

MBA Ethics Assignment BP

by Judith Bronwen Harris Doyle

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Management Ethics

MBA Assignment: BP

Deepwater Horizon

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**MBA
MANAGEMENT ETHICS ASSIGNMENT 2017
for CAROLINE JAWAD**

**CORPORATE SCANDAL:
BP AND THE DEEPWATER HORIZON EXPLOSION IN THE
GULF OF MEXICO 2010**

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1: EXECUTIVE SUMMARY

This report follows from the presentation given on 6 December 2016, which detailed the events that led to the explosion and deaths of eleven men in April 2010 on the Deepwater Horizon rig, leased and managed by BP. It reviews the company's reaction to the disaster itself, and the technical, human and legal consequences. As a result, recommendations are made to list ways the company can avoid or lessen the impact if such an event occurs in the future.

1.1: Recommendations:

- Regulation on a national scale, rather than solely state or self-regulation
- Relating to the technical issues and the use of manual override commands, which also include being able to carry on working despite test results showing readings either inaccurate or capable of being mis-interpreted
- If results are inconclusive, data to be digitally examined by third party experts capable of deciding whether there is a risk, or if there is a problem with the computing.
- Manual override to be more than one person's responsibility.
- Proactively introducing ethical leadership and management
- Training employees for ethical decision making
- Training employees for hazard awareness and safety related incidents and decision making
- Worker representation on the Board of BP

2: INTRODUCTION

As was noted in the presentation given as the first part of this assignment, there are three main elements that required further examination. The first and most immediate in its effect in causing the explosion was the technical and mechanical; secondly, the resultant environmental and human damage; and finally the resulting legal cases.

Following at least two explosions, a huge fire and uncontrolled oil, mud and gas spillage, ten attempts were made over the next eighty-seven days to control the flow and seven of these partly failed or failed completely (BP Report, 2010). In this process, it became apparent that more than one single cause was at the root of the spill. A breach in the BOP (blow out preventer) at the sea bed was identified but there was more than one failure within the BOP and drill bore.

As noted in the Deepwater Horizon Study Group's final report "*The organizational causes of this disaster are deeply rooted in the histories and cultures of the offshore oil and gas industry and the governance provided by the associated public regulatory agencies*" (DHSG, 2016).

3: A CRITICAL REVIEW OF THE SCANDAL, AND THE COMPANY'S REACTION.

This section looks more fully at the three main impacts, differing interpretations, and attempts to assess how ethical theories sit with the coverage of the explosion and BP's response.

3.1: Legal Issues

BP was found guilty of gross negligence in 2014 (BBC News, 2014; Gilbert and Scheck, 2014): Judge Barbier said BP should shoulder 67% of the blame for the 2010 spill, with drilling rig owner Transocean responsible for 30% and cement firm Halliburton responsible for 3%, and that BP were guilty of "*gross negligence*" and "*wilful misconduct*". It is interesting to note that despite BP's promotion of their ethical values in their Code of Conduct (BP, 2016 c), revised since the explosion, but not since the ruling), that they had put aside less than a quarter of the sum needed for civil negligence penalties under the Clean Water Act and stated they "*strongly disagreed*" with the result and intended to question the ruling (BP statement, 2014, reproduced as Appendix 1).

Carroll discussed moral and ethical management and leadership (Carroll, 2009) and noted that ethics should drive an organisation and the managers and leaders should not only conform but "*aspire to operate above what the law mandates*" (Carroll, 2009). From the tone of BP's statement, this is not being attained, despite their corporate values. The US Supreme Court rejected BP's claim, and BP's response was to verbally challenge this, saying they would be prey to "*inflated or bogus compensation claims*" (BBC News, 2014). It is interesting to note that this was BP's primary thought – does it reflect what their corporate position is when in litigation?

In BP's Investigations and Legal Proceedings Report (BP, 2015) they note two monitors were appointed, an ethics monitor and a process safety monitor, which Francis and Murfey (2016) note is part of creating an ethical corporation.

