ENVIRONMENTAL DISCLOSURE

SEC Should Explore Ways to Improve Tracking and Transparency of Information
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Why GAO Did This Study

To help investors make informed decisions, the Securities and Exchange Commission (SEC) enforces federal securities laws requiring companies to disclose all information that would be considered important or “material” to a reasonable investor, including information on environmental risks and liabilities, in reports filed with SEC. To monitor companies’ disclosures, SEC reviews their filings and issues comment letters requesting revisions or additional information, if needed. This report addresses (1) key stakeholders’ views on how well SEC has defined the requirements for environmental disclosure, (2) the extent to which companies are disclosing such information in their SEC filings, (3) the adequacy of SEC’s efforts to monitor and enforce compliance with disclosure requirements, and (4) experts’ suggestions for increasing and improving environmental disclosure.

What GAO Found

Key stakeholders disagree about how well SEC has defined the disclosure requirements for environmental information. Some stakeholders who use companies’ filings, such as investor organizations and researchers, maintained that the requirements allow too much flexibility and are too narrow in scope to capture important environmental information. Other stakeholders, primarily those who prepare or file reports with SEC, said that the scope of the current requirements and guidance is adequate and that companies need flexibility to accommodate their individual circumstances.

Little is known about the extent to which companies are disclosing environmental information in their filings with SEC. Determining what companies should be disclosing is extremely challenging without access to company records, considering the flexibility in the disclosure requirements. Despite strong methodological limitations, some studies provide tentative insights about the amount of environmental information companies are disclosing and the variation in disclosure among companies. However, the problem in evaluating the adequacy of disclosure is that one cannot determine whether a low level of disclosure means that a company does not have existing or potential environmental liabilities, has determined that such liabilities are not material, or is not adequately complying with disclosure requirements.

The adequacy of SEC’s efforts to monitor and enforce compliance with environmental disclosure requirements cannot be determined without better information on the extent of environmental disclosure. In addition, SEC does not systematically track the issues raised in its reviews of companies’ filings and thus, does not have the information it needs to analyze the frequency of problems involving environmental disclosure, compared with other types of disclosure problems; identify trends over time or within particular industries; or identify areas in which additional guidance may be warranted. Over the years, SEC and EPA have made sporadic efforts to coordinate on improving environmental disclosure; currently, EPA periodically shares limited information on specific, environment-related legal proceedings, such as those involving monetary sanctions.

Using a Web-based survey of 30 experts that use disclosure information, including investor organizations and financial analysts among others, GAO obtained suggestions for increasing and improving environmental disclosure in three broad categories: modifying disclosure requirements and guidance, increasing oversight and enforcement, and adopting nonregulatory approaches to improving disclosure. Some of the experts offered comments about why particular proposals are unnecessary or unworkable. GAO also sought the views of representatives of companies that file reports with SEC, who questioned the value and feasibility of some suggestions.

What GAO Recommends

GAO is recommending that SEC take steps to improve the tracking and transparency of information related to its reviews of companies’ filings, and to work with the Environmental Protection Agency (EPA) to explore ways to take better advantage of EPA data relevant to environmental disclosure. SEC agrees with GAO’s recommendations and is taking action by, for example, making comment letters and company responses available on its Web site, beginning with August 2004 filings.


To view the full product, including the scope and methodology, click on the link above. For more information, contact John B. Stephenson at (202) 512-3841 or stephensonj@gao.gov.
Abbreviations

AICPA  American Institute of Certified Public Accountants
EPA    Environmental Protection Agency
GAO    Government Accountability Office
SEC    Securities and Exchange Commission

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July 14, 2004

The Honorable James M. Jeffords  
Ranking Minority Member  
Committee on Environment and Public Works  
United States Senate

The Honorable Jon S. Corzine  
United States Senate

The Honorable Joseph I. Lieberman  
United States Senate

Recent scandals in the business world have shaken investors’ confidence in corporate financial reporting and the underlying accounting and auditing practices, and have highlighted the importance of disclosing key information to potential investors. Environmental risks and liabilities are among the conditions that, if undisclosed, could impair the public’s ability to make sound investment decisions. For example, the discovery of extensive hazardous waste contamination at company-owned facilities could expose a company to hundreds of millions of dollars in cleanup costs, while impending environmental regulations could affect a company’s future financial position if the company were required to shut down plants or invest in expensive new technology. While not the primary impetus, concern about environmental liabilities has also contributed to the growth of “socially responsible” investor groups and mutual funds that invest only in companies with a strong record in environmental compliance, worker protection, and other social issues. Congress passed the Sarbanes-Oxley Act of 2002 to protect investors by improving the accuracy and reliability of corporate disclosures, which could lead to improved reporting of environmental liabilities.

