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An Examination of Corporate Environmental Disclosure by The Bangladeshi Public Limited Companies

[1]Shafiqul Islam, [2]Aoulad Hosen and [3]Mujahidul Islam
[1]Department of Accounting,[2]Department of Economics, [3]Department of Marketing
National University, Gazipur-1704, Bangladesh

Abstract: In Bangladesh, before 90's it was not found any evidence that public limited companies disclosed environmental information in their annual reports. Government's denationalization policy in the late 70's made capital market open for investors and since then very insignificantly corporate reporting practices was working. A very significant improvement of environmental disclosure was highlighted by some of the previous studies but they did not go through any testing which was statistically significant. Our attempt here is to examine 48 recent corporate annual reports of 2003 to find out significant differences in the quality of environmental disclosure between industry types and between company sizes along with the present environmental disclosure practices. We have found that 40% of companies surveyed have made environmental disclosures that have been more general and descriptive in nature. Only 16% companies have disclosed environmental information under a separate heading in the annual reports. Our finding shows a significant statistical difference in sales revenue and employee sizes between companies having environmental disclosure and companies not having environmental disclosure. We have found that there is no significant difference in the quality of the disclosure between Textiles and Garments Industries and Pharmaceutical industries and between Pharmaceuticals industries and other industries. But the textiles and Garments industries and the other industries are significantly different each other. Our finding also shows that there is no significant difference in the quality of environmental disclosure between different combinations of employee sizes but there is a significant statistical difference between different combinations of revenue sizes.

Key words: Bangladesh, Dhaka Stock Exchange (DSE), corporate environmental disclosure and company size

INTRODUCTION

Environmental reporting can be defined as an umbrella term that describes the various means by which companies disclose information on their environmental activities. This should not be confused with Corporate Environmental Reports (CERs), which represent only one form of environmental reporting. CERs are publicly available, stand-alone reports issued voluntarily by companies on their environmental activities[1].

Environmental disclosures in corporate annual reports began in the 1970s and it had been a rapid expansion in the 1990s[2].In Bangladesh before 90's it was not found any evidence that public limited companies listed with Dhaka Stock Exchange (DSE) disclosed environmental information in their annual reports to the stakeholders. Government's denationalization policy in the late 70's made capital market open for investors and since then very insignificantly corporate reporting practices was working. Evidence was found from Belal's[2] study that only 6% publicly traded Companies made environmental disclosure[3]. Since corporate reporting practices were still the new concept for a developing country like Bangladesh, public awareness about environmental disclosure in corporate reporting practices remained ignorant. A very significant improvement of environmental disclosure was highlighted by some of the studies of Belal[4], Imam[5,6] and Bala and Yusuf[7]

This study has two specific purposes. First, it is to explore a very recent environmental disclosure practice in Bangladeshi publicly traded companies. Second, it is to examine significant differences in the quality of environmental disclosure between industry types and between company sizes. Regarding environmental disclosure in Bangladesh there were all descriptive studies of Belal[2,4], Imam[5,6] and Bala and Yusuf[7] and these studies did not go through any testing which was statistically significant.

Corresponding Author: Shafiqul Islam, Department of Accounting, National University, Gazipur-1704, Bangladesh

MATERIALS AND METHODS

This is a desktop research review. This review is based on synthesis of published materials and secondary resources. In this paper the quality of an environmental report is scored based on the environmental reporting index ratings of Wiseman[8] that was also adopted by Cormier and Magnan[9,10]. The method gives relative scores according to the character of information (monetary, quantitative, qualitative) in each disclosure items. Such a rating method is good for the analysis of an annual report[11]. Concerning the quality of an environmental report, there were also many methods to measure environmental disclosure in corporate reports[1-12]. Since those methods were developed exclusively mainly for developed country perspective and were not applied in Bangladesh we could select any of them for our study. Among those studies we have randomly selected Wiseman's[8] index ratings and applied this technique to explore the quality of environmental disclosure in Bangladeshi companies. In this study we have brought Wiseman's[8] index rating that have been used for Mann-Whitney U test.

