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## Financial Reporting of Environmental Information

Richard Peters

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FINANCIAL REPORTING OF ENVIRONMENTAL  
INFORMATION

by  
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Bachelor of Science, University of North Dakota 1969

An Independent Study

Submitted to the Faculty

of the

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in partial fulfillment of the requirements

for the degree of

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## I INTRODUCTION

This country is presently experiencing an increasing emphasis on the social responsibilities of the corporation. There has been a shift from the traditional belief that corporations operate best when limiting their activities to the market place. Corporations now must be concerned with such social problems as hiring of minorities, eliminating pollution, building safe products, and educating their employees. In short, business concerns are being forced to answer for their actions that have effects outside the market place. These forces are being generated by growing public demand and governmental regulation forcing corporations to act upon these problems and creating the need for appropriate accounting for corporate social performance.<sup>1</sup>

As a consequence, accountants, both public and private, have found their responsibilities increased because of the added problems of creating a social accounting system in which to record and report social performance by corporations.<sup>2</sup>

Although social accounting does not have one definition accepted by the accounting profession, Sybil Mobley offered one in 1970 that seems to give the broadest scope to this expansion of accounting.

. . . . . refers to the ordering, measuring and analysis of the social and economic consequences of governmental and entrepreneurial behavior. So defined, social accounting is seen as encompassing and extending present

accounting. Traditional accounting has limited its concern to selected economic consequences--whether in the financial, managerial, or national income areas. Social accounting expands each of these areas to include social consequences as well as economic effects which are not presently considered.<sup>3</sup>

One of the limitations preventing the extension of accounting into social areas is Statement No. 4 of the Accounting Principles Board which states:

The subject matter of financial accounting is economic activity and financial accounting therefore involves measuring and reporting on the creation, accumulation, and use of economic resources. Economic activities that can be quantified are emphasized in financial accounting. Accounting does not deal directly with subjective concepts of welfare or satisfactions; its focus is not sociological or psychological.<sup>4</sup>

If society demands that corporations report on a broader responsibility than contained in Statement No. 4, the profession must make the necessary changes to keep society informed.

Social accounting covers many areas of a corporation's environment. The most frequently mentioned areas in annual reports include the following:<sup>5</sup>

1. environmental quality (pollution)
2. equal employment opportunities
3. product safety
4. educational aid
5. charitable donations
6. industrial safety
7. employee benefits

8. various community support programs

Although many of these areas may be mentioned in one annual report, environmental quality seems to be the area that nearly all corporations can associate with at one time or another. The reporting of environmental information includes informing statement users how much the corporation has spent on antipollution equipment, how much damage it has done to the environment, and has the corporation bettered the environment in which it operates? These are but a few of the questions that must be answered by financial statements.

Before you can concern yourself strictly with reporting environmental information, you must have an idea of how a corporation operates and what impact the environmental reporting may have on it.

Financial accounting has historically been concerned with economic resources, equity claims, and changes therein measured by past, present or future market prices. This emphasis is consistent with the corporations operating within its "market place."<sup>6</sup>

The dominant motivation for business activities is usually considered to be the profit motive. In accounting for a firm, theory regresses to the proposition that the minimization of private costs is a necessary condition of private profit maximization.<sup>7</sup>

Costs of resources that are consumed or destroyed in the course of business activities borne by the firm are private costs. Costs not included in profit maximization that are destroyed or used and are borne by society are called social costs. They are actually resources destroyed by the firm but paid for by society. Examples of such costs are pollution



of the air, contamination of streams, and deterioration of residential areas.

It seems quite obvious when comparing private and social costs that a corporation motivated strictly by profit maximization has little concern for conserving resources. Any expenditures it would make to benefit the environment would be in direct conflict with profit maximization.

The current and future concern for the reporting of social performance has created an urgency for the profession to accept an active role in reporting social costs. Corporations will have to consider social costs as private costs of the organization and report them as such. Society will no longer accept these costs, but they must be borne by the corporation as a private cost.<sup>8</sup>

By reporting social costs as private costs, corporations may run into problems concerning reallocation of resources. Firms or industries that are low polluters, will not have to assume many social costs. Their costs will remain fairly stable and may even drop if they have been adversely affected by pollution from other firms. The production costs of high polluters can be expected to climb considerably thus causing changes in relative prices, adversely affecting high polluters and favorably affecting low polluters. This will shift demand to the products of the low polluter, shifting the allocation of resources to those industries, and will result in higher profits.<sup>9</sup>

Although this is a very simple example, consider the fishery downstream from the paper mill. When the paper mill installs pollution equipment, its production costs climb but the river becomes less polluted. The fishery will benefit from the clean river, tending to lower costs and prices. Because of increased production costs, the paper mill will be forced to increase prices, thus making the cost of paper higher relative to the cost of fish. The inclusion of social costs among the private costs of the paper mill has then caused a reallocation of resources in favor of the fishery.<sup>10</sup>

The remainder of this paper will be centered on the reporting of one aspect of social accounting: environmental or pollution information. It will review the need for reporting this information, the efforts that have been exerted in this area, and the recommendations of some of the prominent accountants in reporting environmental information for the future.

Because business must comply with the laws of the land, accountants must be ready to provide relevant information for making short-run and long-run decisions to comply with the antipollution regulations.<sup>11</sup> Internal accountants must provide information for corporate management to compare alternative methods of compliance taking into consideration the cost-profit-volume relationship.<sup>12</sup>



## II DEMAND FOR ENVIRONMENTAL REPORTING

Environmental reporting on financial statements would not be the controversial topic it is today if it were not for the demand for the information. This demand can be satisfactorily broken down into two financial segments of society:

1. Internal Users -- "insiders" of a corporation such as the corporate management structure.
2. External Users -- People outside the corporate management structure such as investors, stockholders, creditors, and government.

Environmental reporting is not strictly a year end adjustment process but a daily routine of collecting, accumulating, and analyzing information of an environmental nature. This may call for a social accounting system to gather this information.

