

Assessment 2. Professional Skills and Health & Safety in Construction

Investigating Health and Safety Records of a Company

Ben Jeffs 2110628

5th May 2022

<u>contents</u>	<u>page</u>
1. Introduction	2
2. Review of incidents – tables of case studies 1 to 4.	2
3. Reasons for UCL’s poor health, safety and environmental record	7
4. Improving UCL’s health, safety and environmental performance.	9
5. Conclusion	12
6. List of references	12

list of figures

Fig 1. The HSE Health and Safety Management System HSG65	9
---	----------

1. Introduction

This is an investigation and report on the health, safety and environmental (HS&E) record of UWTSD Construction Limited (UCL). Reviewing four case studies of HS&E issues which were significant enough to involve the governments regulator; the Health and Safety Executive (HSE). With reference to legislation and best practice, the investigation will show how UCL are failing in their HS&E responsibilities and provide recommendations on how to improve this situation. (Gov Legislation Portal, 2022)

2. Review of incidents – tables of case studies 1 to 4.

Case Study 1. Exposure to hazardous substances:	caused serious illness in two workers. The site was identified as a previous landfill. The HSE served two improvement notices; site operation and disposal of material.	
Root Cause	Legislation Violations	Consequences
Failure to uncover the site history during planning stages.	Construction Design and Management Regulations, 2015. (CDM) Reg14 sharing information. Site Waste Management Plans Regulations, 2008. (SWMP)	Poor planning with no investigation, surveys, method statements or risk assessments, this set up the project for failure from the very start.
Failure to use site-specific risk assessments and operational procedures.	CDM Reg12.1 & Reg12.2 Job specific risks. Health and Safety at Work Act, 1974. (HASWA)	Caused the incidents and prevented any useful response to prevent the second illness. Loss of workers morale.
Failure of management and workforce to ensure PPE is worn.	HASWA. Personal Protective Equipment Regulations, 2002. (PPER)	Absence of PPE led to illness of workers, the cost of sick pay and replacement labour.
Failure to properly dispose of hazardous waste.	SWMP	Harm to workers, the public and environment.
Failure of to have suitable HS&E management systems in place.	Not a violation of legislation in itself but a suitable system could have caught the above omissions at any stage.	Poor management systems put at risk workers, the public and environment. Worst still lessons are not being learnt.
Overall - negligence from UCL and workers.	All of the above. Negligence can result in prosecution of those responsible, including an individual who is responsible for their own safety.	Serving of HSE notices will have caused UCL a loss of time, money and a damaged reputation.

3. Case Study 2. Jackhammer noise and dust:	from workers breaking a concrete base, others nearby were not wearing ear protectors or other PPE. HSE issued an improvement notice.	
Root Cause	Legislation Violations	Consequences
No noise assessments were carried out.	Control of Noise at Work Regulations, 2005, Section 5. Control of Pollution Act 1974 (COPA) Environmental Protection Act (EPA)	Potential harm to workers. Environmental nuisances were caused.
Poor communication due to language issues and no competent supervision or HS&E officer present.	HASWA CDM	A lack of management systems puts at risk workers, the public and the environment. Loss of workers morale.
Lack of appropriate PPE.	PPER	No mitigation against an unsafe environment for the workers, dangerous to their ears, eyes and lungs.
No efforts made to clear nor contain the dust in the air.	COPA EPA	Pollution of the site and surroundings. Time and money costs incurred in any clean up.
Overall - negligence from UCL and workers.	As previous table.	As previous table.

Case Study 3. Scaffold collapsed:	punching a hole through a sidewalk, two workers were seriously injured. On a second site, a worker fell and the scaffold collapsed. The company attempted to hide these incidents. HSE issued a prohibition notice.	
Root Cause	Legislation Violations	Consequences
Failure to appropriately survey the site.	CDM Reg19 temporary structure stability & danger to workers. The Work at Height Regulations, 2005 (WAH)	Time and money costs incurred from re-install of scaffold and extension of the project.
Lack of base plates.	HASAWA section 6.3 unsafe structure CDM Reg17 unsafe site. WAH	Again, time and money costs. Loss of workers morale.
No competent supervisor or HS&E officer present to identify and prevent potential issues.	HASAWA CDM Reg15.2 no supervision	Injuries, subsequent money loss for sick pay and new labour.
No equipment inspections resulting in the bracings eventually loosening enough to collapse the scaffold.	HASAWA Reg2a equipment maintenance WAH	Negative reputational impact due to a lack of care and due diligence to equipment and site safety
No one in position to correctly record incidents.	Reporting of Injuries Diseases and Dangerous Occurrences Regulations, 2013 (RIDDOR), incidents were not recorded.	Prohibition period costs of time and money. Unprofessional and dangerous.
Overall - negligence from UCL and workers.	As previous table.	As previous table.

