

How Workplace Mapping was introduced at CIBA Specialty Chemicals, Bradford by GMB Safety Representatives

In January 2001 Ciba Chemicals in Bradford had recorded 6 Lost Time Accidents (LTA's). If such trends were to continue the Bradford site would be put in the position of having the worst accident rate in the whole Ciba group, worldwide. Pressure from the group's headquarters in Basle, Switzerland had reached such a level that higher management at Bradford were being telephoned at home during the weekends and also they were told they had to go to Basle, to explain the sites poor accident performance.

When the management returned to the Bradford site they informed everybody that if improvements were not made immediately there would not be any more funding for further site improvements which would effectively see the site suffer a slow and painful decline which would eventually cause it to shut down.

This news brought a group formation to reduce the amount of accidents. It consisted of the Managing Director, UK Head of Safety, UK Head of Production, UK Head of Human Resources, Divisional Production and the senior site safety representative Sean Bussey.

One of the main comments that came out of the group meeting was, “*The accidents on this site were attributable to the clumsiness and lack of care taken by the production operators,*” which Mr Bussey quickly responded by saying “*The real issue was the hazardous areas and conditions that the operators were expected to work in.*”

After a heated discussion, it was finally decided, that it would be in the best interests of everyone if all working areas were improved. This would be created by using the involvement of the employees of the areas.

The senior site Safety Representative informed everybody that Revitalizing Health and Safety and the DTI government strategy for improving health and safety, in particular page 46 actions by workers point **XV**. (Over two thirds of workers would take greater personnel responsibility for their own health and safety if better training, better education and awareness of hazards were available).

This fit closely with the concepts of engaging and involving the Workforce Union Policy and Strategy Hazards magazine ‘Hazard 60, 1997’. (Mapping out work hazards which the site could adopt and use).

It was also decided that the group would be called ‘Safety is Our Future’.

After this meeting the Senior Site Representative met with the rest of the site reps. they together discussed the issues finally deciding and agreeing with the concepts.

Senior reps went to a further meeting with the 'Safety is our future' group and it was decided that the Safety reps. would run a site wide campaign called 'Workplace Mapping'.

The first agenda agreed on was to hold a meeting for all the Senior Site Safety Representatives to discuss and decide what strategy to take for such an undertaking.

The production areas on the site are divided into seven different areas. Each area has a Safety Representative on each of the four shifts, (one of those is also a Site EHS Safety Representative).

Below is a list of the Site Safety Representatives and relevant areas.

- **Sean Bussey - GCD, Site & Senior Safety Representative.**
- **Ian Bullen - Powder & Site EHS Representative.**
- **Craig Clark - DBR / 14 & Site EHS Representative.**
- **Chris Wormald - Bead & Site EHS Representative.**
- **Ronald Root - Warehouse & Site EHS Representative.**
- **Douglas Hall - LDP & Site EHS Representative.**
- **Barry Woodhead, Intermediates.**

EHS Stands for Environmental Health & Safety

Outcome of Meeting

- To modify the hazards mapping article regarding offices, so it can be used for our particular working environment.
- Agreed that the seven production areas will be mapped and run individually, (but still keeping in touch with other site reps. and senior rep. should any problems arise).
- Site & shift reps. to explain to workers in their area about Workplace Mapping using Power Point Presentations.
- Decided on what type of Posters, Tags, Hazard / master sheets will be used?
- Building plans will be needed to make a map of your individual area.
- What will be said in the Power Point briefings?
- To meet at set times and keep in touch with senior reps.
- Pilot mapping trial to be done.
- Mapping hazards to be split into 4 different categories.

Later that week I discussed with the three shift reps. in my area various issues from the Senior Reps. Meeting. We decided that all four shifts would be briefed individually when they are on the day shifts (you do not get a good response from the men in powder area when they are on night shifts).

CIBA RUNS ON A 4 SHIFT, 3 ON 3 OFF SYSEEM

After all the men were briefed, it was decided that I should go on regular days for two week whilst the mapping was taking place. The reason for this was because all the hazards each shift had identified had to be put into different categories, and also the information had to be transferred onto a master list.