The Securities and Exchange Commission’s (SEC) primary mission is to protect investors and the integrity of securities markets. Among other things, SEC regulations require companies to disclose information that would be considered “material” by a reasonable investor. A matter is material if there is a substantial likelihood that a reasonable person would consider it important. The omission or misstatement of an item in a financial report is material if, in light of surrounding circumstances, the magnitude of the item is such that the judgment of a reasonable person would probably have been changed or influenced by the inclusion or correction of the item. Information that might be considered material can
include, for example, significant changes in accounting practices or potential risks or liabilities, such as the cost of a major environmental cleanup, that could affect future earnings. SEC’s Division of Corporation Finance monitors compliance with the disclosure requirements by periodically reviewing companies’ filings and issuing comment letters to the companies, if necessary, to request any additional information that might be required. In addition, SEC’s Division of Enforcement may seek a monetary penalty or take some other enforcement action when a company’s failure to comply with disclosure requirements is particularly egregious. While the Environmental Protection Agency (EPA) does not have a direct role in monitoring environmental disclosures, the agency encourages the disclosure of environmental legal proceedings by notifying companies of potential disclosure obligations and periodically shares relevant information with SEC.

You asked us to determine (1) key stakeholders’ views on how well SEC has defined the requirements for environmental disclosure, (2) the extent to which companies are disclosing environmental information in their filings with SEC, (3) the adequacy of SEC’s efforts to monitor and enforce compliance with the disclosure requirements, and (4) what actions experts suggest for increasing and improving environmental disclosure. To obtain views on environmental disclosure requirements, we reviewed SEC’s disclosure regulations along with relevant standards and guidance from SEC, the Financial Accounting Standards Board, and the American Institute of Certified Public Accountants (AICPA). We also interviewed representatives of groups with a stakeholder interest in environmental disclosure, including investor organizations, financial services institutions, environmental groups and consultants, business associations, credit rating agencies, and public accounting firms. For information on the extent to which companies are disclosing environmental information in their filings with SEC, we reviewed 27 studies conducted from 1995 to 2003 and assessed their methodologies. After eliminating 12 studies that either had severe methodological limitations or did not address aspects of environmental disclosure relevant to our objectives, we summarized the findings of the remaining 15 studies. At the committee’s request, we supplemented our analysis of existing studies with a limited examination of disclosures related to potential future risks, focusing on the impacts of potential controls on greenhouse gas emissions at 20 U.S. electric utilities with relatively high emissions of carbon dioxide.

For information on SEC’s monitoring and enforcement of environmental disclosure requirements, we reviewed SEC’s policies and procedures,
obtained agency statistics on relevant activities, and interviewed officials within SEC and EPA. To obtain suggestions for increasing and improving environmental disclosure, we conducted a Web-based survey of 30 experts that use disclosure information, including representatives of the accounting and auditing profession, environmental consultants and attorneys, investment and financial services, the insurance industry, environmental interest groups, public employee pension funds, and credit rating agencies, among others. Some of the experts were also among the stakeholders consulted about the disclosure requirements. To ensure balance, we sought the views of representatives of reporting companies regarding the experts’ suggestions. We conducted our work between February 2003 and June 2004 in accordance with generally accepted government auditing standards. (See app. I for a detailed description of our scope and methodology.)