3.2: Environmental Impact

The environmental impact was visible and extensive (Howard, 2016) and the hydrocarbon damage is still unknown. Damage to the population of wildlife, particularly sea turtles, is immense and BP was fined \$20.8bn. However, they contested the extent of the damage and consider the fine the end of the matter. BP also contested the amount of oil spilled (Crooks, 2013) denied negligence or misconduct and contested environmental evidence from government and other sources. Fisher and Lovell (2009) consider globalisation and ethical issues, whether it creates harm or good, and in this case the larger organisation recovers and fights their corner more than a smaller organisation would; it can afford to finance the harm done rather than be in a position to prevent it.

Sternberg (2016) considers that leaders who fail do so because of a number of reasons, partly their failure to identify ethical situations and respond accordingly; this could be true of BP, Halliburton, Transocean and any large, global organisation where board members are generally elderly, white males presiding over a hierarchical organisation. Sternberg (2009) also considers the difficulties of putting ethical leadership into practice. As a result of this, unethical elements of lying, and pressure on staff appear to be part of the cultural norm (DHSG, 2010), and Tony Hayward, then BP's CEO, stated in Elkind, Whitford and Burke (2011), that Deepwater Horizon was "less dire than originally believed" - not a wise remark

considering the eleven deaths, and certainly not after the fifteen deaths at a BP refinery in Texas in 2005.

In examining the morals and values of a company, Freeman (2010) considers the relationships between the various groups of stakeholders. He notes that in the traditional models "*only owners and shareholders matter...and there is a binding fiduciary duty to the shareholders*". Clearly, in BP's case, this is their primary duty. However, as a result of Deepwater Horizon, the value of the company fell (Times, 2016, and Wall Street Journal, 2016) and it is only now, almost seven years later, that the value of BP's shares is rising with new projects in the Gulf of Mexico (Mad Dog Phase Two), and partnering the LNG in West Africa, with Kuwait, Senegal and Saudi Arabia (Wall Street Journal, 2016, b, and The Times, 2016). Friedman (2006) notes that identifying and grouping stakeholders and their needs has become "*a tangled path*" and legitimising actions for the benefit of one group may cause divergence.

3.3: Technical Issues

The depth at which the failures occurred was approximately 13, 330 feet below sea level, and the sea depth is approximately 5,000 feet deep at the site of the Macondo Well. The series of failures identified in BP's report (BP, 2010), the DHSG report (DHSG, 2010) the Halliburton report (Horne, 2010) fell into four basic categories, and BP and Halliburton were arguing about who was responsible (Horne, 2010), Horne (2010) said the combination of factors was a "yellow light" i.e., if you're driving and see one, do you brake or continue, and there were too many yellow lights which was not recognised. The reasons for these are:

- 1: the casing failure
- 2: the cement failure
- 3: ignition of gas on the rig, and
- 4: BOP failure.

In order to prevent this ever happening again, there needed to be "*Intelligent interpretation of facts, not anything else*" (Horne, 2010). He emphasised the facts only as there were "*hundreds*" of law suits in progress over allegations of guilt.

In brief, the casing issues were that a cheaper, longstring case was used, not suitable at depth, through differing formation pressures. The cement was a cheaper, quicker alternative – nitrogen foam – which did not set evenly around the riser pipe as six instead of twenty-one risers were used to keep the pipe central in the bore. No bond log was consulted to ascertain the cement had set, the log engineers had been sent off rig, again, due to costs. Because of this the negative pressure test was wrongly interpreted as there was overuse of spacer material which had leaked into the BOP and killer pipe and gave a false reading. Partly, this is because there was no industry standard set to run and interpret these tests. This led to the failure of the BOP, which internally had a series of failures due to the three sets of controls (Manual on rig, auto shut down in case of failure and auto ROV control,) all failing.

With these failures, the gas rose and pressure altered the dynamic positioning and the engines failed, the gas (manual detection and alarm only) exploded. The rig lost position, the BOP ram failed to close and the rest is history. Horne (2010) noted the series of enquiries by the US Energy and Gas subcommittee, the US Coastguard and Ocean Energy, the Office of Science and Technology (NST, 2011) all reached the same physical conclusions. The reasons behind all of the failures, on

interpretations, seem to be that a quicker and cheaper alternative was used consistently, and with no industry standard tests, or national regulation, it was acceptable.