Because business must comply with the laws of the land, accountants must be ready to provide relevant information for making short-run and long-run decisions to comply with the antipollution regulations.<sup>11</sup> Internal accountants must provide information for corporate management to compare alternative methods of compliance taking into consideration the cost-profit-volume relationship.<sup>12</sup>

This information involves the use of capital budgeting to determine the most efficient antipollution system which is also compatible with the firm's goals or objectives. Another method often used is cost -- benefit analysis which involves quantifying and matching costs and benefits which could result from a given course of action. Examples of these procedures would be comparing the cost of installing an antipollution device against the benefits gained by the community, or the comparison of the cost of two antipollution devices against the increased profits that may be gained by the public's approval of the corporations' attempts at cleaning up the environment.<sup>13</sup>

Impact analysis is another area where the internal accountant may become involved. It concerns the impact a certain decision will have on a given area or environment. It usually is a qualitative analysis rather than quantitative as was cost-benefit analysis. Examples of the use of impact analysis are:

1. determining the effects on wildlife of building a new plant in a remote area.<sup>14</sup>
2. filing environmental impact statements with governmental agencies.<sup>15</sup>
3. setting up computer systems to record pollution data.<sup>16</sup>

The information required for internal users is generally of the input type. There remain unanswered questions regarding this information, such as:

In other words, will environmental information affect the decisions of investors and creditors?<sup>18</sup>

1. Who should do the actual measuring?
2. What measurement techniques are appropriate?
3. Where can the information of the appropriate nature be obtained?

The essential needs of the internal user is information to better his social performance within his respective community. Management should be concerned with what activities contribute to being socially responsible and what the corporation has done to meet these responsibilities. This needed information will eventually aid in the evaluation of management's performance in solving their environmental problems.<sup>17</sup>

External users have brought, by far, the greatest pressure on corporations to report environmental information on their financial statements. This information is becoming vital for investors and creditors to make reliable decisions.

To understand what type of information and why it is needed, one can probably look at four criteria or standards for reporting financial information which are relevance, quantifiability, verifiability, and comparability.

#### Relevance

Accounting has traditionally attempted to report information that is relevant to the user. Evidence must be shown that the inclusion or

exclusion of certain information will affect the decisions of the user. In other words, will environmental information affect the decisions of investors and creditors?<sup>18</sup>



Investors are already asking themselves whether they should continue to invest only on traditional information or to seek environmental information also.<sup>19</sup> There is strong evidence that some investors are using this information as a major item to consider. Yale, Cornell, and the Ford and Rockefeller Foundations have reportedly reviewed their investments with emphasis on social and environmental information. Some mutual investment firms are also leaning in this direction.<sup>20</sup> The investors must deal with environmental factors to judge the profitability of corporations due to increased federal and local legislation affecting environmental costs.<sup>21</sup>

There is considerable evidence across the nation that courts are enforcing the antipollution statutes at the local and national levels. The courts have stopped firms from polluting by either forcing them to invest in expensive antipollution equipment or cease operations.<sup>22</sup>

Court orders to stop pollution activities have been very effective in forcing firms to make major investments in antipollution equipment but this is not the only means available. Firms being taken to court have experienced adverse public relations resulting from the exposure which is independent of the court rulings. Ford Motor Company and Marathon Oil Company in Michigan are two examples of companies that made major antipollution equipment investments without court rulings against them.<sup>23</sup>

It seems quite clear that environmental information is a relevant ingredient to a sound financial statement. Investors and creditors need this information to make sound economic decisions. They cannot afford

to invest or to loan money to firms that may not be solvent in the future due to environmental regulations.

### Quantifiability

Once we have determined that environmental information is relevant to the user, we must attempt to quantify it for reporting purposes. Although quantifiability is not mandatory, it follows the format of traditional financial reporting.

Many accountants have written and published articles on environmental costs, but few have attempted to offer any insight into the problems of measuring it. Although accountants have been accustomed to establishing standards for all costs, time has not been available for the profession to analyze the problem and establish criteria for cost measurement of environmental effects.<sup>24</sup> If the time had been available, it is doubtful that the profession would have solved the problem. Accountants are inexperienced at measuring the cost of lives shortened by smog, the cost of children being unable to play in fresh air, or cost of beautiful scenery obscured by air pollution.<sup>25</sup>

At present, it appears that the only method of measuring costs will be decided by law. Organizations will incur costs not to neutralize the environmental damage, but to satisfy legal standards established by some governmental agency. Cost will be measured and reported by observing how much money was spent on pollution control equipment to satisfy government regulations or the fines imposed for not installing



such equipment.<sup>26</sup>

"The accountant need not limit quantification to valuation."<sup>27</sup>

The possibility of disclosing a volume or weight measurement of pollution persists. Robert F. Sawyer and Laurence S. Careto have assigned a weighting process to different forms of air pollutants. The problem of a volume or weight measurement is that some pollutants are more damaging to the environment than others.<sup>28</sup>

Still, much environmental information is of a quantifiable nature that significantly affects asset valuations, costs, expenses, outlays, and liabilities. Accountants must consider this information in order to accurately and adequately communicate financial position and performance.

#### Verifiability

After we have attempted to quantify this information, we must ensure that it is verifiable. This is usually done by some type of audit. At present few such audits have been attempted mainly because auditors have expressed no interest in this type of measurement.<sup>29</sup>

Investors, stockholders, and creditors will require their environmental information to be verified by people outside of the corporation. Accountants must not consider this area off limits but rather concentrate their research towards a verifiable environmental audit.<sup>30</sup>

### Comparability

After complying with criteria of relevance, quantifiability, and verifiability, we must look at comparability. Some firms within an industry are controlling pollution by making current outlays while others are seemingly ignoring the pollution problem. This introduces the problem of comparability among financial statements between companies and industries. The operations of some industries are more destructive to the environment than others. The probable result of these differences is that, other things being equal, the worst polluters may appear to be the most successful and they may likely receive additional resources from the investing public.<sup>31</sup> If investors look only at earnings between two different companies, the company who made no expenditures for pollution equipment may look more profitable [than one who made these expenditures].

Failure of major polluters to report the full cost of resources used in production (including social costs), and distribution of goods and services also adds to the problem of comparability. The withholding of information concerning environmental resources used and the current outlays not appropriated enhances the problem considerably.<sup>32</sup>

Another impetus for accounting to develop an environmental reporting format is the Securities and Exchange Commission. The SEC has been urged to regulate registration statements in a manner as to compel socially orientated actions.<sup>33</sup> In 1971 the SEC called for the disclosure of material information "When compliance with statutory requirements

with respect to environmental quality, e.g., various air, water, and other antipollution laws may necessitate significant capital outlays, may materially affect the earning power of business, or cause material changes in registrants' business done or intended to be done."<sup>34</sup>

On April 14, 1975, the SEC held hearings for the purpose of determining what further disclosure should be required on environmental issues and the investors' use of such information. As a result of these hearings, new rules were proposed concerning environmental disclosure that were slightly more stringent.<sup>35</sup>

of information and how it was being reported.<sup>35</sup> His findings can be categorized into three methods of reporting social information which are:

1. monetary
2. non-monetary (quantitative)
3. narrative (non-quantitative)

Illustration 1 shows the findings of Dilley's survey.

