

Paul Feltoe

*As part of our series looking at the way in which Chemical Engineers are working to protect people in many parts of the Process Industries, I interviewed **Paul Feltoe**. Paul studied Chemical Engineering at the University of Canterbury, gaining a BSc in 1993. He is a Fellow of the Institution and a Professional Process Safety Engineer. Paul is currently a consultant working in New Zealand where he is Managing Director of Safety Solutions Ltd*



Paul, how would you describe your current role?

My main responsibilities involve managing and developing the Safety Solutions business and also acting as a process safety consultant. We have 10 people in our team and we work across New Zealand and Australia.

What aspects of Process Safety do you apply in your work?

My consulting responsibilities cover a wide range. Facilitating hazard and risk workshops, auditing process safety performance, developing management systems, incident investigation, emergency response and developing process safety competence of organisations through training courses.

Is it possible for you to describe an average week?

Not one week is the same for me. One week could include facilitating workshops, other weeks could include development or delivery of training courses, and other weeks include development of safety management systems. Sometimes it is a bit of everything. A significant portion of my role involves running the business which includes sales and marketing, finance, developing partnerships, business development and HR. With such wide variety of work and responsibility, some weeks are chaotic however there is an immense amount of diversity in the types of work and people I interact with.

What parts of your work do you find most interesting?

Some sectors are mature in their implementation of process safety management (PSM), and some are less so. I like working with new sectors that have not traditionally implemented PSM. Often I need to work out how PSM relates to their context. I enjoy it when these clients have “**Ah-hah**” moments when a gap is identified, and they start to see benefit in the process.

Is there a part of your work that gives you the most satisfaction?

I get the most satisfaction when I identify a gap in process safety management within an organisation and can get the message across to a leader. I feel that my impact is the greatest in this situation as the leader can influence ongoing change. Gaps could be technical (missing or weak controls) or gaps in how the organisation is functioning. The latter often has involved having difficult conversations with company leaders, but persistence can lead to significant outcomes.

What skills and experience – both technical and/or soft skills – have been key to your achievements in Process Safety?

My career started in process engineering at a refinery and moved to advanced process control in a global engineering company and then process safety in the last 15 years while running my own company. When I was doing advanced process control work, I would often need to “figure out” the process quickly before being able to do the “work”. This mentality is very similar to process safety consulting where we are not specialists in the underlying process and need to figure things out quickly so that we can add value.

My PSM experience, initially developed in the hydrocarbon industries, has helped me transfer “know-how” to other sectors such as power, food, pulp and paper and water-treatment sectors. The hydrocarbon sector has a lot of historical process safety capability and I have been in a unique position to transfer much of this “**good practice**” to other sectors as they grow and mature.

How are you able to contribute to solving society’s grand challenges?

My role as a consultant, trainer and leader within New Zealand’s processing industry has helped me grow the process safety competence of my own staff and sectors new to the concept of process safety. We cannot solve our process safety problem alone and it is important that we educate our peers, clients, and partners so they can also take on this mission. Within the last 10 years, I have seen numerous sectors grow and develop.

What are the key Process Safety challenges faced by your sector in New Zealand and what skills will be needed as we move towards ‘Net Zero’?

As we move towards net zero, there will be a significant reduction in the use of hydrocarbons as a transport fuel and a significant increase in the use of electricity and associated storage. On balance, I feel that the overall potential for significant catastrophic events will reduce.

I think that the application of process safety will shift away from systems & engineering we put in place to prevent “**loss of containment**” and move towards “**loss of control**”. There is likely to be greater emphasis on power generation and electricity storage. With this in mind, the process safety community will need more contribution from the electrical community.

What led you to choose a career in Chemical Engineering?

There are 2 factors that have influenced my choice of chemical engineering as a career. Firstly, my father was a chemical engineer and secondly, when I was at high school, I enjoyed the practical side of the sciences. As a youngster, you are not quite sure if your choice was the right one, but I can say that I have a rewarding career in chemical engineering and am pleased with my choice.

Being a member of IChemE has helped my career in a number of ways. IChemE facilitates access to networks of like minded people, training courses, conferences and literature. I have met numerous people at IChemE events that have influenced my thinking, career development and work opportunities

Do you have any advice to an engineer thinking of moving into Process Safety from another role?

My advice to a future process safety engineer would be that a career in process safety is both challenging and rewarding. Process Safety Engineering is a subject that is relevant for all sectors and covers technical and management potential. You will get the opportunity to make the organisation safer and make a difference.