

BUSINESS RISK MANAGEMENT AND ENVIRONMENTAL COMPLIANCE: A REVIEW OF SHELL OIL SPILLS IN SYDNEY HARBOUR AUSTRALIA

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***Abstract:** A business risk has been an inherent part of companies' activities nowadays. It relates to threats and opportunities which make a majority of companies manage the risk. The business risk also has been concerned by public particularly in term of environmental risk. A failure to manage the environment may result in negative reactions from public. The negative reactions are predicaments for company's economy. Therefore, companies have also considered the significance of the environmental risk management. An example of these companies is Shell Oil Company which suffered environmental issue in 1999. Accordingly, this paper aims to evaluate the risk management conducted by the Shell Company which focuses on company's effort to maintain good relationship with stakeholders in its environmental risk management. There were determinant factors in the successful risk management. The first factor is an efficient and effective implementation of risk management cycle. Secondly, a practice of risk management phase. The third factor is effective social activities. The fourth factor is a significance of risk management application since the establishment of company. The fifth factor is an importance of efficient and effective communication with stakeholders. Finally, a substantial contribution from media is prominent aspect in company's risk management.*

***Keywords:** Business Risk, Risk Management, Risk Management Cycle, Environmental Risk Management*

INTRODUCTION

A business risk is an integral part of companies' activities particularly in a high level of environmental uncertainty condition. The environmental uncertainty leads to a slight possibility for companies to make an accurate forecasting. Several companies attempt to avoid the risk because it is a threat for company's economy. Conversely, other companies accept the risk as opportunities to attain advantages. It implies that risk contains threats and opportunities (Archer 2002). Therefore, a majority of companies have shifted perspectives to receive the risk because risk avoidance may refer to a loss of opportunity to achieve advantages.

The perspective results in companies' efforts to conduct risk management. One of the risk management is an environmental risk management. Despite the

impact of environmental risk in company's economy, the environmental risk has been predominant issue in media and public (River and Heally, 2006). A failure in the environmental risk management may result in a great refusal from public to company's operation. The refusal may lead to immense problem in company's economy and continuity.

The case of environmental risk was encountered by Shell Oil Company primarily in 1999. The Shell Oil Company's principal products are oil and natural gas. It is a multinational oil company which has numerous subsidiaries in many countries. One of these subsidiaries is a Shell Company Australia which has Shell Gore Bay Terminal in Sydney Harbour Australia. The Shell Gore Bay Terminal was established in 1901 and operates in receiving and storage facility which provides crude oil. It utilizes underground pipes to transfer petroleum to Clide. The Clide Companies is a Shell's partnership which has supplied 40% of New South Wales's fuel market (Shell Australia, 2007).

The operation in the Sydney Harbour stimulated numerous criticisms from public because it devastated the environment and harmed a value of Darling Harbour as an international tourism area. Accordingly, the company implemented risk management which focused on building a good relationship with stakeholders particularly public. However, a serious crisis occurred on 3 August 1999 when an oil tanker from Italy intended to unload its cargo at the Shell Gore Bay Terminal. There was oil spill of 300 tonnes in the harbor (Morgner, 2005). The oil spill obviously gave negative consequences for environment. The company realized that the incident was a hazardous condition for company's reputation which may lead to predicaments in company's economy and a continuity operation in the Sydney Harbour. Therefore, the company directly conducted a risk management. In this case, the company still emphasized its effort on company's relationship with stakeholders and media.

According to the case of oil spill in Sydney Harbour, there was a definite probability that the company executed efforts to reduce pollutant from the Sydney Harbour. However, the most significant part in the company's risk management was high efforts to approach stakeholders and media. Accordingly, this paper attempts to evaluate the risk management conducted by the Shell Company. The evaluation will focus on company's effort to maintain good relationship with stakeholders in its environmental risk management. This paper consists of three parts of risk management issues in the company. The first part is a risk management cycle. Afterwards, the second part focuses on a crisis management. Finally, the third part will evaluate a correlation between management risk and good communication.