Results in Brief

Key stakeholders disagree on how well SEC has defined the requirements for environmental disclosure, with some saying that certain aspects of the requirements provide too much flexibility and are too narrowly scoped, while others maintain that the flexibility is warranted and the scope adequate. The stakeholders who cited concerns generally included groups with an interest in environmental protection or socially responsible investing. These stakeholders said, for example, that companies may not be disclosing some potential environmental liabilities or may be minimizing the amounts reported because SEC’s guidance is not specific enough in certain areas, such as (1) disclosing liabilities when their occurrence or amount is uncertain, (2) assessing the materiality of liabilities and potential risks, and (3) disclosing potentially significant environmental problems or regulatory initiatives that could pose future financial risks. In contrast, stakeholders who viewed the existing requirements for environmental disclosure as sufficiently well defined generally represented entities responsible for reporting information to SEC and groups with general investment interests. Among other things, these stakeholders commented that the flexibility in the requirements is necessary to accommodate the variability in companies’ circumstances and that developing more specific guidance would not be feasible. For some of these stakeholders, the problems with inadequate disclosure—to the extent such problems exist—are linked to inadequate oversight and enforcement rather than to the nature of the requirements. However, this view was not shared by representatives of businesses responsible for filing SEC reports, who believe that SEC’s oversight is adequate.
Little is known about the extent to which companies are disclosing environmental information in their filings with SEC, despite many efforts to study environmental disclosure over the past 10 years. The primary impediments to conducting such studies lie in determining for specific companies (1) what environmental information is potentially subject to disclosure and (2) whether the information should be considered material—thus meeting the reporting threshold—given the companies’ particular circumstances. While disclosure studies can summarize the information included in companies’ SEC filings, determining what should have been reported may be impossible without direct access to company records. The studies included in our review had other serious limitations as well, including small sample sizes and narrow focus. While the results of these studies are very limited and not generalizable, some indicate that the extent of environmental disclosure has increased over time and that, within a particular industry, it can vary considerably in terms of the amount and type of information provided. Our own analysis of a limited number of disclosures related to the future risks posed by potential controls over greenhouse gas emissions similarly revealed substantial variation in the information that companies are reporting to investors. However, because of the flexibility in some aspects of the requirements, it is impossible to determine whether differences in the level of disclosure reflect differences in the risks companies face or differences in the extent to which companies are disclosing these risks.

The adequacy of SEC’s efforts to monitor and enforce compliance with environmental disclosure requirements cannot be determined without more definitive information on the extent of environmental disclosure and the results of SEC’s oversight process. SEC’s primary means of overseeing disclosure are reviewing companies’ filings and issuing comment letters to request revisions or additional information. In each of the past 5 years, SEC’s Division of Corporation Finance reviewed about 8 to 20 percent of companies’ annual filings. SEC does not, however, track the nature of the division’s comments on filings to identify the most common problems, analyze trends, or determine where additional guidance may be warranted. Agency officials said that based on their experience, the adequacy of companies’ environmental disclosure rarely prompts comments, partly because of the nature of the businesses involved, although such comments are more prevalent in industries such as manufacturing and oil and gas. In keeping with this observation, an SEC review of annual filings from Fortune 500 companies in 2002 found relatively few problems with environmental disclosure overall, compared with other types of disclosure. Despite sporadic efforts to coordinate on improving environmental
disclosure, SEC and EPA do not have a formal agreement to share relevant information. At one time, EPA was providing enforcement-related data to SEC’s Division of Corporation Finance on a quarterly basis, but SEC questioned the usefulness of the data because they were facility-specific and SEC could not readily identify the parent company responsible for filing reports with SEC. Currently, information sharing occurs less frequently and is focused on specific legal proceedings, such as those involving monetary sanctions for environmental violations.

Experts’ suggestions on ways to increase and improve environmental disclosure fell primarily into three broad categories: (1) modifying the disclosure requirements and improving guidance for reporting entities (2) stepping up SEC’s monitoring and enforcement of existing requirements, and (3) adopting nonregulatory approaches to improving disclosure. In the first category, some experts that we surveyed suggested additional guidance to clarify specific requirements and terminology and to rein in flexibility. For example, some experts suggested that SEC clarify its requirements for when environmental liabilities must be disclosed and require either the use of a specific cost-estimation method or, at a minimum, disclosure of more information about the method used and related assumptions. In the second category, some experts suggested that SEC put more emphasis on corporate compliance with environmental disclosure requirements by, for example, reviewing more filings in relevant industries, and improve coordination between SEC and EPA on environmental matters. Some experts also advocated that when the opportunity exists, SEC initiate a few high-profile enforcement cases to emphasize the seriousness of not disclosing material environmental information and to establish legal precedents for interpreting current requirements and guidance. In the third category, suggestions included pressure from investor groups and financial institutions for better disclosure of environmental information through shareholder petitions and voluntary environmental reporting initiatives. Some experts offered comments on why particular proposals are unnecessary or unworkable. Representatives of reporting companies also believe that some of the suggestions would not improve disclosure of environmental information, but agreed that nonregulatory approaches can be effective in making company management aware of public interest in environmental disclosure.