Monetary

From observing Illustration 1, it is quite obvious that little progress has been made in including monetary environmental information in the body of the financial statements. A good start in this direction is displayed by Bethlehem Steel Corporation in their 1974 annual report (Illustration 1). They have included environmental information in their "Consolidated Statement of Changes in Financial Position." Because the amounts are significant, they have included "Use of funds committed for



### III CURRENT ENVIRONMENTAL REPORTING PRACTICES

With strong pressure from society to report the social performance of corporations, there has been increased progress in this area in the last few years. Steven C. Dilley conducted a survey of 250 annual reports for the year 1974 to compile an estimate of who was reporting this type of information and how it was being reported.<sup>36</sup> His findings can be categorized into three methods of reporting social information which are:

1. monetary
2. non-monetary (quantitative)
3. narrative (non-quantitative)

Illustration 1 shows the findings of Dilley's survey.

#### Monetary

From observing illustration 1, it is quite obvious that little progress has been made in including monetary environmental information in the body of the financial statements. A good start in this direction is displayed by Bethlehem Steel Corporation in their 1974 annual report (Illustration 2). They have included environmental information in their "Consolidated Statement of Changes in Financial Position." Because the amounts are significant, they have included "Use of funds committed for

Type of Disclosure	Type of Disclosure		
	Monetary	Quantitative (Non-Monetary)	Narrative
Placement of Disclosure			
Body of Financial Statements	Infrequent	Infrequent	Infrequent
Footnotes to Financial Statements	Relatively Common	Infrequent	Relatively Common
Letter to Shareholders	Relatively Common	Infrequent	Relatively Common
"Other" Section (Such as disclosures appearing in a specially labeled, separate section, or comments in "operating review" sections of annual reports.)	Relatively Common	Relatively Common	Relatively Common

Illustration 1. Environmental Disclosure Among Corporations.<sup>37</sup>

"pollution abatement facilities" in their funds provided and "Funds committed for pollution abatement facilities" in the Funds Applied.<sup>38</sup>

The inclusion of monetary environmental information in the footnotes, letter to shareholders, and "other" sections has been more common than in the body of the financial statements. Environmental regulations have created contingent liabilities that may have a great impact on future operations and are usually disclosed in the footnotes to the financial statements. The Ansul Company included such information in their 1974



## Consolidated Statements of Changes in Financial Position



### FUNDS PROVIDED

#### Operations—

Net income .....	\$342,034	\$206,609
Depreciation .....	210,912	196,086
Deferred income taxes (Note J) .....	11,000	25,000
	<u>\$563,946</u>	<u>\$427,695</u>
Decrease in investments in associated enterprises .....	25,039	9,070
Use of funds committed for pollution abatement facilities .....	25,716	7,021
Sale of property .....	32,642	23,217
Decrease in miscellaneous assets and deferred charges ..	—	7,982
Increase in liabilities payable after one year .....	29,341	13,561
Increase in long-term debt .....	—	42,000
Treasury stock used in an acquisition .....	5,974	—
Other .....	—	10,044
<i>Total</i>	<u>\$682,658</u>	<u>\$540,590</u>

### FUNDS APPLIED

#### Capital expenditures—

Property, plant and equipment .....	\$524,241	\$248,817
Investments in associated enterprises .....	17,267	21,302
Funds committed for pollution abatement facilities .....	7,201	45,804
Increase in miscellaneous assets and deferred charges ..	17,492	—
Decrease in long-term debt .....	14,725	21,134
Payment of dividends .....	100,172	72,431
Purchase of treasury stock .....	29	28,568
Other .....	14,138	—
<i>Total</i>	<u>\$695,265</u>	<u>\$438,056</u>

Net Increase (Decrease) in Working Capital .....	<u>\$(12,607)</u>	<u>\$102,534</u>
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#### Details of Increase (Decrease) in Working Capital:

Cash and marketable securities .....	\$195,652	\$200,133
Receivables .....	42,638	51,261
Inventories .....	67,833	(39,008)
Accounts payable .....	(104,213)	(42,874)
Accrued employment costs .....	(20,425)	9,212
Accrued taxes .....	(159,207)	(64,264)
Debt due within one year .....	212	7,195
Other current liabilities .....	(35,097)	(19,121)
<i>Total</i>	<u>\$(12,607)</u>	<u>\$102,534</u>

annual report (Illustration 3). Footnote disclosure usually will not give the reader any detailed information concerning the contingent liability.<sup>40</sup>

Note 8 -- Deferred Items Deferred items at December 31, 1974 and 1973 were as follows:

	1974	1973
Deferred Currency Exchange Gains (Note 1)	\$ 740,369	\$1,137,595
Waste Disposal Reserve	<u>1,915,000</u>	<u>1,000,000</u>
	\$2,655,369	\$2,137,595

The waste disposal reserve has been provided for anticipated costs that may be associated with the recycling or disposal of a salt waste by-product of our domestic agricultural chemical production. During 1974, we determined that any recycling or disposal program probably will be completed over a period of time exceeding one year. As a result we have classified the waste disposal reserve and related future tax benefits as non-current items. The December 31, 1973 balance sheet and statement of changes in financial position have been restated to conform with the 1974 classifications.

Illustration 3. The Ansul Company 1974 Annual Report.<sup>41</sup>

The annual "letter to shareholders" has commonly included environmental information such as Bethlehem Steel's 1974 annual report (Illustration 4). In their report they relate both historical and forecast monetary information, but fail to reveal that:<sup>42</sup>

1. Bethlehem Steel had been charged with seven violations concerning air pollution.
2. Four of these violations resulted in damages or injunctions.

### Capital Expenditures

Capital expenditures during 1974 were \$541.5 million, twice the \$270.1 million spent in 1973 and almost three times the \$183.6 million spent in 1972. At year end, the estimated cost of completing previously authorized projects was \$1.2 billion, including approximately \$200 million for environmental protection equipment. In January, 1975, additional capital expenditures of more than \$300 million were authorized. We estimate that capital expenditures during 1975 will amount to approximately \$650 million.

All the new facilities are being designed to comply with applicable Federal and state environmental protection regulations. In the past five years Bethlehem has spent approximately \$130 million for environmental protection equipment, and it expects to spend more than \$600 million for such equipment during the next five years. Environmental protection equipment not only increases the capital costs of new facilities, but the expense of operating that equipment adds materially to operating costs.