The present study has investigated two key variables of corporate environmental disclosure using Mann-Whitney U test. We have used only two determinants; Number of employees or Sales volume (proxy variable for Company size) and the type of industries. Other determinants like profitability, risk, leverage, customer preferences have been ignored in this study. We have some limitation finding information in these determinants. We have surveyed 48 annual reports and no separate environmental report (other than annual reports) has been used to extrapolate corporate environmental disclosure. All the sample information has been extracted from corporate annual reports of 2003. Based on the investigation on environmental disclosure we have classified industries by Textiles and Garments, Pharmaceuticals and others (others include financial institutions, Cement, real estate and a chemical company)

CORPORATE ENVIRONMENTAL DISCLOSURE

Introduction: From the viewpoint of the degree of involvement of public authorities, environmental reporting can be categorised into these types of disclosure:

- Mandatory disclosure: Examples are the Toxic Release Inventory (TRI) in the US and the Pollutant Release and Transfer Registers (PRTR) in some European countries, for example the UK.
- Voluntary disclosure: Examples are the annual environmental statement issued under the Eco-Management and Audit Scheme (EMAS) and any environmental information a company voluntarily makes available to the public such as in the form of CERs.

Mandatory schemes such as the TRI and the PRTR can provide a powerful incentive for companies to reduce their toxic releases. Simply by making toxic release information accessible to any interested party, encourages companies to take pollution prevention measures. Currently, most CERs are the result of voluntary disclosure and in the case of EMAS, companies are required to prepare an environmental statement annually, which should be designed for the public.

As seen, mandatory schemes to regulate and encourage the disclosure of environmental information for the public along the lines of CERs and EMAS environmental statement are rare. However it is expected-at least at the current level-that there will be minimum number of mandatory schemes for corporate disclosure of environmental information in annual accounts and reports of companies.

Developments in corporate environmental reports: An international survey carried out by IIIEE on behalf of KPMG Environmental Advisors in 1996 showed that environmental reporting is spreading rapidly. The results varied between countries and industries, but the main trend was clear. More and more companies are publishing environmental reports and the quality of the reports has also improved. The "green glossies" have now almost disappeared due to stakeholder demands for quantifiable data and most CERs represent a serious commitment by the company to monitor and improve environmental performance.

In September 1999 the results of the KPMG International Survey of Environmental Reporting 1999 were published. The survey showed that environmental reporting rose significantly in all the European countries examined, especially in countries with mandatory reporting rules (Denmark 29% in 1999 compared to 8% in 1996) and a high uptake of EMAS (Germany 36% in 1999 compared to 28% in 1996). The survey also showed that in complete contrast with the European trend, the proportion of top American firms issuing environmental reports fell from 44% in 1996 to 30% today. The results of the KPMG international survey of 1999 as well as the main findings in three different timings are summarized in Box 1 and Table 1, respectively.

Table 1: Environmental Disclosure in Bangladeshi Public limited Company Wiseman[8]

Name of the Company	Wiseman's (1982) ratings
1.Beximco Dennims Limited	27
2.Beximco Knittings Tld	24
3.Beximco Infusion Ltd	20
4.Beximco Textiles Ltd.	18
5.Anlima Yarn Dyeing Ltd	18
6.Square Pharmaceuticals ltd	16
7.Chittagong Cement Clinker Grinding Ltd	14
8.Beximco Synthetics Ltd	14
9.Dhaka Bank Ltd	12
10.Prime Bank Ltd	10
11.Shinpukur Holdings Ltd	8
12.Appex Spinning and knitting Ltd	8
13.Beximco Pharmaceuticals Ltd.	6
14.ACI(Bangladesh) Ltd.	6
15.Eastern Housing Ltd	5
16.Delta life Ltd	4
17.BOC Bangladesh Ltd	4
18United Insurance Company Ltd.	4
19. Hill Plantation Ltd.	3

Recently there have been several attempts to create global registry and electronic information exchanges for corporate reports. Notable among these is the cooperative project between the German Federal Environmental Agency (Umweltbundesamt-UBA) and the London-based Next Step Consulting to create a comprehensive archive. The partners in this are building an archive of published environmental and sustainability reports from all over the world, which will be accessible to the public at UBA's library in Berlin.