We are making recommendations to increase the amount of information available to SEC and the public on the results of SEC’s filing reviews and to improve the level of coordination between SEC and EPA. In commenting
on a draft of this report, SEC agreed with our recommendations and, in particular, said that the agency is taking steps to increase the tracking and transparency of key information. EPA generally agreed with the information presented in the report.

**Background**

SEC seeks to (1) promote full and fair disclosure; (2) prevent and suppress fraud; (3) supervise and regulate the securities markets; and (4) regulate and oversee investment companies, investment advisors, and public utility holding companies. To ensure that all investors have access to basic relevant information prior to trading, federal securities laws require certain companies to register with SEC and make public particular information. Among other things, these companies are required to file reports with SEC about their financial condition and business practices when stock is initially sold and on a continuing and periodic basis afterwards to help investors make informed decisions. Each year, companies generally must file, at a minimum, one annual report, called a 10-K, and three quarterly reports, known as 10-Qs.

SEC promulgates regulations and issues guidance on what information public companies must disclose in their filings. Beginning in 1982, SEC integrated all of the required disclosures into one omnibus regulation, regulation S-K. According to SEC, three sections of regulation S-K are most likely to elicit environmental disclosures, either because of specific environment-related requirements or common practice:

- Under S-K item 101, companies must disclose the material effects of compliance with federal, state, and local environmental provisions on their capital expenditures, earnings, and competitive position;

- Under S-K item 103, companies must describe certain administrative or judicial legal proceedings arising from federal, state, or local environmental provisions; and

- Under S-K item 303, companies must discuss their liquidity, capital resources, and results of operations. For example, companies must identify any known trends, demands, commitments, events, or uncertainties that may result in a material change in the company’s liquidity. In this part of the filing, known as Management’s Discussion and Analysis of Financial Condition and Results of Operations, SEC expects to see information on any environmental matters that could materially affect company operations or finances.
In addition to its own disclosure requirements, SEC relies on the standards and guidance issued by the Financial Accounting Standards Board and the Public Company Accounting Oversight Board to help ensure that companies are properly accounting for and reporting on their financial operations, including any environmental losses resulting from liabilities or from permanent reductions in the value of company assets.\(^1\) For example, SEC presumes that financial statements in company filings that are not prepared in accordance with generally accepted accounting principles, promulgated by the Financial Accounting Standards Board, are misleading or inaccurate. Moreover, SEC regulations require companies to submit audited financial statements with their annual filings. The audits are performed by independent auditors, who are subject to professional auditing standards, which until recently were promulgated by the AICPA. Under the Sarbanes-Oxley Act of 2002, the new Public Company Accounting Oversight Board, appointed and overseen by SEC, is now responsible for issuing standards related to the preparation of audit reports for publicly held companies.\(^2\)

To monitor compliance with disclosure requirements, SEC's Division of Corporation Finance periodically reviews companies' filings and issues comment letters to the companies, if necessary, to request additional information, amendments of prior filings, or specific disclosures in future filings. While Corporation Finance does not have direct authority to compel companies to respond to its comment letters, companies know that failure to do so could delay approval of filings that they need in order to raise capital. In egregious cases, Corporation Finance can refer companies to SEC's Division of Enforcement. The Division of Enforcement can seek sanctions against companies for the misrepresentation or omission of important information about securities in civil or administrative proceedings. Among the sanctions available to SEC are obtaining a permanent injunction against an officer of the company; levying monetary penalties; requiring the return of illegal profits, known as disgorgement; and barring an individual from serving as an officer or director in a public

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\(^1\)The securities laws authorize SEC to prescribe the methods to be followed in the preparation of accounts and the form and content of financial statements to be filed under those laws. To assist in meeting these responsibilities, SEC has historically relied upon private sector standard-setting bodies designated by the accounting profession to develop accounting principles and standards. Since 1973, SEC has officially recognized the Financial Accounting Standards Board as the authoritative standard-setting organization.

\(^2\)The AICPA continues to exist as the officially recognized standard-setting body for independent financial audits of nonpublic companies.
company. EPA encourages companies to disclose environmental legal proceedings by notifying companies of potential disclosure obligations and sharing relevant information with SEC.