### Synthoil Pilot Plant

In December, Bethlehem agreed with the U.S. Bureau of Mines to participate in development of the new Synthoil technology for converting high sulfur coal into a clean burning liquid fuel. Bethlehem will operate the 8 tons per day pilot plant, to be located at the Bureau's Energy Research Center near Bruceton, Pennsylvania, and will join in laboratory research and evaluation of test data. While the pilot plant is small, its success would aid materially in solving the nation's energy problems in an environmentally acceptable fashion.

Illustration 4. Bethlehem Steel's 1974 "Letter to Shareholders."<sup>42</sup>

Other monetary disclosures have been usually found in the operations review section and are too numerous to cover in this paper. They have also been reported in completely separate social statements included



in with the annual financial statements .

Non-monetary (quantitative)

This disclosure of non-monetary information in the financial statements, footnotes, and letters to shareholders has been very rare. This type of disclosure has been usually found only in "other" sections. Reynolds Metals disclosed their recycling and other environmental programs in the operations review section as did DuPont in Illustration 5.<sup>44</sup> DuPont's report revealed the number of employees involved in environmental research while Reynolds revealed the number of cans recycled and the disposal of waste matter from aluminum. DuPont's "Support of Community Needs" indirectly concerns itself with the environmental issues also.<sup>45</sup>

Also in 1974, the development, design and installation of pollution abatement facilities continued at an increased pace to meet more demanding environmental requirements. Costs of operating and maintaining pollution abatement facilities and conducting environmental research and development programs totaled \$120 million during 1974. The equivalent of 2,900 full-time employees was engaged in these activities during the year. At the end of the year, existing and authorized investment in pollution abatement facilities in the United States totaled \$396 million, including \$151 million in facilities authorized or under construction. Over the next three years, DuPont's capital authorizations budget for pollution abatement facilities will be approximately \$400 million in the United States alone, and by the end of 1975 cumulative United States investment for pollution control, both in place and authorized, will be approximately \$550 million.

### Support of Community Needs

DuPont continues to provide leadership and financial assistance to a broad range of programs, both national and local, aimed at improving the quality of life in the communities in which it operates.

Areas of involvement include urban renewal, secondary education, health care, housing, minority business, and services for the needy. Activities are focused on communities where the Company has facilities, and primarily in the Wilmington, Delaware, headquarters area.

On the national level, DuPont maintains deposits in 24 banks owned by minorities, and purchases goods and services from an increasing number of enterprises owned by minorities. More than 200 suppliers participated in the Company's minority vendor program in 1974. Both the number of suppliers and the amount of purchases were doubled during the past 24 months.

Employee involvement in community activities is also encouraged where feasible. For example, more than 50 Company lawyers have been provided time to work on a volunteer basis as public defenders in criminal cases in Delaware.

Illustration 5. Exerpts from DuPont's 1974 "operations review."<sup>46</sup>

#### Narrative

In the letter to shareholders, the chief executive of the corporation often mentions items that relate to environmental responsibility (but usually are of a narrative nature). Standard Oil of California in Illustration 6 mentions its "broad responsibilities to the community" which indirectly refers to the environment. Bethlehem Steel's 1974 letter to shareholders mentions its efforts to solve the energy crisis but in an environmentally safe fashion.<sup>47</sup>



The Company continues to recognize and act upon its broad responsibilities to the communities in which it operates. This philosophy is supported by direct participation of employees and management personnel. We participated in a wide range of social action programs. These dealt with youth, community welfare and improvement, affirmative action and minority hiring, as well as assistance to education, cultural activities, and charitable organizations.

Illustration 6. Standard Oil Company of California's "letter to stockholders."<sup>48</sup>

The "other" section, referred to in Illustration 1 again, primarily refers to the operations review. DuPont's 1974 report showed their environmental disclosure in narrative fashion in their operations review.<sup>49</sup>

As the illustrations and examples from these reports show, there are many methods of disclosing environmental information on corporate reports. This creates added problems for the policymaking bodies in financial accounting areas. They cannot select the correct procedure from studying numerous annual reports and choosing the most appropriate. They will probably have to formulate their own procedure from studying many different disclosures; picking out the best parts of each method and discarding the remainder. Although this seems difficult, it has been attempted by several researchers which will be covered in the last section of this paper.<sup>50</sup>

Special attention should be given to Abt Associates, a consulting firm, which made a very ambitious attempt at a total report. In their 1971

and 1972 annual reports they included a social income statement and social balance sheet under the heading "Social Audit" that attempted to measure their full impact on society. This was probably one of the first attempts at reporting environmental and social information in one section and although it had many faults, it was a start in the direction of complete social reporting.<sup>51</sup>

An obvious problem that has developed among corporations reporting environmental information is that they only report information which is beneficial to them. They usually do not report negative information such as costs that could have been expended for antipollution equipment, but were not. They also do not break down their performance into: actions required by law, actions in response to public pressure, and voluntary actions. This particular breakdown would give the report reader a more meaningful idea of what the corporation is actually attempting to do concerning environmental problems.<sup>52</sup>

Liowes recommends the statement be prepared periodically to coincide with the organization's profit and loss statement and balance sheet. It is intended to include those items which an organization has given to or held back from society. It compiles expenditures that are voluntarily made to improve the welfare of employees and the public, product safety, or environmental conditions. Mandatory expenditures would not be included because they are a necessary or required expense

#### IV RECOMMENDATIONS FOR FUTURE

##### ENVIRONMENTAL REPORTING

Since pollution and environmental issues first emerged during the 1960's, accounting has slowly and cautiously attempted to find its role in solving the problems. Now with most major corporations reporting on some area of environmental concern, it seems critical to the accounting profession that guidelines be established to standardize the methods and procedures to report this information to the public.

Few accountants have studied the problem to the extent that David F. Linowes has. Because of this he has become known as the "Father of Social Accounting."<sup>53</sup> In the mid 1960's, Linowes began publishing articles concerning the reporting of environmental information on financial statements and in 1972 published what he called a "Socio-economic Operating Statement" (SEOS) (Illustration 7).