The number of reports now stands at approximately 2,400 (B and E, 2001). Detailed statistics of number of reports per country and business sector can be accessed through the URL: www.corporateregister.com.

In May 2002 a new online service will start to make it possible for the public to download an environmental report or order a hard copy for several companies. This service will be part of The International Corporate Environmental Reporting Site www.enviroreporting.com). Companies who join this service will have the possibility to generate statistics about the type of stakeholders that ordered their reports.

RESULTS AND DISCUSSION

Wiseman's[8] rating scale has been used to measure a company's environmental disclosure. Wiseman used coding instrument for quality of voluntary environmental reporting strategy. Environmental reporting would have composed of nineteen items grouped into six categories; economic factors, environmental litigation, pollution abatement, sustainable development, land remediation and contamination and environmental management and total 39 items have been accounted for this study. Authors have modified rating instruments consideringpresent scenario of reporting practices in Bangladesh. The rating is based on a score of one to three, three for an item described in monetary and quantitative terms, two when an item is described specifically and one for an item discussed in general. Our finding shows highest score is 27, lowest score, 3 and mean score 11.63 among 19 annual reports that have disclosed environmental information. Eight companies (16% of total companies surveyed) have disclosed environmental information under a separate heading in the annual reports. 29 annual reports have not disclosed anything regarding environment.

Not a single company has provided quantitative and financial data regarding environmental disclosure in their annual reports. Most of the annual reports have discussed of the firms activities with regard environmental litigation, pollution abatement and environmental management that were more general in nature. One important thing here has been found that Companies under same group (Beximco Groups) has provided highest environmental information to other companies that have distinct groups or no group. Using Mann-Whitney U test, quality scores of the Beximco Groups have been found to be significantly different to the quality scores of all other companies together (p = 012).

29 of 48 companies annual reports surveyed are found no existence of environmental disclosures. These 29 companies include Eastern Bank Limited, Apex Tannary Ltd., Square Textiles Ltd., BDCOM Online Ltd., Alltex Industries Ltd., NCC Bank Ltd., Keya Cosmetics Ltd., Fu-Wang Foods Ltd., Agricultural Marketing Co. Litd(PRAN)., Padma Oil Company Ltd. , Bangladesh Leaf Tobacco Ltd., Atlas Bangladesh Ltd., Mita Testiles Ltd., Quasem Drycels Ltd. , Niloy Cement Industries Ltd., Aftab Automobiles Ltd. ,, Kay and Que(Bangladesh) Ltd. , Shaiham Textiles Mills Ltd., Investment Corporation of Bangladesh(ICB)., Fu-Wang Ceramic Industry Limited , Bengal Fine Ceramics ltd., Ashraf Textiles Mills Ltd., Monno Jutex Industries Ltd. ,Sonali Annsh Industries Ltd. , H.R. Textiles Mills Ltd., Tamijuddin Textiles Mills Ltd. , Prime Textiles Mills Ltd. , Desh Garments Ltd. , Ashraf Textiles Mills Ltd.