THEORETICAL REVIEW

The Risk Management Cycle

The Shell Company's efforts to resolve incident of oil spill represents several aspects in risk management. The first aspect was a risk management cycle whilst the second aspect is a crisis management. In addition, a significant point in these aspects was a practice of good communication with media and stakeholders. The stages in the risk management cycle which were primarily conducted by Shell

Company were risk identification, risk measurement and risk treatment (Agustine, 2000).

a. Risk Identification

The risk identification is a phase to understand the nature of risk that may give negative consequences to the environment (Standard Australia 2001a cited in River and Healy, 2006). In this stage (as shown in Figure 1), the Shell Company comprehended the nature of business. The nature of the company’s operation relates to oil, gas and petrochemical which require offshore plant for production, exploration, drilling and refinery. Accordingly, the company considered its operation resulted in some perils like pollutant and criticism from public. The company also recognized the exposures of the risks are company’s economy and stakeholders.

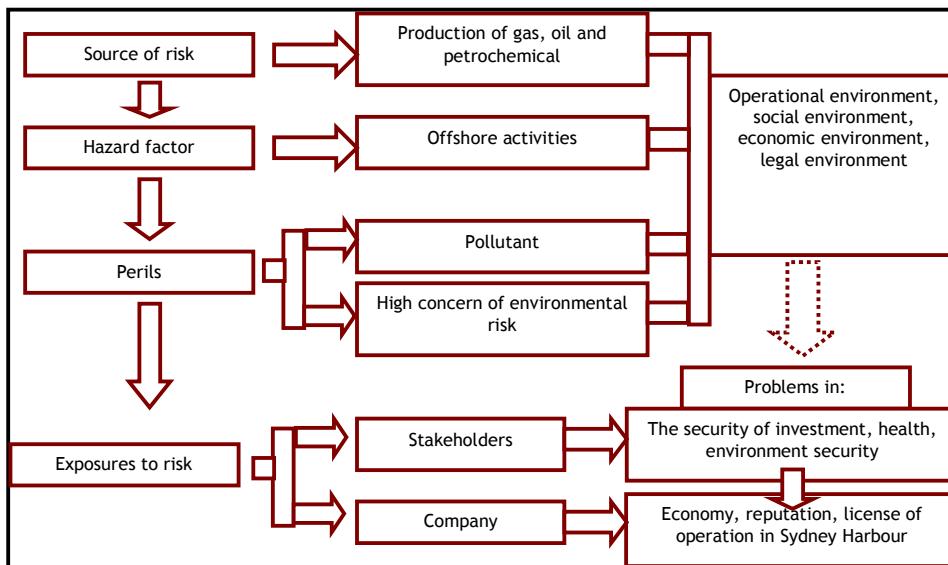


Figure 1. Risk Identification in Shell Company

These stakeholders have right to comprehend the security of their interests in the company (River and Healy, 2006). For instance, shareholders concern on investment security, employees require information of risk in company particularly relates to safety and health issue, public concern on the impact of company’s activity to health whilst the government needs information to make business and environment regulation. A failure to understand these interests, may lead to negative reactions from stakeholders. These negative reactions had further negative consequences on economics condition, company’s reputation and operation license in Sydney Harbour. Accordingly, the company focused on these stakeholders’ interests in its risk management of oil spill incident.

b. Risk Measurement

The risk measurement has an objective to determine risk management method related to the level of risk in term of probability and severity (Crockford, 1991).