Linowes recommends the statement be prepared periodically to coincide with the organization's profit and loss statement and balance sheet. It is intended to include those items which an organization has given to or held back from society. It compiles expenditures that are voluntarily made to improve the welfare of employees and the public, product safety, or environmental conditions. Mandatory expenditures would not be included because they are a necessary or required expense



**I Relations with people****A Improvements:**

1 Training program for handicapped workers	\$ 10,000	
2 Contribution to black college	4,000	
3 Extra turnover costs because of minority hiring program	5,000	
4 Cost of nursery school for children of employees, voluntarily set up	<u>11,000</u>	
Total improvements		\$ 30,000

**B Less detriments:**

Postponed installing new safety devices on cutting machines (cost of the devices)		<u>14,000</u>
--	--	---------------

C Net improvements in people actions for the year \$ 16,000

**II Relations with environment****A Improvements:**

1 Cost of reclaiming and landscaping old dump on company property	\$ 70,000	
2 Cost of installing pollution control devices on Plant A smokestacks	4,000	
3 Cost of detoxifying waste from finishing process this year	<u>9,000</u>	
Total improvements		\$ 83,000

**B Less detriments:**

1 Cost that would have been incurred to re-landscape strip mining site used this year	\$ 80,000	
2 Estimated cost to have installed purification process to neutralize poisonous liquid being dumped into stream	<u>100,000</u>	<u>\$180,000</u>

C Net deficit in environment actions for the year (\$ 97,000)

**III Relations with product****A Improvements:**

1 Salary of VP while serving on government product safety commission	\$ 25,000	
2 Cost of substituting lead-free paint for previously used poisonous lead paint	<u>9,000</u>	
Total improvements		\$ 34,000

**B Less detriments:**

Cost of safety device recommended by safety council but not added to product		<u>22,000</u>
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C Net improvements in product actions for the year \$ 12,000

Total socio-economic deficit for the year (\$ 69,000)

Add: Net cumulative socio-economic improvements as at  
January 1, 1972 \$249,000

Grand total net socio-economic actions to December 31, 1972 \$180,000

of doing business. Matched against these expenditures would be the detriments to society that a prudent, socially aware management would be expected to take care of but which it chose not to. These various positive and negative social actions would be classified on the SEOS statement as one of three groups: relations with people, relations with environment, and relations with products.

Linowes cites several rules that he believes help identify particular information to be reported on the SEOS:

1. If a socially beneficial action is required by enforceable law and regulations, it is not included on a SEOS.
2. If a socially beneficial action is required by law, but is ignored, the cost of such item is a "detriment" for the year. The same treatment is given an item if postponed, even with government approval.
3. A prorated portion of salaries and related expenses of personnel who spend time in socially beneficial actions or with social organizations is included.
4. The cost of re-landscaping strip-mining sites or other environmental eyesores, if not required by law, are included.<sup>56</sup>

Although Linowes includes more rules, these four apply basically to the environmental portion of his SEOS. (Relations with Environment.)

Linowes also adds that the cost of installing a pollution-control device would be included in the SEOS statement for the year the cost was incurred, while the annual operating cost would be expensed each year.<sup>57</sup>

Examples of specific environmental items which he recommends be included as positive action are:

1. Costs incurred for replenishing land that had been polluted such as landscaping.
2. Expenditures for pollution control devices on smokestacks.

3. Detoxification of waste items.<sup>58</sup>

Items which he recommends be considered a detriment are:

1. Costs that should have been incurred in landscaping, but were neglected.
2. Costs of installing purification process to neutralize poisonous liquid being emitted into streams.<sup>59</sup>

The preparation of such a statement of "social audit" would be done by a "small interdisciplinary team, headed by an accountant."<sup>60</sup>

Other members would include "a seasoned business executive, a sociologist, a public health administrator, an economist, and/or members of other disciplines whose specific expertise might apply to a particular industry or circumstance."<sup>61</sup> The SEOS statement would be prepared internally but audited by a team headed by a Certified Public Accountant.

The end result of this statement would be a "net socio-economic contribution or deficit" which could be compared to other firms in the industry. The comparative figures over the years would give the statement user a guide in establishing the direction the firm is going in connection with its social obligations. The total would be a combination of capital expenditures and periodic expenses.<sup>62</sup>

Floyd A. Beams and Paul E. Fertig recommended in 1971 that pollution data be reported in two parts; a verbal description and a quantitative picture. The verbal description would contain a "dual disclosure" section that would disclose the pollution problems of both the firm and the industry the firm is associated with. This would be reported along with the annual financial statements and would begin with an introductory section



stating:

1. A standard industry footnote which identifies the major pollution control problems within the industry, the goals of the industry in abating pollution, the control standards which have been imposed and the deadlines for compliance with existing standards (this industry note could be prepared by the research staff of the AICPA and supplied to auditors on a quarterly or semi-annual basis).
2. A firm disclosure which relates to the industry disclosure and compares firm and industry pollution problems, regulations, deadlines, goals and programs of abatement.<sup>63</sup>

The second part of their recommendation, the quantitative portion, would be to require separate disclosure in the financial statements of pollution control expenses (income statement), pollution control outlays (changes in financial position), and pollution control resources (balance sheet). Beams and Fertig believe that because the current trend towards publicizing dollar expenditures for pollution control is misleading, the AICPA should standardize the terminology and guidelines for classification of pollution control items. Present reporting is felt to be misleading because equal dollar amounts have different implications in relation to different firms and industries.<sup>64</sup>

Beams and Fertig feel that their recommendations would have the greatest value to investors. With their standardized statements, investors would have a greater opportunity to assess managements' commitment to saving environmental resources and would give management a stimulus to take greater responsibility in voluntary pollution control expenditures.<sup>65</sup>

A more recent recommendation for social environmental reporting is the program approach suggested by Charles H. Brandon and Joseph P. Matoney. They have borrowed the idea from public sector accounting (General Accounting Office) and adapted it to financial accounting.<sup>66</sup>

Because the program approach is goal orientated, the format must begin with a statement of goals which they define as "a desired state of affairs based on current knowledge and values".<sup>67</sup> (Illustration 8).

As an example of goals, they site the following hypothetical corporate goals:

Controlling goal:

To provide those public goods and/or services which will fulfill the corporation's responsibilities to its owners, employees, customers, and the general public.

Substantive goals:

Environment -- To provide a means of production whereby resources are used efficiently with minimum disturbance to the ecological balance.<sup>68</sup>

Following the goals, Brandon and Matoney recommend the corporation set its objectives which they describe quantitatively in terms of units of desired impact to be achieved within a given time frame and employing available resources. After the objectives, the corporation designs and implements its programs.

The "Social Responsibility Program Statement" would be reported with the annual financial statements. The statement shown in Illustration 9, would be divided into Human Resources, Physical Resources, Product or Service Contributions, and Community Involvement.<sup>69</sup> Each of these is further divided into:

### Social Responsibility Goals

#### I. Human resources

##### Controlling Goal

To provide for the physical and mental health and well being of employees .