Analysis of environmental disclosure: Mann-whitney U test : A number of studies by Cowen *et al.*[13], Patten[14], Deegan and Gordon[15] Cormier and Magnan[9] showed that there was a significant relationship between types of industry and disclosure of environmental information. Again that company size had a significant influence on corporate environmental disclosure. We have used industry types and company size to test any significant differences in the quality of the environmental

Table 2: Mean sales revenue and and number of employees by the companies having with environmental disclosure (n = 19) and companies not having with environmental disclosure (m = 29) (N = 48)

Company	No. of company analyzed (% of total)	Mean revenue (Thousand Tk.)	Mean employees
Having environmental disclosure	19 (40%)	1464934.5789	1073
Not having environmental disclosure	29(60%)	544314.551	493

disclosure. We also need to know a significant difference in company size between companies having environmental disclosure and companies not having environmental disclosure.

The significance of difference in sales revenue and in number of employees between the companies that have made environmental disclosure and the companies that have not made environmental disclosure is assessed using Mann-Whitney Test. Test has presented a significant difference ($p<0.016$) in volume of sales revenue and significant difference ($p<0.012$) in number of employees between two types of companies (Table 1). If Both company sales revenue and number of employees have been used for a proxy variable for the sizes of the company, we could say, there is a significant statistical difference in company sizes between companies having environmental disclosure and companies not having environmental disclosure.

Types of industry: Looking at the descriptive data above, it could be found that there are some apparent differences and these differences could be statistically significant or not. The 'quality of the environmental disclosure' variables have been tested for significant differences between industries using the Mann-Whitney Test. The test has presented no significant differences ($p = 0.257$and $p = 0.120$) in the quality of the disclosure between Textiles and Garments Industries and Pharmaceutical industries and between Pharmaceuticals industries and other industries. The textiles and Garments industries and the other industries have been significantly different each other ($p = 0.006$).

Company size: We have employed sales volume and the number of employees as a proxy variable for company size.

Employee size: In order to find out the statistically significant differences in quality of environmental disclosure between the sizes of the employees, we have classified employees into four different groups. Two of our surveyed companies have contained less than 200 employees that presented average score of 6; ten companies contained 200 to 1000 employees that presented average score of 14.6. The sizes of the emplyees, 1000 to 2000 and more than 2000 have remained 2 and 5 companies and their average scores are 6 and 10 subsequently. Mann-Whitney test has presented the employee sizes are not significantly different to each other ($p = 0.182$, $p = 1$, $p = 0.196$, $p = 0.39$ and $p = 0.696$ for the different combinations of the employee sizes)

Revenue size: The descriptive statistics have explored some apparent differences in the quality of environmental disclosure. Mann-Whitney test also proved these differences between the sizes of the revenues. The sizes of the revenues have been grouped into four distinct categories; less than tk1, 00,000 thousand, 1,00,000 to 10,00,000 and above 10,00,000 and their average quality scores are 3.5, 16 and 9.55 subsequently. The test has explored significant difference in the quality of disclosure between revenues sizes ($p = 0.037$, $p = 0.056$ and $p = 0.074$ for different combination revenue sizes)

Table 3: Mean Wiseman's[8] ratings in annual reports by size (Revenue and employees) and Industry (n = 19)

Industry	No. analyzed	(%) of total	Mean quality Ratings
Textiles and Garments	6	32	18.16
Pharmaceuticals	4	21	12.00
Others (Financial ins, real estate, cement etc)	9	47	7.11
No. Of employees			
Less than 200	2	11	6.00
200-1000	10	53	14.60
1000-2000	2	11	6.00
More than 2000	5	26	10.00
Revenue Size (Tk in Thousand)			
Less than 1,00,000	2	11	3.50
1,00,000-10,00,000	8	42	16.00
More than10, 00,000	9	47	9.55

Since the last KPMG international survey of 1999, it is difficult to make empirical conclusions about developments in CERs beyond the global 100. However a few observations can be made about trends in CERs.

Integration: We can expect convergence of various reporting requirements on the environmental, social and economic issues. This convergence is facilitated by increased number of companies adopting integrated information management systems. With increased interest in social issues the scope of environmental reports is widening to include social, environmental and economic factors. Most guidelines now are shifting in the use of taxonomy from environmental reporting to sustainability, social responsibility or 'triple bottom line' reporting.