4: CRITICAL REVIEW OF THE EVENT, AND LOGICAL SOLUTIONS TO AVOID OR REDUCE THE NEGATIVE IMPACT OF SUCH SCANDALS IN THE FUTURE

Looking at the event, the way that BP and the other organisations involved in the project, responded; also the media response and state and national government response, there were varied means of reporting and responding to reports. The proliferation of social media meant that viewpoints were publicised before official press releases, but a corporation as large as BP should have been aware of this and prepared.

4.1: Market Forces

\$50bn was “wiped off” the value of BP (Quinn and Mason, 2010) immediately after the event, 47% of its value and the reaction to this was primarily one of shock that BP could not then pay its expected dividend. The importance of the shareholder, as the company has a fiduciary duty to act in their interests (Freeman, 2010) is seen here, and BP were from their view acting correctly in trying to ensure a good return, but failed the shareholders in that assets had to be sold, the value of the company plummeted, and a dividend was not paid. This constraint to the shareholders is identified in Fisher and Lovell (2009), where there is a dichotomy between the interests of the shareholders and how the company can be a part of the society with which it interacts. Clearly, in BPs case they are continuing with their CSR projects

globally and promote this aspect of their direction in conjunction with their shareholders requests (BP website, 2016 (b)).

The root causes becoming apparent caused shock and dismay, and websites such as dirtyenergymoney.com were not backward in exposing what they felt to be the corporate unethical payments by global businesses to US congress members (Dirty Energy Money, 2016). The public response of BP did not necessarily fit either with their Code (BP, 2016 c), corporate values or ethical CSR behaviour. Greenfield (2004) considers that even if CSR is adopted, it would not stop bad corporate behaviour and this is clearly reflected in BP's promotion of responsible corporate CSR, whilst behaving irresponsibly as a company regarding payments to politicians, pressurising staff and polluting the environment. Berger (2015) notes post 2008 "the boundaries and accountability of decision making [are] especially vague and ambiguous".

4.2: Categories for Future Action

There are four strands where action could be taken to reduce or avoid both the mechanical failures that caused the event, and also the behaviour of the organisations afterwards.

1: Legislative and judicial moves, to make the legal setting whereby the self-regulation of the oil and gas industry in the US could be removed and made subject to national law and regulation, rather than state and local. If it can be done with the Clean Water Act it could be achieved with oil and gas; but the danger is pressure from BP and similar organisations regarding economic impact.

2: Technical solutions, where failsafe devices should work, and if not, more than one professional reads the real-time data to prevent overrides. Although some are being brought in, there remains the attitude of managers to operational staff, which is hierarchical and has meant that data was deleted.

3: As noted, market forces ensure the prime reasoning of a company like BP is to produce a good return for their shareholders but also an end user price that is competitive. This does put pressure on individuals who cannot prevent the growth of major unethical companies alone by boycotting a BP petrol station, for example. The ethical marketing issue usually refers to vulnerable end users (Crane and Matten) but with the medical reports for micro-diesel and petrol causing asthma, BP could market their green energy agenda, although the depth of commitment of BP to this has been questioned (Greenpeace, 2008).

4: This would then become a social norm, as displayed Kohlberg's theory of moral development which determines the understanding of right and wrong at differing ages (Appendix 2). However, Kohlberg does conclude that as adults, less than 15% consider independently the principles of right or wrong and take their morals from those around them (Kohlberg, in Fisher and Lovell, 2009). From BP's view, as clearly there was pressure on their staff, this

BP is a global organisation, with multi-layered operational systems, and with a varied stakeholder groups with contrasting interests. Kant, discussed in Chryssides and Kaler (1993), developed the theory of categorical imperatives, evaluating motives

and actions; a means to an end where differing groups may have conflicting aims, but that the way people conducted themselves was essentially down to doing the right thing, out of duty, not consequence. This deontological view is examined in Dietrich Bonhoeffer's *Ethics* (1949), where in his study of Kant, he noted that Frederick the Great said "I am the first servant of the state"; and the consideration of managing and leading a large modern global organisation such as BP is along the same theory of operating, as opposed to Utilitarianism (Carroll, 2009).