##### Substantive Goal

Employee health--To promote employee health by providing a safe job environment, a system of health care insurance and outlets for physical exercise and recreation

Employee education--To encourage employee education by supporting general educational courses and financing of college and university instruction

#### II. Physical resources

##### Controlling Goal

To provide for the efficient use of physical resources in our manufacturing operations through reduction of waste and an awareness of environmental impacts--To promote reclamation of land damaged by past operations .

#### III. Product or service contributions

##### Controlling Goal

To provide a product safe and reliable in use, with recycling possibilities where possible and minimal packaging

##### Substantive Goal

To improve product safety and reliability through research and development

#### IV. Community involvement

##### Controlling Goal

To be a responsible participant and supporter of community affairs

##### Substantive Goal

To provide financial and advisory support to local minority business and training for unskilled workers through direct action and support and through charitable contributions

Illustration 8. Social Responsibility Goals of a program approach. <sup>70</sup>

Illustration 8. Social Responsibility Program Statement



I Human resources

<p>Program Company medical plan</p>	<p>Committed resources \$ _____ Health insurance contribution</p>	<p>Effect on human behavior and/or environment _____ Number of employees covered \$ _____ Claims paid during year _____ Injuries/1000 man- hours _____ Ratio of employee injuries to industry average</p>
<p>Job safety program</p>	<p>\$ _____ Expended for non- compulsory safety equipment _____ Man-hours spent on safety seminars and instruction _____ Suggestions adopted</p>	<p>_____ Employees partici- pants in softball league _____ Man-hour usage of company athletic facilities _____ Employees success- fully completing company courses of instruction _____ Credit hours financed at colleges or universities _____ Degrees awarded to employee participants in tuition reimburse- ment program</p>
<p>Leisure and recreation</p>	<p>\$ _____ \$ _____ Land value</p>	
<p>Education</p>	<p>_____ Employees participating in company courses of instruction \$ _____ Tuition paid</p>	

II Physical resources

<p>Program Company recycle program</p>	<p>Committed resources _____ Man-hours spent on special studies</p>	<p>Effect on human behavior and/or environment _____ Tonnage recycled _____ Ratio of waste/ final output _____ Energy usage/final output _____ Ratio of reclaimed/ damaged land</p>
<p>Land reclama- tion program</p>	<p>\$ _____</p>	

III Product or service contributions

<p>Program Product safety</p>	<p>Committed resources \$ _____ _____ Product research man-hours</p>	<p>Effect on human behavior and/or environment _____ Product safety inno- vations implemented</p>
<p>Packaging reduction</p>	<p>\$ _____ _____ Product research man-hours</p>	<p>_____ Reduction in tons of non-recyclable packaging _____ Tons of product or packaging recycled</p>

IV Community involvement

<p>Programs Local business development</p>	<p>Committed resources \$ _____ Funds contributed \$ _____ Loans to minority \$ _____ Business averaging _____ Man-hours spent training unemployed</p>	<p>Effect on human behavior and/or environment _____ Businessmen receiving free consulting _____ Workers trained and removed from welfare</p>
<p>Community fund</p>	<p>\$ _____ Contributions _____ Man-hours devoted to lecture on United Fund</p>	<p>_____ Percentage of employees contrib- uting fair share</p>

Illustration 9. Social Responsibility Program Statement. 71

1. Programs -- listing each social program in its order of importance.
2. Committed resources -- money, manpower, or physical property committed to the program. They should be expressed in dollars whenever possible.
3. Effect on environment -- the main point of the statement because it discloses results. This part is used to compare results to the objectives declared by management.

Brandon and Matoney feel their "Social Responsibility Program Statement" has many characteristics that make it more favorable than other reporting models. It is strictly a quantitative tool and is easily adopted by different firms in differing industries. Both of these characteristics permit it to be used for comparison purposes between firms. It reports on operations for a single year which makes it adaptable to interim reporting and because it relates to resource outlays, it is consistent with the matching concept.<sup>72</sup>

Probably the most detailed and extensive recommendation to be published is one that was suggested by Steven C. Dilley and Jerry J. Weygandt in 1973.<sup>73</sup> They began by comparing four alternative methods of reporting environmental information on a statement, they were:

1. Inventory Approach -- the business enterprise lists its social and environmental obligations.
2. Cost or Outlay Approach -- the enterprise discloses its obligations as in the inventory approach, but also discloses the

amounts spent to fulfill its obligations.

3. Program Management Approach -- the enterprise discloses social obligations, expenditures made, and its success in reaching the goals of its programs.
4. Benefit Cost Approach -- the enterprise discloses its social obligations, its expenditures made, and the worth of each expenditure. This approach is different from the program management approach in that the real worth of the program must be determined.

Of the four different approaches, Dilley and Weygandt feel the last to be the most appropriate for reporting purposes. The inventory approach lacks measurement criteria. The cost or outlay approach emphasizes the monetary value spent on the obligations and this will not always give the reader a true picture of the benefits gained. The program management approach would be good except that the approach requires goals and objectives and few companies have set any in the environmental areas.<sup>74</sup>

Dilley and Weygandt not only suggested using the benefit--cost method but actually implemented it on a utility company. They labeled it the "Social Responsibility Annual Report"<sup>75</sup> or SRAR. They obtained permission from a Midwest gas and electric utility to conduct a social audit of their operations and to have the information reported.

The SRAR begins with an introductory statement that insures the reader of what he is about to read: that the SRAR is an independent audit



and that it is not a company effort. Included in the introductory statement is:

1. The industry to which the enterprise belongs.
2. The scope and purpose of the audit or report.
3. The party conducting the audit and who paid for it.<sup>76</sup>

Independence is an unsolved matter in this report but its validity would be enhanced considerably if performed and paid for by an independent source rather than the enterprise itself.

Following the introductory statement is an informational statement of the particular company. This enables the reader to obtain a keen insight into the company and also enables a comparative study to be made of different companies within or outside the industry. The informational statement would include neutral information and would not judge the company. Included in the statement would be such information as:

1. type of company
2. this years revenues and expenditures
3. the nature of their products and a description of their customers'
4. number of employees
5. age of company
6. nature of ownership
7. parent -- subsidiary relationships with other companies<sup>77</sup>

The third part of the SRAR includes a description of the community and environment the company serves and operates in. Specific items may include:

1. data on population and area economics obtained from the Census Bureau.
2. personal observation of weather and topography conditions.
3. air and water pollution problems from scientific personnel.<sup>78</sup>

After the three statements described, which basically concern the company and its community, Dilley and Weygandt's SRAR involves itself with "meaningful quantitative information about the social concern to the company."<sup>79</sup>

Illustration 10 shows the fourth part of the SRAR which concerns itself with the pollution caused by the utility company. It describes comparatively the amount of pollutants emitted into the atmosphere by different fuels burned by the utility. The statement could also relate the utilities with local and federal regulations concerning these particular pollutants.