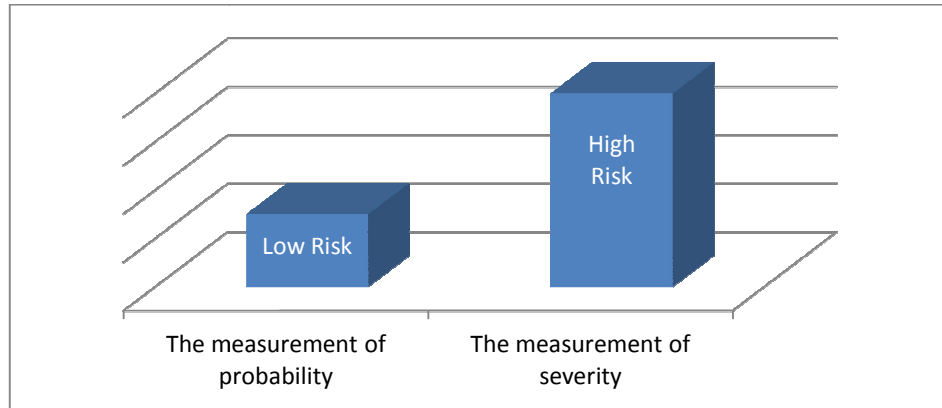


Figure 2. Risk Measurement of Shell Oil Spill in Sydney Harbour

The Measurement of Probability

The risk probabilities are derived into high, medium and low probabilities (Peltier, 2004). The case of oil spill in Sydney Harbour was categorized as a low probability risk because it is estimated to irregularly occur every year or even it is very unlikely that oil spills regularly. However, the environmentalists as one of the Shell's stakeholders reckoned differently stating that the oil spills occurred every day (Bland, 1993 in Hinman, 1993). It signifies that the Shell Company should consider the different perspectives thus the risks would be properly managed.

The Measurement of Severity

This process measures a severe level of the risk (Schutz et al., 2006). The significance of risk is measurable if the risk is compared with environmental standard or other risks (Schutz et al., 2006). The pollutant in the Shell Company was categorized as a serious danger in Environmental Protection Law and it was also the highest risk compared with other business risk in the Shell Company. In addition, pollutant in sea has been considered as a difficult problem to control and requires high costs (Inyang and Essien 1995 cited in Ogri, 2001). According to these characteristics, the case of oil spill had a high magnitude.

c. Risk Treatment

Risk treatment is a phase to conduct actions in order to solve risk-related problems (River and Healy, 2006). There are several methods in risk treatment which comprises risk avoidance, risk reduction, risk transfer and risk retention (Crockford, 1997). According to the problem of oil spill, the Shell Company implemented risk reduction and risk retention.

Risk reduction was applied to reduce the probability of negative impacts of risk (Crockford, 1997). The Shell Company realized the high level of severity of oil spill. Therefore, the company had implemented risk management since the establishment of the plant in Sydney Harbour to reduce the risk as a consequence from stakeholders' negative image. It was applied by maintaining a good social relationship with stakeholder particularly local community. It was intensively continued in the oil spill incident in Sydney Harbour. The basic aim of these

practices was to obtain support from community to the company's operation. If the company could handle the risk of high criticism, the risk became an acceptable risk (Crockford, 1997). The company also applied risk retention because the risk was considered as acceptable risk thus company retained the risks (Crockford, 1997). Accordingly, the company had preparation and actions to encounter and solve the risk.

THE CRISIS MANAGEMENT

The incident of oil spill required a crisis management. The crisis management consists of six phases. These phases are avoidance, preparation, recognition, contain, resolution and profiting (Agustine, 2000).

Crisis Avoidance

The Shell company in this stage evaluated the impact of oil spill to company. The condition related to a high probability of negative reaction from stakeholders particularly public. The negative reaction resulted in a decrease in share value, overall company's economy and discontinuity of company's operation in Sydney Harbour.

Crisis Management Preparation

Before the incident, the company conducted a stakeholder communication plan because the company considered the prominent value of stakeholders. The plan was initiated in 1980s by Shell's External Affairs. The existence of the Shell's External Affairs indicated that the company had special team which was expert in the company risk management. The plan activity basically had the aim to maintain communication with stakeholders particularly with local residents. In addition, it also had specific staffs to make communication with New South Wales politicians and substantial public group.