Case Study 4. Falling objects:	a labourer was hit by a falling metal acro-pole, suffering a shoulder injury. On a second site, a door collapsed from the fourth floor just missing a pedestrian. HSE issued a prohibition notice.	
Root Cause	Legislation Violations	Consequences
Unqualified and inexperienced worker .	HASAWA Reg2.c training. CDM Reg8 Competence.	Serious injury. Near fatality. Prohibition period costs time and money. Unprofessional and dangerous.
Failure to put safe walkways in place.	WAH CDM Reg17.2 unsafe site.	Serious injury. monetary loss for sick pay and new labour.
Failure to implement exclusion zones in high hazard areas.	CDM Reg17 and Reg18 safe places of construction work.	Near miss to a member of the client team. Loss of workers morale.
Incomplete method statements.	HASAWA Reg2.1 plans. CDM Reg12.4 files not updated.	Again, a lack of adequate management systems puts at risk workers and others at the site.
Overall - negligence from UCL and workers.	As previous table.	As previous table.

3. Reasons for UCL's poor health, safety and environmental record

A review of the company's HS&E management practises and execution of site operations clearly shows that UCL are failing in their responsibilities. In fact, UCL are failing by such a significant margin that the situation should be viewed as critical. The repeated violation of HS&E legislation, plus the inability to learn from mistakes and make improvements are staggering, some of the actions taken by UCL representatives may even be considered criminal by the HSE.

Widespread confusion, ignorance. omissions and incompetence from the company and its workers have resulted in the multiple examples of negligence detailed in the above tables. What cannot be measured is the near misses that are likely to be occurring on a daily basis and remain unreported. The HSE's issuing of improvement and prohibition notices will already have caused serious damage to UCL's professional reputation.

A high-level view of the present situation sees that UCL is failing to meet its:

- legal responsibilities
- morale responsibilities
- business and financial objectives

Without immediate improvement the situation could result in further injury or even death and most certainly has the potential to cause significant environmental damage and without doubt criminal prosecutions and permanent closure of the business.

On further examination of the case studies and the supporting notes we see the following:

Planning – based upon the legislation violations alone, UCL has limited understanding of legal requirements. There appears to be a lack of preparation and forward planning, displayed in the failure to produce suitable policies, method statements and risk assessments. The matching of worker competencies to rolls doesn't seem to have taken place.

Performance – frequently used by UCL and its employees; ‘confusion and ignorance’ are not an acceptable excuse for poor HS&E performance. Leadership is not visible, nor points of contact approachable. The application of robust policies, method statements and risk assessments appear absent.

Culture - there is no evidence of UCL attempting to integrated HS&E with the overall business objectives and the workers.

Checking – all four case studies showed a purely reactive response, with no evidence of routines in place to proactively check, record and capture issues for review.

Improvement - no method could be found of measuring and learning from past experiences and most importantly making the appropriate improvements.