Congress passed the Sarbanes-Oxley Act of 2002 to improve the accuracy and reliability of corporate disclosures. While the act does not contain provisions that specifically address environmental disclosure, some of them could lead to improved reporting of environmental liabilities. These provisions include requirements for SEC to more frequently review company filings; for companies to make real-time disclosures of material changes in their financial conditions; and for company officials to annually assess the effectiveness of internal controls and procedures for financial reporting and to certify that their SEC filings fairly present, in all material respects, the company’s financial condition and results of operations. In addition, the act authorizes an increase in SEC’s funding for, among other things, additional professional support staff necessary to strengthen SEC’s disclosure and fraud prevention programs.  

The term “socially responsible investor” refers to individuals who screen their investments based on companies’ environmental, labor, or community practices. Beginning in the late 1960s, some investors consciously avoided the securities of companies they perceived as polluting the environment, engaging in unfair labor practices, or otherwise exhibiting poor corporate governance, and sought out investments in companies perceived to have better records on various social issues. Although initially a marginal segment of the investing community, the dollar amount of assets in socially screened accounts has increased significantly in recent years. The Social Investment Forum, an organization of over 500 social investment practitioners and institutions, estimated that in 2003, the total assets invested in such accounts were about $2 trillion in the United States, or about 11 percent of the $19.2 trillion in assets under professional management.

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While most of the disclosure requirements are designed for broad application—and apply to the disclosure of all types of information, including environmental matters—some of the regulations and related guidance provide criteria specifically for determining whether and how to disclose environmental information. (See app. II for a list of the principal requirements and guidance applicable to environmental disclosure.) Key stakeholders disagree about whether the flexibility and scope of existing disclosure requirements for environmental information are appropriate. Some stakeholders who use companies’ filings, such as investors and researchers, believe that the existing environmental disclosure requirements allow too much flexibility and are too narrow in scope to capture important environmental information. Other stakeholders, primarily those who prepare or file reports with SEC, hold the opposite view, and said that the scope of the current requirements and guidance is adequate and that companies need flexibility to accommodate their individual circumstances.

In determining whether to disclose environmental information, public companies generally must apply the same standards and guidance as they apply to other information that is potentially subject to disclosure. SEC, the Financial Accounting Standards Board, and the AICPA have issued broadly applicable regulations, standards, and guidance related to determining the likelihood and amount of potential liabilities; the materiality of information relevant to the company, its results of operations, or its financial condition; and the extent to which future risks must be disclosed.

Generally accepted accounting principles require companies to report liabilities, including environmental liabilities, in their financial statements if the liabilities’ occurrence is “probable” and their amounts are “reasonably estimable.” A liability is reasonably estimable if company management can develop a point estimate or determine that the amount falls within a particular dollar range. According to generally accepted accounting principles, companies should always accrue (and disclose) their best estimate for a liability in their financial statements, given the range of possible costs. If no one estimate is better than the others, the applicable accounting standard specifies that companies should accrue the lowest estimate in the range in their financial statements, although they must still disclose the potential for additional liability in the footnotes to the financial statements.
If the liability does not meet one or both of the criteria for accruing in the financial statements, it must nonetheless be disclosed in the footnotes if it is “reasonably possible.” The term “reasonably possible” represents a range of possible outcomes that have a greater than remote chance of occurring.

SEC regulations generally require disclosure of information only if it is “material.” According to SEC officials, in determining whether information is material, the agency relies on the Supreme Court’s statement that “an omitted fact is material if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote.”

Guidance issued by the Financial Accounting Standards Board states that the omission of an item in a financial report is material, if, in light of surrounding circumstances, the magnitude of the item is such that it is probable that the judgment of a reasonable person relying on the report would have changed or been influenced by the inclusion or correction of the item. In general, SEC and other standard-setting bodies recognize that only those who have all the facts can properly make materiality judgments. The Financial Accounting Standards Board believes that no general standards of materiality could be formulated to take into account all the considerations that enter into an experienced human judgment.