Standard format: The Global Reporting Initiative (GRI) is expected to continue to drive the development in format and style thus building an international consensus for a standard reporting framework. At the same time recent country-specific initiatives to publish guidelines (UK, Germany and Denmark) of environmental and sustainability reporting and the ISO decision to pursue ISO standards for reporting can be seen as counter productive to the efforts of GRI.

Content: On the content side there is still considerable room for development. More focus will be given to sector specific indicators. This is reflected in the current focus of GRI working groups on sector specific issues. The greatest challenge is still in finding common grounds for social performance categories and indicators.

Medium: More recently, technological advances and the continued increase in Internet access have led to a surge in the use of the Web as a reporting medium (both for stand-alone reports and as an extension of hardcopy publications.)

Regulations: Within Europe, several countries have passed legislation aimed at increasing environmental reporting - including The Netherlands, Denmark, Norway and Sweden. The experience of these countries with mandatory reporting is further examined in Ch 4. The relevant point to mention here is that there is considerable objection on the part of business leaders for any legislation on reporting. The argument from business leaders and some practitioners in the field is that environmental and social reporting is still in a development phase and needs considerable innovations. Any attempt to legislate now would stifle innovations.

In a recent conversation with the environmental manager of a Swedish utility company, the manager bitterly complained that the company has decided not to publish a hard-copy environmental report any more because they think that the demand for it is not there. They will switch to Internet based reporting as an alternative medium and reduce the amount of information published.

ENVIRONMENTAL REPORTING AND THE ROLE OF GOVERNMENTS

In the European and North American context, governmental involvement in corporate environmental reporting dates back to earlier obligations on companies to disclose specific emissions or use of toxic materials in the context of citizen's right to know or freedom of access to information. An example of this is the EU Council Directive 90/313/EEC (Freedom of Access to Environmental Information, 1990), which requires all public authorities with responsibilities for the environment including some public companies to make environmental information available to the public upon request.

Most mandatory reporting schemes however were designed with the obligations on companies to report to public authorities under various licensing regimes. Mandatory public reporting of environmental information is currently limited to a few countries, while mandatory reporting to the authorities is more widespread.

The increased demand for corporate environmental information from non-governmental actors stimulated the demand for voluntary reporting such as in the form of CERs. SustainAbility in Engaging Stakeholders concludes: Because of the 'free rider' syndrome, where reporting companies are disadvantaged in comparison with some non-reporting companies, national and international government agencies are likely to come under growing pressure to review the need for regulated reporting requirements for key industry sectors . However our opinion is that any new governmental scheme focusing solely on CERs could perhaps be seen as redundant within the multitude of obligations on companies to disclose under various licensing regimes.

One of the key supporting arguments for mandatory public reporting perhaps rests in the need for streamlining and harmonizing the reporting process to satisfy multiple stakeholders and objectives. The following points summarize main views in support of mandatory environmental reporting by corporations in general (to both the general public and authorities):

- United Nations Environmental Programme is of the view that mandatory reporting obligations play a crucial role in promoting cleaner production and ensuring corporate accountability.
- Governments will continue to examine how to implement the recommendations contained in Agenda 21, particularly the part concerning Environmentally Sound Management of Toxic Chemicals (Chapter 19).
- Since many of the environmental problems are of a global nature, there is a need to create international registers of pollution. Mandatory environmental reporting system is a cost-effective way for the individual states to collect the necessary information.
- Also, there is a need for a regulation which indicates how to deal with environmental issues in financial reporting, since regulation is obviously a prerequisite for inclusion of these issues in the financial statements.

Because CERs are still evolving, there is the fear that mandatory regulation might put a limit to innovations in this field. An answer to this offered by is that mandatory reporting of core environmental performance indicators does not exclude continued experimentation and development of corporate environmental reports in the direction of sustainability reporting. Companies will continue to produce and improve their environmental reports for the same reasons even when there are mandatory reporting requirements to comply with. In fact, as is suggested by the updated SustainAbility model for environmental reporting, without minimum mandatory reporting frameworks, sustainability reporting might not be possible.