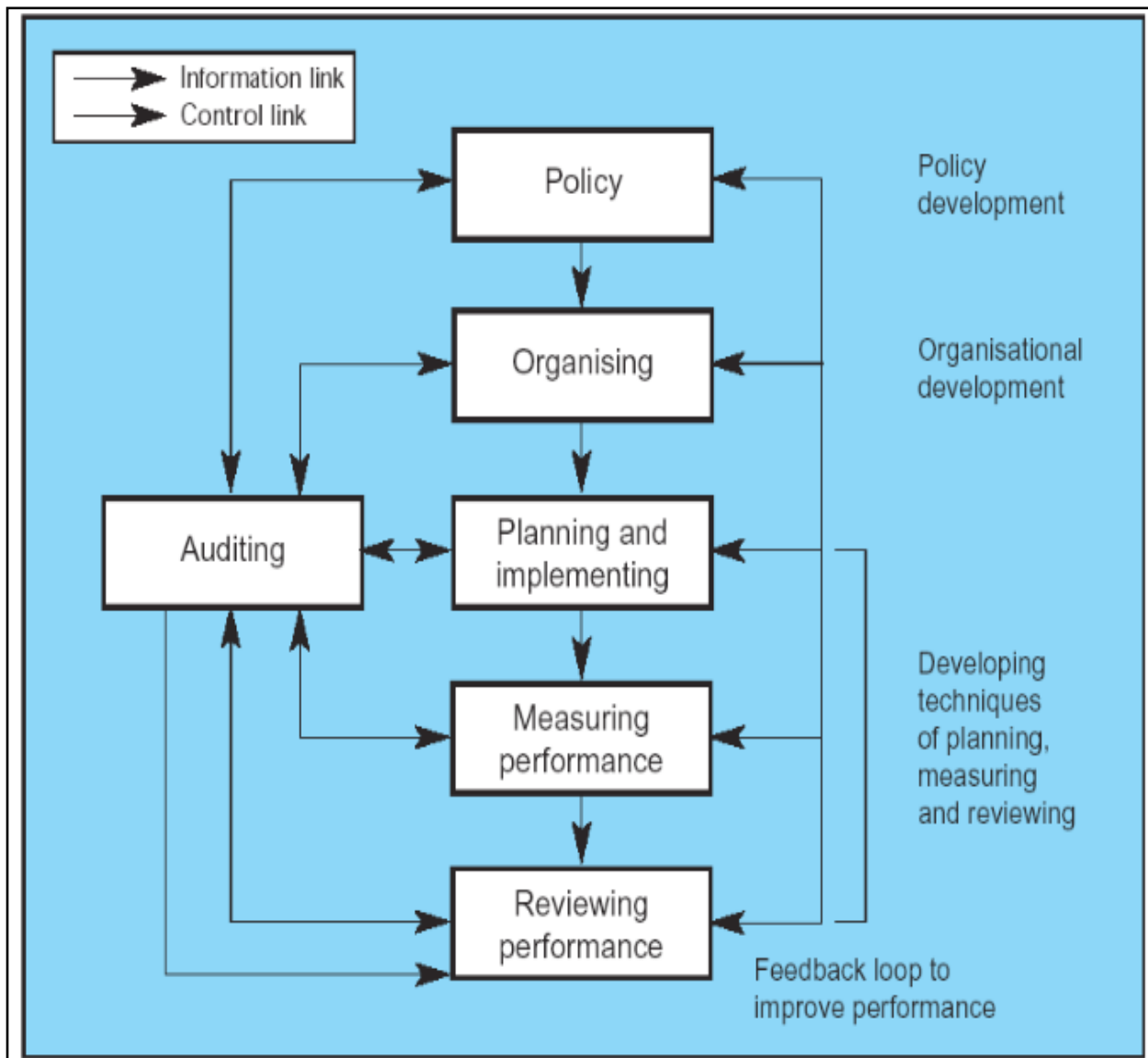
Systems - there is no evidence of any effective or systematic control of HS&E matters. Even the best attitude to HS&E needs a framework. HS&E in construction is too important and too complex a matter to have this disorganised approach. The construction industry applies such a framework by means of HS&E Management Systems.

Installing a Management System will help UCL. The need for such massive improvement may seem daunting but UCL should not fear as help is readily available. (Hughes NEBOSH, 2015)

4. Improving UCL's health, safety and environmental performance.

Effective management of HS&E issues at UCL will facilitate compliance with the law, it is vital to workers well-being and that of the public. Protecting our environment and enhancing the reputation and improving the financial situation of the business. The HSE introduced HSG65 in 1991, it was the first UK centric Management System, subsequently the International Standards Organisation (ISO) developed OHSAS 18001 – 2007 which dovetails nicely into ISO 9000 quality management and ISO 14000 environmental management series. (ISO,2022)

Fig 1. The HSE Health and Safety Management System HSG65



Management Systems improve performance and deliver better, safety outcomes. They promote a systematic approach where potential risks are proactively identified and managed on a continuous basis. They provide the framework for effectively managing and assuring the continued performance of relevant control and safety measures. They play a significant role in mitigating risks.