Illustration 11 shows similar information but in a different aspect of pollution. Because a utility company requires large quantities of water for cooling, this statement shows the temperature effects of discharging the warm water into the environment or "thermal water pollution." Although these last two statements are for a utility company, they may easily be adapted to any industry encountering pollution problems.

Dilley and Weygandt conclude their report with a "Statement of Funds Flow for Socially Relevant Activities."<sup>80</sup> This statement attempts to attach monetary significance to environmental and other social issues mentioned in prior statements. Illustration 12 shows such a "funds flow" statement is very comparable to Beams and Fertig's recommendation.

The SRAR, although more detailed than other recommendations, does not attempt to judge the company by its environmental actions but leaves it to the reader.

	Particulate matter		
	Coal	Oil	Gas
1971	3.3717	.003	.112
1970	4.3920	.001	.095

  

	Sulfur oxides		
	Coal	Oil	Gas
1971	17.71	.046	.005
1970	22.22	.027	.004

  

	Nitrogen oxides		
	Coal	Oil	Gas
1971	2.69	NA**	NA**
1970	3.58	NA	NA

The company was in compliance with all state and federal laws in regard to air pollution during 1971. Federal air pollution emission standards generally apply to new power plants. No new coal-fired boilers were put in service during 1971. State regulations require compliance with stringent air pollution standards by 1973. To meet those more stringent standards, the company will have to reduce its pollution emissions by 1973. To accomplish this goal, the company is installing electrostatic precipitators to trap 99.5 percent of the particulate matter, using as much natural gas as is available and using low-sulfur coal when it can be obtained. The pollutants emitted during 1971 can impose social costs upon the community which the company serves. These social costs are composed of increased soiling costs, increased incidence of respiratory disease and decreases in property values.

\*\*Not applicable.



Type of cooling system	Once-through		
Source of cooling water:	Fresh-water lake, area 5.4 sq. mi.		
Cooling water data:	Temperature as received	Temperature as discharged	Differ- ence
Winter maximum	40° F	69° F	29° F
Summer maximum	79° F	105° F	26° F
Average rate of water consumption during 1971:	1 cu.ft./sec.		
Average rate of water withdrawal from water body:	152 cu.ft./sec.		
Average rate of water discharge to water body:	151 cu.ft./sec.		
Depth of water withdrawal:	17 ft.		

Depth of water discharge: Surface

Illustration 11. Pollution Activities Caused by a Utility.<sup>82</sup>

Illustration 12. Statement of Funds Flow for Socially Relevant Activities.<sup>83</sup>

Environmental

Installation of electrostatic precipitators (Note 1)	\$ 26,000	
Construction of power plants (Note 2)	2,089,000	
Construction of transmission lines (Note 3)	35,000	
Electrical substation beautification (Note 4)	142,000	
Incremental cost of low-sulfur coal (Note 5)	33,670	
Conversion of service vehicles to use of propane gas (Note 6)	3,700	
Incremental cost of underground electric installations (Note 7)	737,000	
Incremental cost of silent jackhammers (Note 8)	100	
Environmental research—		
Thermal	\$17,000	
Nuclear	1,955	
Other	38,575	
Subtotal	57,530	
Total environmental funds flow		\$3,124,000
<u>Other benefits</u>		
Charitable contributions	\$26,940	
Employee educational and recreational expenditures (Note 9)	6,000	
Total other benefits		32,940
<u>Total 1971 funds flow for socially relevant activities</u>		\$3,156,940
As a percentage of 1971 operating revenues		7.9%
As a percentage of 1971 advertising expenses		8,500%

Notes to funds statement

- 1 The company will complete installation of two electrostatic precipitators in 1973. Costs in 1971 totaled \$26,000.
- 2 The company is building power plants which will begin operation in the middle to late 1970's. Incremental cash costs of environmental controls installed in these plants during 1971 totaled \$2,089,000.
- 3 The company is constructing a high-voltage transmission line from another community to the company's service area. Environmental cash costs resulting from wider spacing of line towers totaled \$35,000 in 1971.
- 4 The company constructed a new substation in 1971 with an enclosed structure rather than open exposure of the electric transformers. The cost of this enclosure along with landscaping of existing substations totaled \$142,000 in 1971.
- 5 The company used approximately 150,000 tons of coal during 1971 for electric power generation. Low-sulfur content coal comprised 8.6 percent of this coal consumption with the remaining 91.4 percent being coal of a higher sulfur content. The low-sulfur coal cost approximately \$2.61/ton more than the high-sulfur coal.
- 6 Motor vehicles fueled with propane gas contribute substantially less air pollutants to the atmosphere than gasoline-fueled vehicles. During 1971 the company converted 9 more of its fleet of 115 vehicles to use of propane gas. The cost of this conversion was \$3,700. Seventeen company vehicles are now operated on propane gas.
- 7 Underground installation of electric transmission lines has increased since environmental attention has focused on the aesthetic pollution of poles and wires. During 1971 the company installed underground electric transmission lines, which cost \$737,000 more than putting the same lines above ground.
- 8 Jackhammers used by the company are, with one exception, of the normal, noise-polluting type. One jackhammer purchased during 1971 with noise controls cost \$100 more than the regular jackhammers.
- 9 The company reimburses employees for educational expenditures and provides recreational opportunities such as the annual company picnic. Such expenditures amounted to approximately \$6,000 in 1971.

communicate to the reader that the corporation may not be fulfilling all of its social responsibilities.

The future of environmental reporting will probably follow similar guidelines to the four recommendations presented. Questions still left unanswered in these recommendations are:

1. Who will pay for the reporting?
2. Who will actually complete auditing of the information?

Accountants have made slow progress in the area of environmental reporting mainly because they have no experience in the area and some information is difficult to quantify. Also, APB Statement No. 4, has left the accounting profession with a narrow concept that does not include social cost reporting.

The future will undoubtedly bring many new recommendations concerning environmental reporting. The present recommendations, with the exception of Beams and Fertigs', seem to suggest that the accounting profession must make material changes in its concepts and principles to allow environmental reporting to be useful to statement users. Beams and Fertig have contributed the most realistic solution and one more likely to be accepted by the profession. They have basically stayed with the three main financial statements but adapted them for social reporting.