It is possible to operate a large scale organisation on firm ethical foundations, as the Quakers did from the 17th century onwards, as Raistrick in *Quakers in Science and Industry* (1958) notes the Quakers' "*refusal to separate the business activities from the principles which regulated their religious life, gave them a soundness of practice that was unusual.*"

The strength of moral and ethical leadership operated by BP falls far short of this, and considering the various forms of acting ethically, whether out of duty or innate moral obligation, is not seen, particularly in pressurising staff to delete or alter data, in the ignoring of results of tests, and ordering less centralisers, and also in enforcing waivers being signed. BP's Code of Conduct forms part of their ethical and responsible strategy (BP, 2016 c) and the signing of waivers contradicts this as they have a Speak Up and Open Talk process if employees need to speak if they see "*something safe, unethical or potentially harmful*" (BP, 2016, c). Boatright (1995, and 2009) examines the issues around whistle-blowing, and with BP, as with other industries, if one person starts to come forward others do.

5: CONCLUSIONS

The costs are both financial, to the organisation, stakeholders, and in particular shareholders, also to the reputation of the company name. The explosion resulted from both organisational and individual unethical issues that could really only be resolved by organisation cultural change and introducing inspiring leadership. The number of websites raising awareness of unethical behaviour shows concerns about BP's behaviour, but there are so many and it is possible society is hardened to disasters. As an organisation, given the recent media coverage of BP's expansion in Africa and the Gulf of Mexico (Leroux and Strydom, 2016) it is unlikely that BP have learnt from the Deepwater Horizon experience. Risk aversion management is apparently in place, but this would really positively impact where the industry is more nationally regulated, not self-regulated, especially in a global economy.

Sadly, most of the reasons that caused this scandal are unethical rather than illegal in the first instance. The cost cutting measures, as the rig was in the process of being closed down as it had not fulfilled its economic needs, led directly to seven of the ten technical failures: the lack of centralisers, the pressure test not being undertaken due to cost; the cheaper (but unsuitable) cement mix, untested due to cost, at depth; the various failures of the blow out preventer.

It is likely, that whatever fines are issued following an oil spill, whether from a tanker or a well, or whatever measures are put in place to prevent them, that spills will occur again. It is also likely, given examination of numbers and volumes, that such spills will be large in volume with a consequentially large adverse impact on humans, and the environment, as deepwater drilling is undertaken at deeper levels (Koch, 2015).

6: RECOMMENDATIONS

These are made in order that the deep drilling process is better regulated, safer and auditable with transparency; and also that the likelihood of a disaster is reduced by these means. In the event that a disaster does occur, that the response is swift and effective in lessening the physical and societal impact.

- Regulation on a national scale, rather than solely state or self-regulation
- Relating to the technical issues and the use of manual override commands, which also include being able to carry on working despite test results showing readings either inaccurate or capable of being mis-interpreted
- If results are inconclusive, data to be digitally examined by third party experts capable of deciding whether there is a risk, or if there is a problem with the computing.
- Manual override to be more than one person's responsibility.
- Proactively introducing ethical leadership and management
- Training employees for ethical decision making
- Training employees for hazard awareness and safety related incidents and decision making
- Worker representation on the Board of BP

7: SELF-REFLECTION

As I began the module and we looked at many scandals (sadly), I felt drawn to the BP Deepwater Horizon explosion. I'd visited the area just prior to the event, and seen the devastation caused by Hurricane Katrina, and how hard the people and landscape had been hit. Oil and gas are big employers and I learned a great deal about how the industry works.