The reason for doing this is because you could have four men on different shifts and each could have identified the same hazard. This happened on many occasions and from 432 hazards that were identified by all four shifts, a master list was produced that had 313 individual workplace hazards that were put into different categories and had a colour tag attached to the hazard in question.

Whilst the operators were mapping the working areas, the majority responded well and gave a lot of information about the hazards in their place of work.

A small number of operators were not interested. (These were non union people). After speaking to 2 of them on my shift who worked on line 6 and basically telling them *“If you think that line 6 plant runs perfectly and nothing at all can be done to improve the safety don’t put anything on the mapping sheet. Likewise if there is*

in your opinion causes for improvement note it on the sheet. That way we will either try to correct the hazard or highlight the hazard to the operator who works there”.

They ended up putting down around 20 hazards on the mapping sheet.

Hazard Categories and Identifying colour

Chemical Hazard - Blue Coloured Tag.

Physical Hazard - Red Coloured Tag.

Ergonomic Hazard - Yellow Coloured Tag.

Other Hazard - Green Coloured Tag.

When all the information was put onto the master list I asked for the men from the mapped areas to discuss the hazards in question using an Automatic Risk Assessment that my son had designed so it can be used on the computer. The operators and I gave all the hazards a category risk so when the findings were shown to Powder Management and Engineering Department they not only had information on what type of hazards we were dealing with, but also knew what type of risk factor there was.

This is a list of the different Risk Categories

- **VERY HIGH**
- **HIGH**
- **MEDIUM**
- **LOW**
- **TRIVIAL**

After meeting with the Site Safety Representatives it was decided that all the seven production areas should use this type of Risk Assessment even though this is not usually the standard way of conducting one.

The reason we decide to use this system was because it was a fast way of identifying what level of risk the hazard is. Alternatively if we had carried out a standard risk assessment, we would still be doing them now. All we wanted was a rough guide on what level of risk the hazards were, then we could start with the very high risk hazards and work our way our way down the list.

I myself checked several of these risk assessments with CIBA standard risk assessments and they all came out with the same category of risk.

After the master list was completed I had to decide on how to design a plan of the workplace where the

mapping took place. The design I chose was to use building plans of powder area (Birds eye view), which I photocopied from the planning department.

I removed all irrelevant data that was on the plans (measurement figures and lines) using tipex, I then took another photocopy so all the white tipex marks would not be visible, this left me with a birds eye plan of powder with just the building and plant showing. I then fixed the plan and master list onto a 4 x 10 foot piece of board.

I then inserted coloured pins; these were numbered from 1 to 313, inserting them where the hazards were present. If for example there was a physical hazard on line 1 drier I would take a red coloured pin, write what job number the hazard was and stick it in that specific area. The reason for this being that all the operators could look at the plan and see at a glance where the actual hazards was situated and what type it was.

Once hazard had been eliminated, the pin would be taken out of the plan and JOB COMPLETE put on the master list.

This was a simple but effective way of having a visual aid that the workforce could look at to see what hazards had been eliminated. The mapping showed some unusual trends. You would have thought that the most common hazard would have been chemical, but the mapping showed that in powder we had mostly physical hazards which were followed by ergonomic. The chemical hazards that were present were usually high on the risk assessment.

Having completed the mapping board, all the Safety Reps. in powder then went around the plant and fitted the appropriate coloured tags where a hazard was present.

Now the powder area was mapped, tagged and mapping board complete. I arranged a meeting with the Powder Production Manager, Engineering Personnel, and Shift Managers to discuss the findings of the mapping survey and also to agree on which hazards would be targeted first.

Because of the August holiday shutdown, it was not until September that any of the mapping issues started to be resolved. During a meeting it was decided that all the very high and high priorities would be looked at first, but due to complexities of certain issues it was then decided that if there were any hazards that could be resolved quickly and without any disturbance to production, then these could also be put right.

It is now July 2002 and we have completed 164 (52%) of all mapping actions which averages out at a 5% completion rate per month.

We will come to a point when we have got certain hazards left that cannot be resolved due to either plant design or excessive cost (I estimate this to be around 25% of mapped hazards).