Management Systems include goal-setting, planning and measuring performance. The HSE Guide; Managing for health and safety promotes a “**Plan, Do, Check, Act**” approach for ensuring the effective planning, organisation, control, monitoring and review of safety measures. (HSE, 2022)

The four key phases to an effective System:

Plan - covering legal responsibilities, business planning, policy statements outlining responsibility, aims, objectives and commitments. Clear organisational structures, training, hazard identification and risk assessment.

Do – performance of business activity with present and effective leadership, good communication, installing worker representatives and safety committees. Adopting safe systems of work and a good inclusive culture. All activity is always well recorded.

Check - both active and reactive assessment of performance. Always comparing with objectives. Inspections and audits play a big part.

Act – Implement improvement. From review, cooperation, and vigilance, always putting in place continual improvement.

Unlike the open ended, chaotic management applied by UCL this system creates a closed-loop via auditing, where omissions are captured or just simply where improvements can be made. Management Systems themselves are measured and audited, often by the body that provides the system in the first-place e.g., ISO. Despite there being this recognised fix for UCL’s problems, there is no one-size-fits-all approach. UCL will need to put effort into installing a tailored HS&E Management System that meets the complexity of their operations, with the hazards and associated risks unique to them. (Hughes NEBOSH, 2015)

Had UCL had such a HS&E Management System in place, then our four incidents may have turned out differently...

Issue	Mitigation
Case Study 1. Exposure to hazardous substances	Plan – this issue would never have happened. Early and thorough planning would have ensured legal requirements were met. Enquiries, research and surveys would have taken place and the landfill would have been identified. Plans, programmes, responsibilities, method statements and risk assessments all put in place prior to site work commencing.
Case Study 2. Jackhammer noise and dust	Plan – again the planning stage will have put in place safe systems of work. The Management System would have considered the risks and referenced the relevant legislation and best practices. Do – assuming elements are missed at planning stage then effective leadership and good communication between workers should have stopped the continued exposure to noise and dealt with the dust problem. In a worst-case scenario with the issues occurring regardless, then the Check and Act phases of the Management System should predict and prevent repeat incidents.
Case Study 3. Scaffold collapsed	Plan – again the planning stage would have ensured safe systems of work were in place. Do – if missed at planning stage then a good inclusive safety culture with effective leadership and accessible communication should have stopped the errors being made. Making HS&E a priority and a part of every aspect of the business will affirm commitment of and to workers. It would seem unlikely for the Plan and Do phases to miss an issue as significant as this but if they did then the Check and Act phases will ensure it doesn't happen again.
Case Study 4. Falling objects	A very similar outcome to case study 3 above, however; it is worth highlighting that a Management System will also generate training records and plans and clearly define rolls matched with required competencies, inexperienced workers will not be put into such difficult positions to begin with. (Hughes NEBOSH, 2015)

5. Conclusion

The responsibilities of HS&E are huge. Understanding and complying to the sheer volume of legislation and industry standards must be very challenging for a small to medium enterprise such as UCL. The HSE says that operating a recognised management system is the key to success. UCL installing a systematic approach of integrating HS&E into the company business objectives and making workers inclusive may allow them to make an honest claim in the near future that “we have a good HS&E culture here at UCL”.

6. References

(Gov Legislation Portal, 2022). UK government’s legislative portal, available at <https://www.legislation.gov.uk>

(HSE, 2022) the Health and Safety Executive available at <https://www.hse.gov.uk/> also Guidance Safety management systems: factsheet Updated 5 April 2022 available at <https://www.gov.uk/government/publications/building-safety-bill-factsheets/safety-management-systems-factsheet#:~:text=Safety%20Management%20Systems%20include%20goal,and%20review%20of%20safety%20measures.>

(Hughes NEBOSH, 2015) Introduction to Health and Safety in Construction Phil Hughes and Ed Ferret, Abingdon, Routledge.

(ISO, 2022) the International Standards Organisation available at <https://www.iso.org/home.html>