Presentation

I was interested to find a split module as I feel it gives a good balance between researching the findings for both speaking, and writing. Although I've given presentations for work, this was a completely different subject and I was not as comfortable as usual in presenting; however, Caroline put me at my ease. I had researched the event and examined many aspects of the scandal and BP's conduct and concluded with which elements would be analysed in the report. It was cutting down my findings to meet the time target that wasn't easy! I had rehearsed giving the presentation and that helped. I was comfortable with the questions as I had so much background information on both the event and BP as a company; the questions were asked so well it seemed more like a friendly discussion. It was a good experience in preparing a presentation for a topic new to me.

Report

I was comfortable with the report writing as I had researched the topic and identified which points to concentrate on. As with the presentation, I have written many reports for work and am confident with my written skills. I enjoyed researching the scandal from many sources and bringing all the "evidence" together for critical evaluation. Staying focussed on the question, and applying the theories to the scandal to make achievable recommendations to prevent the scandal happening again, has helped me examine my own values and was challenging in a good way.

BIBLIOGRAPHY

Includes references researched for the presentation and therefore not referred to in this report

STATE OF ALABAMA *Oil and Gas Laws and Regulations* [online]
<http://www.gsa.state.al.us/ogb/ogb.html> Accessed 27 November 2016

BBC NEWS (2014) *BP Loses Appeal* [online] <http://www.bbc.co.uk/news/business-30375089> Accessed 28 November 2016

BBC NEWS (2016) *Mark Rylance 'snubs' RSC in BP sponsorship row* [online]
<http://www.bbc.co.uk/news/entertainment-arts-37501105> Accessed 21 November 2016

BALMER, J., POWELL, S., and GREYSER, S. (2011) 'Explicating Ethical Corporate Marketing. Insights from the BP Deepwater Horizon Catastrophe: The Ethical Brand that Exploded and then Imploded' *Journal of Business Ethics*, Vol 102, Issue 1, pp 1-14

BERGER, R. (2015) Responsible Leadership After the Global Financial Crisis: The Morality Of Control And Self-Management', *International Journal Of Ethics* Vol 11 No 4, pp 309-317

BOATRIGHT, JR. (2009) *Ethics and the Conduct of Business* 6th Edn London: Pearson Education

BOATRIGHT, JR. (1995) *Cases in Ethics and the Conduct of Business* New Jersey: Prentice Hall

BONHOEFFER, D. (1949) *Ethics* 6th Edn. 1963 London: SCM Press

BP (2016 a) *Sustainability Section: Safety Policies* [online]
<http://www.bp.com/en/global/corporate/sustainability/safety/safer-drilling.html>
Accessed 20 November 2016

BP (2016 b) *Corporate Social Responsibility* [online]
<http://www.bp.com/en/global/corporate/sustainability.html> Accessed 20 December 2016

BP (2016 c) *Code of Conduct* [online] <http://www.bp.com/en/global/corporate/about-bp/people-and-values/code-of-conduct.html> Accessed 20 November 2016

BP (2015) *Investigations and Legal Proceedings* [online]
<http://www.bp.com/content/dam/bp/pdf/sustainability/group-reports/investigations-and-legal-proceedings.pdf> Accessed 06 January 2017

CAMPBELL, R & KITSON, A (2008) *The Ethical Organisation* 2nd Edn. Basingstoke: Palgrave McMillan

CARROLL, A. (2009) *Business Ethics: Brief readings on vital topics* New York: Routledge

CHRYSSIDES, GD. and KALER, JH. (1993) *An introduction to Business Ethics* London: Chapman and Hall

CRANE, A. and MATTEN, D. (2010) *Business ethics*. 3rd Edn. Oxford: Oxford University Press

CROOKS, E. (2013) BP Disputes Deepwater Horizon spill estimates *Financial Times* [online] <https://www.ft.com/content/4e0afb0e-1710-11e3-9ec2-00144feabdc0> 6 September 2013 Accessed 27 December 2016

DEEPWATER HORIZON STUDY GROUP (2011) *Final Report* [online] http://ccrm.berkeley.edu/pdfs_papers/bea_pdfs/dhsgfinalreport-march2011-tag.pdf Accessed 20 November 2016

DIRTY ENERGY MONEY (2016) [online] <http://dirtyenergymoney.org/view.php?searchvalue=BP+Exploration+%26+Oil&com=671&can=&zip=&search=1&type=search#view=comparisons> Accessed 27 November 2016