<sup>12</sup> Dilley, p. 20.

<sup>13</sup> *Ibid.*

<sup>14</sup> *Ibid.*



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Robert L. Sullivan, "CPA's Role in Restoring the Ecological Balance," Management Advisor 8 (March-April 1971):23-29.

H. S. Sawin, "The CPA's Role in Restoring the Ecological Balance," Management Advisor 8 (March-April 1971):23-29.

Chastain, p. 56.

FOOTNOTES

<sup>1</sup>S. Kerry Cooper and Mitchell H. Raiborn, "Accounting for Corporate Social Responsibility," MSU Business Topics 22 (Spring 1974):18.

<sup>2</sup>Steven C. Dilley, "Practical Approaches to Social Accounting," CPA Journal 65 (February 1975):17.

<sup>3</sup>Sybil C. Mobley, "The Challenges of Socioeconomic Accounting," The Accounting Review 47 (October 1972):762.

<sup>4</sup>Accounting Principles Board of the American Institute of CPAs, "Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprise," APB Statement No. 4 (1970):45.

<sup>5</sup>Nabil Elias and Marc Epstein, "Dimensions of Corporate Social Accounting," Management Accounting 56 (March 1975):36.

<sup>6</sup>Cooper and Raiborn, p. 20.

<sup>7</sup>Floyd A. Beams and Paul E. Fertig, "Pollution Control Through Social Cost Conversion," Journal of Accountancy 132 (November 1971):38.

<sup>8</sup>Clark E. Chastain, "Corporate Accounting for Environmental Information," Financial Executive 43 (May 1975):48.

<sup>9</sup>James E. Parker and Steven C. Reimer, "Pollution and Accounting," The Ohio CPA 30 (Autumn 1971):128.

<sup>10</sup>Ibid.

<sup>11</sup>Floyd A. Beams, "Accounting for Environmental Pollution," The New York CPA 40 (August 1970):660.

<sup>12</sup>Dilley, p. 20.

<sup>13</sup>Ibid.

<sup>14</sup>Ibid.

- <sup>15</sup> Robert L. Sullivan, "CPA's Role in Restoring the Ecological Balance," Management Advisor 8 (March-April 1971):23-29.
- <sup>16</sup> H. S. Sawin, "The CPA's Role in Restoring the Ecological Balance," Management Advisor 8 (March-April 1971):23-29.
- <sup>17</sup> Chastain, p. 50.
- <sup>18</sup> Parker and Reimer, p. 125.
- <sup>19</sup> Shulman, p. 39.
- <sup>20</sup> Cooper and Raiborn, p. 22.
- <sup>21</sup> Shulman, p. 39.
- <sup>22</sup> Parker and Reimer, p. 126.
- <sup>23</sup> Ibid.
- <sup>24</sup> Beams and Fertig, p. 40.
- <sup>25</sup> D. Y. Causey and J. W. Pratt, "Environmental Problems -- Can Accountants Help Find Solutions," The Texas CPA 46 (October 1973):23.
- <sup>26</sup> Beams and Fertig, p. 41.
- <sup>27</sup> Parker and Reimer, p. 128.
- <sup>28</sup> Ibid.
- <sup>29</sup> Ibid.
- <sup>30</sup> Ibid.
- <sup>31</sup> Beams and Fertig, p. 39.
- <sup>32</sup> Beams, p. 657.
- <sup>33</sup> Cooper and Raiborn, p. 22.
- <sup>34</sup> Securities Act Release 5170, (July 19, 1971).
- <sup>35</sup> Securities and Exchange Commission, Release No. 5569 (February 11, 1975).

<sup>36</sup>Steven C. Dilley, "External Reporting of Social Responsibility," MSU Business Topics 23 (Autumn 1975):13.

<sup>37</sup>Dilley, p. 14.

<sup>38</sup>Ibid., p. 16.

<sup>39</sup>Ibid., p. 15.

<sup>40</sup>Ibid., p. 16.

<sup>41</sup>Ibid., p. 18.

<sup>42</sup>Ibid., p. 16-21.

<sup>43</sup>Ibid., p. 20.

<sup>44</sup>Elias and Epstein, p. 39.

<sup>45</sup>Dilley, p. 16.

<sup>46</sup>Ibid., p. 22.

<sup>47</sup>Ibid., p. 16-17.

<sup>48</sup>Ibid., p. 19.

<sup>49</sup>Ibid., p. 21.

<sup>50</sup>Ibid.

<sup>51</sup>Elias and Epstein, p. 36-39.

<sup>52</sup>Dilley, p. 24.

<sup>53</sup>W. C. McGrew, "Social/Environmental Accounting," Federal Accountant 23 (December 1974):22.

<sup>54</sup>David F. Linowes, "The Accounting Profession and Social Progress," Journal of Accountancy 136 (July 1973):38.

<sup>55</sup>Ibid., p. 39.

<sup>56</sup>David F. Linowes, "Let's Get on With the Social Audit: A Specific Proposal," Business and Society Review (Winter 1972-73):40.

<sup>57</sup>Ibid., p. 40.



<sup>58</sup>Ibid.

<sup>59</sup>Ibid., p. 41.

<sup>60</sup>Ibid.

<sup>61</sup>Ibid.

<sup>62</sup>David F. Linowes, Journal of Accountancy, p. 38.

<sup>63</sup>Ibid., p. 42.

<sup>64</sup>Ibid.

<sup>65</sup>Ibid.

<sup>66</sup>Charles H. Brandon and Joseph P. Matoney, Jr., "Social Responsibility Financial Statement," Management Accounting 57 (November 1975):32.

<sup>67</sup>Ibid.

<sup>68</sup>Ibid.

<sup>69</sup>Ibid.

<sup>70</sup>Ibid.

<sup>71</sup>Ibid., p. 33.

<sup>72</sup>Brandon and Matoney, p. 34.

<sup>73</sup>Steven C. Dilley and Jerry J. Weygandt, "Measuring Social Responsibility: an Empirical Test," Journal of Accountancy 136 (September 1973):62.

<sup>74</sup>Ibid., p. 64.

<sup>75</sup>Ibid., p. 65.

<sup>76</sup>Ibid.

<sup>77</sup>Ibid., p. 66.

<sup>78</sup>Ibid.

<sup>79</sup>Ibid.

<sup>80</sup>Ibid., p. 69.

<sup>81</sup>Ibid., p. 66.

<sup>82</sup>Ibid., p. 67.

<sup>83</sup>Ibid., p. 69.

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