Accordingly, the company had already fundamental resources and information to deal with environmental risk. This condition became a fundamental cognition to encounter the oil spill problem. In this case, company still emphasized efforts on stakeholders' interests. As a consequence, the company executed "a crisis communication plan" in order to maintain communication with stakeholders. The planning involved all employees in company from subordinate until to managers. In addition, it was also supported by a Shell Australia's External Affairs team who was particularly in charge in company's risk management.

Crisis Recognition

The Shell Company encountered a pressure to move its operation in Sydney Harbour before the oil spill incident. It was a considerable factor in this stage. The oil spill incident may result in higher and more serious criticism. This was a crucial problem which could harm the company's operation. In addition, the company also recognised the impact of negative operation evaluation from shareholders and the government. These shareholders would avoid investing their assets in the company whilst the government would issue a disapproval of company's operation in Sydney Harbour. In this case, the company

comprehended the principal problem was the stakeholders' negative reactions and further consequences of these negative reactions.

Crisis Contain

According to the recognition of consequences emerged from stakeholders' negative reaction, the Shell Company framed actions which focused on a solution to deal with stakeholders. As a result of this, the majority of problem solving plan related to the communication with stakeholders. There was a job description formed in this stage. For instance, spokespeople deal with public's inquiries whilst senior management negotiated with the government. In addition, senior management and its subordinates were in charge of information delivery to local residents and other stakeholders whilst customer service centre staffs were highly trained to respond customers' questions. In this stage, the company also had a high concern of media role. The media was considered as an effective and efficient information transmitter thus company was able to deliver favorable and significant information to public.

Crisis Resolution

According to the crisis contain, the Shell Company implemented actual actions in this stage which were derived into five important concerns on this risk management (Morgner, 2001).

a. Media

The company held a press conference only three hours after the oil spill incident. It also gave necessary information of the company's operation in Sydney Harbour to be released in media. In addition, the company identified spokespeople who were in charge on media and personal interviews, briefings and phone conversation.

b. Government

The company staffs directly contacted the government on the night of the spill and sent follow-up letters to government. A briefing was also conducted within Shell management. The briefing was important to prepare meeting and negotiation with the government.

c. Local Resident and non-government organization (NGOs)

The Gore Bay Terminal manager sent personals letter to local residents by hand-delivered. The NGOs were also contacted by phone to discuss the incident.

d. Employees

The company sent email to all Shell Australia employees on the night of the oil spill in order to keep these employees up to dated with the ongoing case and had considerable cognitions to encounter the problem.

e. General public and customers

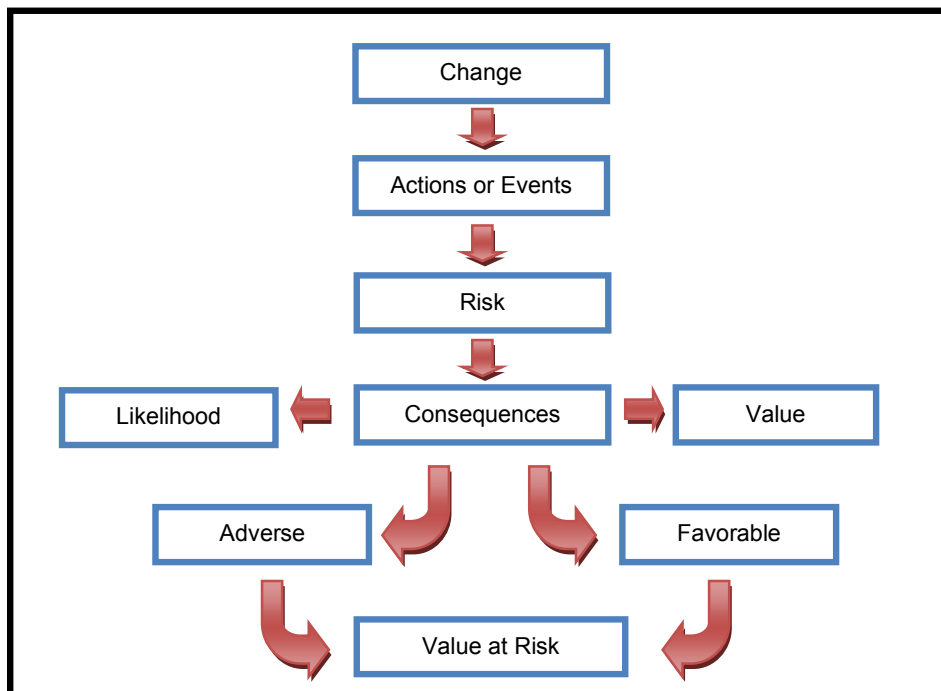
The company employed additional staff at Shell's Clyde refinery to deal with inquiries from public. In addition, it also trained staff in customer service centre to handle questions from customers.