The powder operators will be told why these hazards have not been resolved, and the area where the actual hazard is will be highlighted so people know such hazard exists.

The operators in powder are updated monthly on how the mapping is progressing, either by mapping updates or powder safety meeting minutes. At the speed mapping is going, I would say it will be completed at the end of this year.

Outcomes and Achievements of the Mapping Campaign

Outcomes of Workplace Mapping in Powder

- All areas in powder have been mapped. Including offices, laboratories, mess room, and shower area.
- Regular meetings with management, engineering, and shift supervisors to discuss how issues are to be resolved.
- 432 issues were raised by A, B, C & D shifts, and this was reduced to 313 individual issues that were put onto a master list.
- Viewing board plan of powder with coloured identifying pins that identify specific hazard areas and also master list.
- 164 hazard issues completed (52%) to date.
- Averaging completion rate (5%) per month.
- Hazard tags placed on every individual hazard in powder (so people are made aware such a hazard exists).

Achievements of the Mapping Campaign

- The mapping campaign has given the worker on the shop floor a chance to voice his concerns about hazards that exist in his place of work.
- The mapping campaign has given management, engineering, plant operators and safety representative's valuable information regarding the amount of different hazards that exist in powder production.
- The mapping campaign has enabled GMB safety representatives and CIBA management to work together in a joint approach to resolve the different hazards that exist.
- The mapping campaign has given the opportunity to enable all the GMB safety reps to organise and work together as a team which will put them in good stead to become better Safety Reps.
- Make workers more aware of what hazards exist in the place they work (The site has currently gone 12 months without a lost time accident).
- The mapping in powder was used in October 2001 as an example for the European week for safety and health. Two other GMB safety representatives and myself conducted near miss and workplace mapping seminars that were given to various employers from around the area such as Degauss Chemicals Knottingley, MEL Chemicals Swinton and Mc

Brides Personnel Care Bradford. We also had the local M.P for south Bradford (Gerry Sutcliffe) as well as the European M.P for Yorkshire (David Bowe). Having to conduct a seminar in front of local and Euro M.Ps was quite a daunting task for me as I have only ever briefed lads on the shop floor. After the seminar the M.Ps were quite impressed and thought this kind of campaign was a good tool that would make the site a safer place, not only for the employers but also the surrounding areas.

I believe that the mapping campaign came at the right time for the Bradford site. It not only reduced the number of accidents that we were having, it also changed the attitude of the management from believing that accidents on the shop floor were mostly due to the clumsiness and carelessness of the worker. It has also made the worker on the shop floor more aware of the dangers that exist around him.

One of the things that came to my attention while running such a campaign is that **YOU** have got to take charge of it from **START** to the **FINISH**. If you leave work for others to do, the chances are that they will not get done. As well as this you have to constantly remind the management and engineers in your area about the jobs that need to be done regarding the mapping campaign. If this is not done they will just forgot about them.

Every time I am on the day shift Monday to Friday, I make it my business to meet the powder production manager and see what has been done regarding mapping. I also try to meet the engineering supervisor (*who has started to walk the other way when he sees me coming due to all the engineering jobs that need doing*) to find out what mapping jobs have been completed.

There have been a lot of safety initiatives on this site before union recognition and they have all ended up falling at the first hurdle.

I personally believe that the CIBA management let the GMB Safety Reps. run this campaign thinking that we would not be capable of running such a campaign, this in turn making us look foolish, but when they realised that it was going to be a success they were soon jumping on the band wagon.

I have just been told that the mapping campaign has to finish at the end of the year; therefore I have redesigned the mapping list so it has a section that explains why an issue has not been resolved.

This will be finished before the end of the year and the workers in powder will be briefed on what we have achieved through the mapping campaign.

This campaign has now got GMB recognition and is starting to be used in other Companies around the country.

Our Senior Safety Representative - Sean Bussey, gave a presentation about the mapping campaign to the GMB

National, Regional Health and Safety Officers. This is the first time that a Safety Rep. has ever been asked to do this, which shows that Safety Reps. at the Bradford site are going in the right direction.