Concerning the disclosure of future risks, including risks related to environmental matters, SEC regulation S-K item 303 requires company management to discuss the company’s liquidity, capital resources, and results of operations. For example, a company must identify any known trends, demands, commitments, events, or uncertainties that may result in a material change in the company’s liquidity. In addition, under item 303 companies are “encouraged” to include in their filings forward-looking information, which SEC guidance defines as anticipating a future trend or event, or anticipating a less predictable impact of a known event, trend, or

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5If the best estimate in a range is accrued, then the potential for additional liability need not be disclosed. However, under guidance from the AICPA, companies must disclose the risks and uncertainties of their estimates when it is at least reasonably possible that the estimates will change in a way that is material to the financial statements within the next year. See AICPA, Statement of Position 94-6: Disclosure of Certain Significant Risks and Uncertainties, (New York, N.Y.: 1994).

In a 1989 interpretive release, SEC explained when companies are obligated to disclose future risks. The guidance says that "a disclosure duty exists where a trend, demand, commitment, event or uncertainty is both presently known to management and reasonably likely to have material effects on the registrant's financial condition or results of operation."\(^7\)

Some reporting standards and guidance relate specifically to the disclosure of environmental information or contain specific environmental benchmarks. For example, the AICPA has issued comprehensive supplemental guidance on the disclosure of environmental liabilities.\(^9\) For determining whether environmental liabilities should be disclosed, this guidance uses the terms "probable," "reasonably possible," or "remote," as benchmarks for determining the likelihood that a liability will occur and includes some representative situations in which disclosure is warranted. By way of illustration, the guidance suggests that companies use notification by EPA that they are a potentially responsible party at a hazardous waste site as an indication that a liability is probable and subject to disclosure if material. The supplemental accounting guidance also contains a chapter on measuring the amount of environmental liabilities, given the uncertainties inherent in environmental sites. It identifies the cost elements that should be included when estimating the dollar amount of a liability—including litigation, risk assessment and planning, cleanup, and monitoring—and it requires companies to use whatever information is available.

Disclosure of environmental information is also specifically addressed in SEC regulation S-K item 103. Although SEC’s regulations and guidance

\(^7\)SEC regulations provide a "safe harbor" under which the agency will generally not consider forward-looking statements to be fraudulent.

\(^8\)SEC’s guidance further states that if management determines that the known trend, demand, commitment, event, or uncertainty is not reasonably likely to occur; no disclosure is required. However, if management cannot make such a determination, it must proceed on the assumption that the trends or events will come to fruition; disclosure is then required unless management determines that a material effect is not reasonably likely. See Securities and Exchange Commission, SEC Interpretation: Management's Discussion and Analysis of Financial Condition and Results of Operations; Certain Investment Company Disclosures [Release Nos. 33-6835; 34-26831; IC-16961; FR-36] 54 Fed. Reg. 22427, 22430 (1989).

generally do not establish numeric thresholds for determining materiality, item 103 contains two exceptions related to environment-related legal matters: Companies must disclose as material administrative or judicial proceedings that involve (1) federal, state, or local environmental laws, if the potential amount of the losses exceeds 10 percent of the company’s current assets and (2) potential monetary sanctions of $100,000 or more, if a governmental authority is a party to the proceedings. In each case, these amounts are calculated exclusive of interest and costs. Companies must report potential monetary sanctions of $100,000 or more whether or not the amount would otherwise be considered material, unless the company reasonably believes that the proceeding will result in no monetary sanction or in sanctions of less than $100,000.

Some Users of Disclosure Information Said Existing Environmental Disclosure Requirements Are Too Flexible and Too Narrowly Scoped

Some users of company filings—including environmental interest groups, investment analysts with an interest in socially responsible investing, researchers, and others—said that existing requirements allow too much flexibility and are too narrowly scoped to provide adequate disclosure of environmental information. These stakeholders maintained that the existing regulations give companies too much leeway in determining what environmental information to disclose and limit the extent of disclosure by defining environmental information narrowly. As a result, they believe, companies’ disclosure of environmental information is inadequate, hindering investors’ ability to assess companies’ overall financial condition and the risks they face.

These stakeholders said that the relevant regulations and guidance are too flexible in several areas. Regarding the point at which companies should disclose a liability, stakeholders said that the current standards and guidance are unclear; for example, opinions vary on whether a disclosure obligation exists at the time the environmental contamination occurs or the point at which a regulatory agency (or some other third party) has taken action against a company to force a cleanup. In addition, some stakeholders said that companies can use the apparent flexibility in judging the likelihood of a liability to postpone or avoid disclosure.