These efforts reflected that the company's focus was communication. The company made an approach to be involved in frequent communication with media and other stakeholders in order to attain some objectives. The first objective was to

give detail information to stakeholders about the company's operation and company's responsibility actions to solve. It may lead to stakeholders' trust to company in executing its operation. The second aim was to ensure the continuity of operation because criticism from public may harm the work activity. The final aim was to maintain close relationship with stakeholder particularly local residents. The close relationship will ensure public's support to company's activity.

Profiting From The Risk

The Shell Company made outstanding efforts in the risk management of oil spill incident. As shown in figure 3, all organizations are subject to change. A change was encountered by Shell Company in a form of environmental problem arisen from oil spill in Sydney Harbour. A change is also represented in development of stakeholders' perspective which have more concerned on the impacts of company's activities to its environment. It signifies that a social responsibility of the company has been in high priority. The change in business environment might create risk for the company and affect how the company manages the change (risk). Considering the change encountered, Shell Company executed appropriate actions as discussed in the previous parts of this paper. These significant efforts resulted in several benefits which signify that risks encountered might create a value for the company if risks are properly managed.



The information below comprises the benefits obtained by the Shell Company (Morgner, 2001) as a result of risk management:

- a. The company could maintain good relationship with stakeholders as the company obtained trust from stakeholders particularly local residents. It

- signifies that the company was able to sustain a good reputation among stakeholders.
- b. The company attained support from local community which ensures the continuity of company's operation in Sydney Harbour without obstacle of high criticisms.
 - c. The company obtained license from the New South Wales government to continue its operation in Sydney Harbour.
 - d. The company had a substantial increasing on sales after the case of oil spills which indicated a good condition for company's economy.

MANAGEMENT RISK AND COMMUNICATION

The risk management conducted by Shell Company as discussed in the previous part shows the communication with media and public was a prominent factor in a good performance of company's risk management. It was proven that the communication resulted in a profit from risk. An effective and efficient communication with stakeholders which were involved in Shell's risk management resulted in public trust and finally to the company's credibility. The time of communication was also important because the company directly implemented internal and external communication after the incident of oil spill without any short time delay.

Internal communication consisted of Shell's Australia's External Affairs meeting, Shell senior management briefing, information delivery to employees and employees training to deal with public inquiries. The external communication involved media, government, non government organization (NGOs), local residents, general public and customers. The company also maintained a good relationship with media as a tool of communication. The media was a significant factor to make a successful communication thus company was able to give necessary information to public.

The communication engaged by Shell Company had benefit to make stakeholders comprehend the real situation and the company's action to deal with the risks (Standard Australia 2004b cited in River and Healy, 2006). The efficient and effective communication was shown by regular communication applications. In addition, the communication also involved right people in the company such as spokespeople and Shell Australia's External Affairs team that were basically expert in risk management. Furthermore, all senior managers including CEO were involved in the process particularly in communication with the government. It is very important for the company to employ right people in communication process because the information accuracy depends on the ability of comprehension on stakeholders and risk information (River and Healy, 2006).