CONCLUSIONS

In the late 1990s there has been a strong enthusiasm for regulating corporate environmental reporting to the public. This was evident from the various surveys of CERs expecting a move by national governments and international organizations to mandate rules for disclosure of certain environmental information. This interest in regulation was mainly driven by two conditions. The first condition resulted from the lack of comparability and credibility in existing reporting practices due to various and sometimes confusing reporting guidelines. The second condition is the 'free rider' syndrome in which there was the perception that reporting companies are disadvantaged in comparison with some nonreporting companies.

The first experiment in regulating public environmental reporting in Europe is the Danish green accounts. Though it was mainly designed to bring order to corporate environmental reporting for regulatory agencies, it stated clearly the objective of making this information easily accessible and understandable for the public. The recent evaluation of the green accounts scheme concludes positive results, seen from an environmental, structural and financial standpoint. According to the evaluation 40% of all companies implemented the green accounts rules have achieved environmental improvement. It also states that many companies have initiated activities targeted at cleaner technology. On the other hand, seen from the need to meet public demand for environmental information, the green accounts show discouraging signs. In the companies' experience, interest in the green accounts has been quite low. 50% of all companies have mailed less than 10 sets of green accounts and three out of four companies have received no response to their accounts. What this illustrates is that CERs are still supply driven and stakeholders still don't know what to do with them or assess the quality of the reports. From stakeholders view, CERs so far have signalled that perhaps reporting companies are better than non-reporting companies.

The environmental reporting decree in The Netherlands is the first in Europe to outline rules for separate public reporting along the lines of CERs. The scheme is still in an early stage to assess the impacts of the regulation on corporate environmental behaviour or public perception. An interesting exception to the rules in the Dutch and Danish schemes relates to the EMAS annual statement. A company producing an annual environmental statement in accordance with voluntary EMAS scheme is not required to comply with the public reporting requirements of the environmental reporting decree (Netherlands) or green accounts (Denmark). What this signals is that voluntary schemes such as EMAS can provide credible framework for public reporting.

Other mandatory reporting schemes in Europe like the Norwegian and Swedish fell short of a set of comprehensive rules for public environmental reporting along the lines of CERs. These schemes set rules for disclosure of selected environmental information in annual accounts and particularly whether the environmental impacts of the company have direct or indirect implications on the financial performance.

These schemes are in line with commission recommendation of May 2001 on the recognition, measurement and disclosure of environmental issues in the annual accounts and annual reports of companies. Our view is that these schemes seem to be more in tune with current trend for the integration of environmental reporting with economic reporting. Furthermore they respond better to relevant needs of stakeholders that might particularly need to assess how environmental issues drive overall performance. On the other hand it is still premature to assess if the approach taken by the Norwegian and Swedish actually resulted in changes in corporate environmental behaviour.

The issue of credibility in environmental reporting is still in the grey zone. So far few of the users of CERs seem to have relied on verification statements to increase their confidence in CERs. The problem still rests in the lack of standards on verification practice, approach and methodology; lack of qualified verifiers; and lack of a standard reporting framework. Confidence seems to be highest in EMAS environmental statements because of a clearly defined scope and qualified external auditors.

Overall it is difficult to conclude about the effectiveness and efficiency of these schemes. This requires examining the schemes in terms of stated objectives and realized ones. Additionally an important question is if any of these schemes represent the most efficient choice to create the desired change in corporate environmental behaviour or improve public access to environmental information. The industry point of view is that stakeholders (demand side) still don't know how to interpret environmental information in CERs.

The task for improving the number of reporting companies and the quality of reports perhaps rests not on direct regulation but on indirect and demand stimulatory measures. An illustration of this is the recent change in pension fund regulation in many European countries. These changes require pension fund managers to declare to what extend they consider environmental and social issues in their investment decisions. This is expected to increase the pressure on companies to improve their environmental disclosure practices.

