

Lessons from other industries

A surfing tragedy with lessons for industry

Andy Brazier, AB Risk Limited, UK

Summary

On 11th May 2020 five experienced surfers died. The formation of a thick layer of sea foam appears to be the cause. Although surfing has little to do with the process industry this incident highlights that competent people make mistakes and it can be very difficult to comprehend the power of nature. Also, whilst we may become adept at understanding routine risks this does not always prepare us for when things go wrong, and no risk control or mitigation measures are ever 100% reliable.

Everything we do has a risk. We need to understand that in the context of the benefits we get from the things we do (at work and in everyday life). Our aim has to be to find a balance point between risk and reward — the difference between feeling alive and staying alive.

Keywords: Lessons from other industries

Introduction

Scheveningen is a seaside resort in the Netherlands. It is near to the city of The Hague and popular with tourists and water sports enthusiasts, and home to several surf schools.

On the evening of 11 May 2020, the five young men who died were bodysurfing (catching waves without boards). They were all experienced surfers aged between 22 and 38. Three of them were qualified lifeguards and worked as surf instructors.

Investigation and analysis

The alarm was raised soon after the men got into difficulty and attempts were made to rescue them. Two were pulled from the sea but pronounced dead. Two bodies were found washed up the next day and another was spotted floating at sea.

It was reported that the sea was choppy at the time of the incident, with a strong wind. Whilst these conditions may be challenging to the novice, surfers routinely venture into much rougher seas. The most likely explanation for the loss of life was the formation of a thick layer of sea foam.

Sea foam is a natural phenomenon created by algae. It is not usually toxic. The cause of death in this case is still not known but it may be that the foam caused disorientation or physically made it difficult to swim.

Lessons learned

Although surfing has little to do with the process industry, some of the circumstances of this accident illustrate issues that we are likely to encounter; and where dealing with them to minimise the risks is not always straightforward.

Competent people make mistakes

We usually assign our more hazardous jobs to our most competent people because they are a safe pair of hands. They are willing to take on challenges because they feel their experience has prepared them for everything.

Less experienced surfers usually restrict themselves to calmer conditions and if they do venture out on 'big' days they are usually unceremoniously dumped back on the beach. Most novices would not consider surfing in sea foam because it is something well outside of their previous experience.

Whilst the five men may have been surfing together, they all failed to appreciate the risks. We generally assume that improving the competence of everyone automatically improves safety. However, if everyone shares the same competence (e.g. all attended the same training and worked on the same plant) it may not properly prepare them to handle every possible scenario. In fact, it can result in groupthink and sometimes a feeling of bravado, which can encourage risk taking.

Natural phenomenon

Nature is powerful and it can be very unpredictable. We sometimes feel we can control or overcome the forces of nature, but it constantly proves that is not the case. For these surfers, the sea foam probably seemed like a bit of a nuisance but quite normal. They clearly did not appreciate its danger.

Mitigation cannot be relied on

It is quite right that we put effort into mitigation but we need to recognise it can never be relied upon and we probably need to carry more emergency exercises to make sure that we are as prepared as we can be for the unexpected. Surfing with other people is always considered to be safer than surfing alone and it allows people to help each other, including calling emergency services, but clearly this is not always enough.

Hazards and risks

It is easy to convince ourselves that we have every risk under control. The reality is that whilst a hazard exists there is always a risk. Assessing unusual risks is particularly difficult. In hindsight it is easy to see that a large quantity of sea foam could be particularly hazardous to people trying to swim. But until an incident of this nature occurs it is difficult to consider it as credible.

Conclusions

A response to a tragedy like this could be to ban surfing at that beach. Five people have died so it must be dangerous. But everything we do has a risk and what we need to do is use

our risk assessment processes to determine how an activity can take place safely, making sure everyone understands the risks and ensuring an appropriate risk-reward balance. This is not a static position and so we have to constantly review our assessment and adapt our approach.

References

1. *Tragedy in Dutch surf capital Scheveningen: 5 dead, more missing.* <https://wavelengthmag.com/tragedy-in-dutch-surf-capital-scheveningen-5-dead-more-missing> (12 May 2020)
2. *Tragedy in the Netherlands: several surfers drown at Scheveningen.* <https://www.surfertoday.com/surfing/tragedy-in-the-netherlands-several-surfers-drown-at-scheveningen> (13 May 2020)
3. *Tragedy Shakes The Epicentre Of Dutch Surfing.* <https://www.worldsurfleague.com/posts/452038/tragedy-shakes-the-epicentre-of-dutch-surfing>. (20 May 2020)
4. *Surfing tragedy that stunned a Dutch beach community.* <https://www.bbc.co.uk/news/world-europe-52920048>. (11 June 2020)



ICHEME Global Awards webinars

Want to learn about outstanding work in your areas of interest?

Oil and Gas webinar
4 November 2020,
14:00 GMT



Process safety webinar
17 November 2020,
10:00 GMT



sponsored by



The IChemE Global Awards 2020 webinars are a great way to learn about new ideas and innovations in the areas that interest you. All finalists have been invited to present on their work and participate in Q&A with attendees. Award winners will be announced at the end of each webinar.

The IChemE Global Awards webinars are free to attend and open to all.

For our full list of webinars and to register visit www.icheme.org/globalawards

ICHEME ADVANCING
CHEMICAL
ENGINEERING
WORLDWIDE

Sponsors

AVEVA

BakerHicks



DOOSAN

ICHEME
Food & Drink
Special Interest Group

ICHEME
Water Special Interest Group

Johnson Matthey
Inspiring science, enhancing life

PLASTIC ENERGY

PM GROUP

The Chemical Engineer

wsp