CONCLUSION

Business risk is a predominant factor in companies' activities particularly in an environmental uncertainty. A risk refers to threat and opportunity. Therefore, a majority of company has conducted risk management in order to solve problems and obtain benefits. In addition, the public has concerned on environmental risks that might appear from companies' activities. A failure in environmental management leads to high criticisms from public. Consequently, it leads to

predicament for company's credibility. The poor company's credibility may give further consequences in a decline of sales, investments and the continuity of company's activity. Accordingly, companies have focused on efforts in environmental risk management.

The Shell Company is an example of company which implemented the environmental risk management. The company's operation obviously relates to environmental risk which might stimulate criticisms to company's activities. As a result of this, the company made immense efforts to manage the risk particularly in a case of oil spill in Sydney Harbour. These efforts included risk cycle management and crisis management. In addition, the risk management was focused on an intensive communication with media and other stakeholders with the aim to maintain good relationship with stakeholders. Finally, the company obtained numerous benefits from the risk management. These benefits were a good relationship with stakeholders, a good company reputation, public's support, good economy and the continuity of company operation. These benefits were supported by several determinant factors.

The first factor was an importance of implementation of a risk management cycle. In this case, Shell Company was able to comprehend sources of risks which comprised pollutant and public's criticism. Accordingly, a public image was considered as a high priority. In addition, the company also had a good cognition to categorize the risk as a low probability and a high severity. Accordingly, the company could successfully implement necessary actions to treat the risk of oil spill. In addition, a high management commitment to manage the risk was a significant contribution to the success. It signifies that company's managements need to have commitment in risk management rather than solely have orientation in company's income.

The second factor was a significance of phases in a crisis management which consists of avoidance, preparation, recognition, resolution and profiting. It was proven that an implementation of these phases in the Shell Company resulted in a profit for the company. A prominent factor in these phases was a clear objective which focused on relationship with stakeholders. Accordingly, every stage in the crisis management had been directed to the effort of communication with stakeholders.

The third factor was recognition that a risk management also involves social activities particularly in term of environmental risk management. These social activities relate to company's efforts to build and maintain a good relationship with local community, customers, general public and media. Public has more concerned in the environmental risk thus a failure in environment leads to a bad reputation for company. The bad reputation is obstacles for company's economy condition. It implies that social environment has a substantial influence to companies' activities.

The fourth factor was recognition of the importance of risk management from the establishment of company. The Shell Company had conducted the risk management since the company's operation begun in Sydney Harbour because the company realized that the operation would stimulate negative reactions from public and might create environmental problem. The risk management was focused on the relationship with stakeholders particularly public. It became the fundamental asset

for the company to manage risk in the incident of oil spill in Sydney Harbour. The case implies that companies should avoid conducting risk management solely when serious and unpredictable incident occur.

The fifth factor was an importance of effective and efficient communication with stakeholders. It is important to give principal information to stakeholders about company's responsibility to manage the risk. A choose of right people who are in charge in the communication was a substantial factor to achieve the objective of communication.

The final factor is the importance of media role. The media had numerous contributions to the success of Shell Company's risk management. The media is an effective and efficient mean for companies to deliver necessary information and hold communication with stakeholders. Accordingly, companies are able to form a good public image through media which results in benefit for company.

