) no behaviour based safety process can be without its share of challenges along the way so we need to ask ourselves some tough questions from time to time to see that we stay on track so what are these questions?

One question which we ask ourselves is are the people, are the interest levels and enthusiasm levels high? Are we getting too mechanical, are we repeating the same things over and over again? What do we need to do to make sure that people remain interested and remain involved in the process? Then we also have this challenge of some unsafe behaviour which have a tendency of repeating themselves. For example we are, we are currently struggling with the behaviour of people bending their backs when lifting loads, so how do we, how do we manage and eliminate these seemingly incorrigible behaviours is a challenge, then are we closing actions, so we do the root cause analysis on unsafe behaviours and then we derive on the actions which need to be taken to eliminate those root causes so are we....are we closing timely so we need to ask ourselves these questions from time to time to see that we are able to sustain the process the way it should be. Right.

So how is that we are overcoming these challenges? Ladies and gentlemen we have a great belief in our systems and we are in no doubt that we have to keep strengthening the existing systems but we also feel the need to constantly change and evolve with time. For example of some time back we were faced with this problem that people were having difficulties, especially the new people who come to the platform, they were having difficulty in filling out the checklists so what we did was we introduced a new pocket checklist which is very handy and easy to fill.

Now these checklists they also have a section which asks the observer on what you can do so instead of the observer relying on somebody else to take actions he is promoted to take actions himself right? Then we also, we have also introduced a behaviour checklist to strengthen our permit to work procedure so a lot of industries they follow the permit to work procedure to minimise the risks associated with potentially hazardous jobs. So we decided that we need to strengthen this procedure more and to do that we introduce a behaviour checklist to observe if the people are following the permit to work procedure in the spirit which it is meant to, that we also organise regular contact programmes for our contractors to make sure that they are aware of the risks in the jobs that they are doing.

So (unclear) essentially is that we be, we need to be on our toes all the time so whenever we combat some problems or challenges then we have to devise strategies which combat that specific problem. Ladies and gentlemen behaviour based safety works and it has worked for us; what have been our major achievements we have achieved zero lost time injuries in our offshore platforms for the last four years, that was our primary target, we have won the BG Chairman's award for safety performance for the past 3 years given in the face of stiff competition but apart from these figures and awards that we have won what is of greatest satisfaction to us as a team is the change in culture that we have seen so from the time when people used to listen to what their bosses used to say blindly they have now found a voice of their own, they are not hesitant to speak up right and behaviour based safety has also provided our workforce a common platform to interact with, so people care for each other, they care for each other's safety and that leads to better teamwork which translates to a better work performance.

What are the other visible changes? Here is one. Ladies and gentlemen accidents don't just happen, they are always preceded by a cause so on our platforms we have the system of reporting hazards whereby people can report unsafe conditions in their work, in the workplace so they can be eliminated before they can cause an accident so in this graph you can see that the number of hazards that have been reported has gone up considerably since the time we implemented the behaviour based safety process so this is essentially telling us that people are not only more observant of their surroundings they are also aware of the risks in their workplace and they are taking the pains to report them and see that they are getting eliminated.

Here is an example of what actions we have taken on ground, so these are the categories in which have devised our behaviour checklists where we observe behaviours because we perceive that the risks associated with these areas is maximum. For example working at height, working at height is one such hazardous activity that we have to engage in from time very often on our offshore platforms so we found that the other contractors were having difficulties, they did not really know how is it, what is the right way to use safety belts so that unsafe behaviour was observed in some of the checklists and what we did was we did a contract programme for them and telling them how is it that the safety belt should be used, how is it that, how the anchor points should be and that, and those things so essentially we are always trying to eliminate the unsafe behaviours in all of these categorised by doing actions on ground.

Ladies and gentlemen we firmly believe that teams which celebrate together stay together, we want to feel good about our achievements so here is a poster which, which gives a glimpse of the festive spirit of our anniversary celebrations. We also organise events like hazard hunt competitions, quizzes and poster competitions where people are asked to express creatively their opinions on the process so we want behaviour based safety to be a reason for people to enjoy and come together and not just serious you know, no fatality, no injury; we want it to be a common platform for people to come together and interact with. Ladies and gentlemen success of behaviour based safety is a journey for us and not a destination; we know we have seen this process work and it is really very close to our hearts so till the day we have people working with us on our offshore platforms away from their home we want that behaviour based safety should also be out there to see that they don't injured and that they return to their homes safely. Thank you so much for your time, in the end I just want to show you a film which we have made on our platforms which sorts of, sort of gives you a glimpse of how, what people feel about the process.

FILM

**Hyrsh**

Thank you so much.