As a final remark about corporate public environmental reporting and the regulatory scene in Europe, we support the cautionary remark by about the danger of patchwork of unrelated national regulations that would force for example multinationals to develop data-gathering structures for their mandatory national and voluntary corporate environmental reporting. This would be very costly and probably also inefficient. One way to avoid this is for national governments and businesses to support international efforts on global standards such as the Global Reporting Initiative (GRI).

We have found that 40% of companies surveyed have made environmental disclosure that have been more descriptive and more general in nature.16% of total companies surveyed have disclosed environmental information under a separate heading in the annual reports. One group of companies (Beximco Group) has been found to disclose more information than all the other companies together and this has been found statistically significant. There is no quantitative information regarding environmental disclosure provided by any surveyed companies. Our finding shows a significant statistical difference in sales revenue and in employee sizes between companies having environmental disclosure and companies not having environmental disclosure. We have found that there is no significant difference in the quality of the disclosure between Textiles and Garments Industries and Pharmaceutical industries and between Pharmaceuticals industries and other industries. But the textiles and Garments industries and the other industries are significantly different each other. Our finding also shows that there is no significant difference in the quality of environmental disclosure between different combinations of employee size but there is a significant statistical difference between different combinations of revenue size.

Environmental disclosure was measured by using Wiseman's (1982) scale according to its relevance and meaning. Word or sentences were not counted here due to meaning less objects. In Bangladesh most prior studies on the topic have relied on theoretical model from different streams, without any statistical test, our findings from statistical test are not comparable with prior studies in Bangladesh. However, this paper has some limitations. This study has taken only one-year sample. The multi term studies should be necessary because results could be inconsistent over years[11]. Study has only considered the annual reports for key findings, separate environmental reports published by company (if any) could be investigated, we could also emphasize on media role for corporate environmental disclosure.

Further research in this field should be emphasized. Our result suggests that a different perspective can be adopted when analyzing the content of a company's annual reports. We also could consider other more determinants of environmental disclosure like, company's profitability, beta coefficient, leverage, customer preferences EPS, Price earning etc with multi term data.

OLS analysis, cross correlation, logistic correlation and logit analysis should also be highly emphasized.

APPENDIX 1

Full Name Of the Company and Year for which annual report published :
Amount of Sales revenue(Tk. Thousand):
Number of Employees:
Environmental reporting ratings
(Wiseman scale, 1982; adapted by Cormier and Magnan, 1999)
Economic factors:

- Past and current expenditures for pollution control equipment and facilities
- Past and current operating costs of pollution control equipment and facilities
- Future estimates of expenditures for pollution control equipment and facilities
- Future estimates of operating costs for pollution control equipment and facilities
- Financing for pollution control equipment or facilities
- Environmental debt
- Risk provision
- Provision for charge

Laws and regulation:

- Litigation (present and potential)
- Fines
- Orders to conform
- Corrective actions
- Incidents
- Future legislation or regulation requirements

Pollution abatement:

- Air emission information
- Water discharge information
- Solid waste disposal information
- Control, installations, facilities or processes described
- Compliance status of facilities
- Noise ans odours

Sustainable development reporting:

- Conservation of natural resources
- Recycling
- Life cycle information

Land remediation and contamination:

- Sites
- Efforts of remediation (present and future)
- Cost/potential liability (Provisions for site remediation)

Spills:

- Number
- Nature
- Efforts to reduce
- Liabilities (actual and potential)

Environmental management:

- Environmental policies or company concern for the environment
- Environmental management system
- Environmental auditing
- Goals and targets
- Awards
- Department or office for pollution control
- ISO 14000
- Participation in elaboration of environmental standards
- Joint projects with other firms on environmental management

Rating scale:

- Item described in monetary or quantitative terms
- Item described specifically
- Item discussed in general

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