ELKIND, P., WHITFORD, D. AND BURKE, D. (2011) BP: "An accident waiting to happen in *Fortune Magazine* [online] <http://fortune.com/2011/01/24/bp-an-accident-waiting-to-happen/> Accessed 27 December 2016

FISHER, C. and LOVELL, A. (2009) *Business Ethics and Values* 3rd Edn. Harlow: Pearson Education

FRANCIS, RD. and MURFEY, G. (2016) *Global Business Ethics* London: Kogan Page

FREEMAN, RE. (2010) *Strategic Management: a stakeholder approach* 3rd Edn. [online] <http://stakeholdertheory.org/team/r-ed-freeman/> New York: Cambridge University Press. Accessed 21 December 2016

FRIEDMAN, AL. and MILES, S. (2006) *Stakeholders: Theory and Practice* Oxford: Oxford University Press

GILBERT, D. and SCHECK, J., (2014). BP Is Found Grossly Negligent in Deepwater Horizon Disaster; Federal Court Decision Could Mean Fine of Up to \$18 Billion. *Wall Street Journal* 04 September [Online] <http://search.proquest.com.ezproxy.uwtsd.ac.uk/docview/1559853484?accountid=130472> Accessed 27 December 2016

GILBERT, D. (2014) Halliburton to Settle Deepwater Horizon Claims for \$1.1 Billion *Wall Street Journal* 02 September 2014 [online]

<http://www.wsj.com/articles/halliburton-to-settle-deepwater-horizon-claims-for-1-1-billion-1409664524> Accessed 22 November 2016

GREENFIELD, WM. (2004) In the name of corporate social responsibility *Business Horizons*, Vol 47 No.1, pp19-28

GREENPEACE (2008) Emerald Paintbrush Award to BP [online]
<http://www.greenpeace.org/international/en/news/Blogs/makingwaves/bp-wins-coveted-emerald-paintbrush-award-for-/blog/10204/> Accessed 08 January 2017

HORNE, R. (2010) *Deepwater Horizon: What Happened and Why?* Stanford University Lecture 16 November 2010 [online]
<https://pangea.stanford.edu/deepwaterhorizon/> Accessed 01 December 2016

HOWARD, BC. (2016) BP Oil Spill Trashed More Shoreline than Scientists Thought *National Geographic*, [online] <http://news.nationalgeographic.com/2016/04/160420-bp-oil-spill-shoreline-affected-deepwater-horizon-anniversary/> 20 April 2016
Accessed 27 December 2016

KOCH, W. (2015) Is Deepwater Drilling Safer, Five Years After Worst Oil Spill? In *National Geographic* April 2015 [online]
<http://news.nationalgeographic.com/2015/04/150420-bp-gulf-oil-spill-safety-five-years-later/> Accessed 30 November 2016

LEROUX, M. and STRYDOM, M. (2016) BP gets back in game with \$1bn gasfield deal *The Times*, 20th December, p43

QUINN, J. and MASON, R. (2010) BP oil spill: Billions wiped off value BP as share price plummets *Daily Telegraph* [online]
<http://www.telegraph.co.uk/finance/newsbysector/energy/oilandgas/7816623/BP-oil-spill-Billions-wiped-off-value-BP-as-share-price-plummets.html> Accessed 20 November 2016

RAISTRICK, A. (1950) *Quakers in Science and Industry* 2nd Edn 1968 Newton Abbot: David and Charles (Holdings) Limited

RIGZONE (*Oil and Gas Industry online resource*) [online]
http://www.rigzone.com/news/oil_gas/a/146875/Deepwater_Horizon_Movie_Recounts_Several_Safety_Missteps Accessed 30 November 2016