REFERENCES

- Agustine, N.R. 2000. *HBR on Crisis Management*. Harvard Business Review Press.
- Archer, D. 2002. Creating a Risk Management Framework. *Journal of CMA Management*. Vol. 76, no. 1, pp. 16-19.
- Baxter, M. 2007. Managing Risk and Responsibility. *Personnel Today*. May 2007, pp. 26-27.
- Beach, R. 2007. Risk Management. *Community Banker*. Vol. 16, No. 4, pp. 24.
- Bernstein, P.L. 2000. Risk Management: Facing the Consequences. *Trust and Estates*. Vol. 139, No. 11, pp. 42-50.
- Charles, E.D. 2007. Dealing with Disaster. *Intheblack*. Vol. 77, No. 6. pp. 30-34.
- Croxford, N. 1997. *Risk Management*. Witherby & Co Limited.
- Green, M. 2007. Risk Manager Face Economic, Environmental Impacts. *Best Review*. Vol. 108, No. 2, pp. 75.
- Hinman, P. 1993. Shell Polutes Sydney Harbour. *GreenLeft Issue*. Wednesday, August 25, 1993. Viewed by 1 October 2007. <http://www.greenleft.org.au/node/5719>
- Hubbard, L.D. 2002. Assessing Risk. *The Internal Auditor*. Vol. 59, No. 4. pp. 22-23.
- Joplin, R. 2007. Risky Business. *Best Review*. Vol. 108, No. 4. pp. 75

- Kallman, J. 2005. What is Risk? *Risk Management Magazine*. Vol. 52, No. 10, pp. 57.
- 2007. Planning for Risk. *Risk Management Magazine*. Vol. 54, No. 8. pp. 56-57
- Kawwaler, I.G. 2001. Risk Management – Getting Started. *AFP Exchange*. Vol. 1, No. 6, pp. 18-21.
- Levick, R. and Pudles, G.A. 2007. When Bad Things Happen to Good Companies. *Risk Management Magazine*. Vol. 54, No. 2, pp. 6.
- Martin, P. Business Risk Management Session 1. Lecture notes distributed in the unit Business Risk, The University of New South Wales, Sydney on 17 September 2007.
- McCaul, L. 2007. Contract Risk: RM in an Increasingly Complex Environment. *Accountancy Ireland*. Vol. 39, No. 3, pp. 19-21.
- Meltzer, D. 2007. Risks and Benefits of Risk-Management Plans. *Health Affairs*. Vol. 26, No. 3, pg. 681-683.
- Morgner, H. 2001. Sydney Harbour: Oil Spills in August 1999. Paul Griffin Communication-Corporate Communication Counsel. Viewed by 1 October 2007. <http://www.grif.com.au/Sydney-Harbour-Oi.72.0.html>
- Ogri, O.R. 2001. A Review of the Nigerian Petroleum Industry and The Associated Environmental Problems. *The Environmentalist*. Vol. 21, no. 1, pp. 11-21.
- Peltier, T.R. 2004. Risk Analysis and Risk Management. *The EDP Audit, Control and Security Newsletter*. Vol. 32, no. 3, pp. 1-17.
- Pritchard, W.G. 2000. Evaluating Environmental Exposures. *American Agent & Broker*. Vol. 72, No. 2, pp. 32-41.
- River, S.W and Healy, S. 2006. *Guide to Environmental Risk Management*. CCH Australia Limited.
- Roth, J. and Esperson, D. 2002. Categorising Risk. *The Internal Auditor*. Vol. 59, No. 2, pp. 57-59.
- Schutz, H., Wiedemann, P.M., Hennings W., Mertens J., and Clauberg M. 2006, *Comparative Risk Assessment - Concepts, Problems and Application*. Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim.
- Shell Australia. 2007. Clyde Refinery & Gore Bay Terminal New South Wales. Viewed by 1 October 2007. <http://www->

static.shell.com/static/aus/downloads/fast_facts/nsw_clyde_gore_bay_fact_sheet.pdf

Tchankova, Lubka 2002. 'Risk Identification-Basic Stage in Risk Management, *Environmental Management and Health*. Vol. 13, no. 2-3, pp. 290-297.

Vasilash, G.S. 2007. Managing Risk. *Automotive Design & Production*. Vol. 109, No. 7. pp. 54-55.