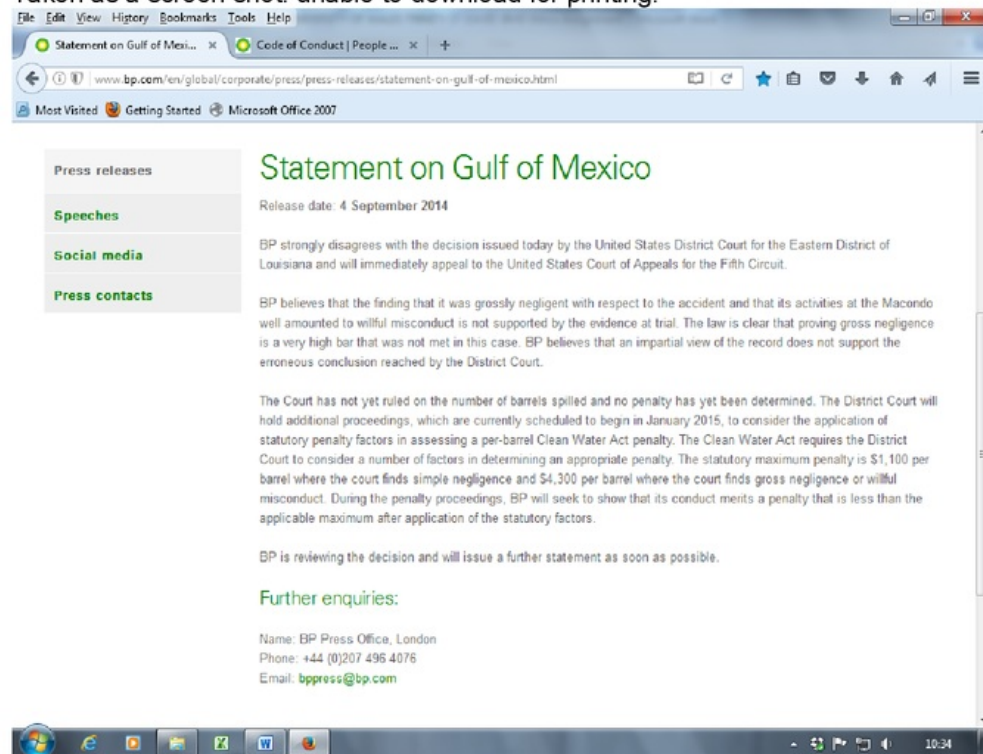
STERNBERG, R. (2009) A New Model for Teaching Ethical Behaviour *The Chronicle of Higher Education* [online]
https://www.cs.uct.ac.za/mit_notes/Ethics/Latest/pdf/Chp02.pdf Accessed 27 December 2016

STERNBERG, R. (2016) *WICS Theory of Leadership* [online]
<http://www.robertjsternberg.com/leadership/> Accessed 27 December 2016

NATIONAL SCIENCE AND TECHNOLOGY SUB COMMITTEE ON OCEAN
SCIENCE AND TECHNOLOGY (2011) *Final Report: Deepwater Horizon Oil Spill*
[online]
<https://www.whitehouse.gov/sites/default/files/microsites/ostp/SOST%202011%20DWH%20Workshop%20Final%20Report.pdf> Accessed 27 December 2016

APPENDIX 1: BP STATEMENT FOLLOWING JUDGE BARBIER'S RULING IN 2014

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APPENDIX 2: KOHLBERG'S THEORY OF MORAL DEVELOPMENT

The growth of the individual's morality does not easily transfer as adults or as part of a corporate organisation.

Kohlberg's Theory

Level/Stage	Age Range	Description
I: Obedience/Punishment	Infancy	No difference between doing the right thing and avoiding punishment
I: Self-Interest	Pre-school	Interest shifts to rewards rather than punishment – effort is made to secure greatest benefit for oneself
II: Conformity and Interpersonal Accord	School-age	The “good boy/girl” level. Effort is made to secure approval and maintain friendly relations with others
II: Authority and Social Order	School-age	Orientation toward fixed rules. The purpose of morality is maintaining the social order. Interpersonal accord is expanded to include the entire society
III: Social Contract	Teens	Mutual benefit, reciprocity. Morally right and legally right are not always the same. Utilitarian rules that make life better for everyone
III: Universal Principles	Adulthood	Morality is based on principles that transcend mutual benefit.

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