Stakeholders also said that applicable regulations and guidance make it too easy for companies to conclude that they have nothing to disclose or cannot calculate an estimate, or to default to a known minimum amount rather than develop a best estimate. Estimating the amount of environmental liabilities involves several uncertainties, among them the extent of contamination and required cleanup, the stringency of applicable
cleanup standards, the state of the art of available cleanup technology, and
the extent to which cleanup costs might be shared with other responsible
parties or offset by insurance recoveries. However, stakeholders believe
that companies have developed methods to account for such uncertainties
that yield better estimates than the known minimum, and they believe that
companies should be required to share this information with investors.

On assessing materiality, stakeholders expressed concern that the existing
regulations and guidance largely rely on the discretion of company
management and that the requirements generally do not establish minimum
thresholds for disclosure. Some stakeholders also said that the materiality
standard does not sufficiently emphasize the need to disclose intangible,
nonquantifiable factors, such as the impact of environmental
contamination on a company’s reputation.

Regarding disclosure of future risks, stakeholders said that SEC
regulations and guidance do not clearly distinguish between “known
information” that could cause reported financial information to not be
indicative of future results and “forward-looking information,” which may
be less certain but could have a greater potential impact. As a result,
companies have more flexibility in determining which risks can be
characterized as forward-looking and thus avoid disclosing the
information.

In addition to concerns about the degree of flexibility allowed in the
regulations and guidance, users of company filings also said that the
disclosure requirements are too narrowly scoped in some areas to ensure
that companies are making available all of the important environmental
information needed by investors. Stakeholders expressed the following
concerns, among others:
SEC’s definition of monetary sanctions does not include certain costs related to the sanctions. Specifically, in determining when the $100,000 disclosure threshold has been met, SEC regulations and guidance exclude costs associated with (1) environmental remediation and (2) supplemental environmental projects conducted in lieu of paying sanctions.¹⁰

SEC’s regulations do not require companies to aggregate the estimated costs of similar potential liabilities, such as multiple hazardous waste sites, when assessing materiality.

Companies are not required to disclose information about their environmental assets or environmental performance.¹¹ A growing body of socially responsible investors believes that such information could be material to many investors or indicative of effective corporate management.

SEC regulations do not require companies to disclose quantitative information on the total number of environmental remediation sites, related claims, or the associated liabilities. As a result, investors cannot determine whether companies have enough reserves to cover current and future liabilities.

Reporting companies and other stakeholders did not share concerns about the flexibility and scope of the disclosure requirements; they said that the flexibility is warranted and the scope adequate. In general, stakeholders representing industry, independent auditors, financial analysts with general investment interests, and others told us that the existing requirements are sufficient to provide for the disclosure of material environmental information and that requiring additional information would not improve investors’ ability to make sound investment decisions.

¹⁰A supplemental environmental project is part of an enforcement settlement related to the violation of an environmental law or regulation. As part of the settlement, a violator voluntarily agrees to undertake an environmentally beneficial project in exchange for a reduction in the penalty; the project does not include activities a violator must take to return to compliance with the law.

¹¹Environmental assets could include, for example, emission “credits” under an emission trading program in which companies that keep their pollutant emissions below their allowed level may sell their surplus allotments, known as emission reduction credits, to other companies.
In commenting on the inherent flexibility of existing disclosure requirements, these stakeholders emphasized that reporting companies need to have a framework that can accommodate a variety of circumstances and that developing more specific guidance would not be feasible. In particular, these stakeholders opposed requiring more disclosure of future risks, such as the estimated costs associated with potential environmental regulations, because of the degree of uncertainty about the impact on companies' financial condition and operations. In addition, they pointed out that while the requirements allow some flexibility in interpretation, there are clear benchmarks for those who report or prepare filings.

Both reporting companies and financial analysts said that the scope of the existing disclosure requirements is adequate to ensure that material environmental information is reported, for several reasons:

- Companies typically disclose nonfinancial information, including information on corporate environmental performance, in other public documents, such as press releases and separate environmental reports. Including such information in SEC filings is generally not appropriate.

- According to financial analysts with general investment interests, environmental information is less important than other types of information, such as executive compensation or the percentage of stock owned by the Board of Directors, in assessing a company's condition and its desirability as a potential investment.

- Asking companies to disclose more information in their filings, without any assurance that such information is material to the company's overall financial condition, would not add value and might burden readers of the filings with irrelevant data.

- Environmental regulations and market forces—not SEC disclosure requirements—drive companies to comply with environmental laws and assess their environmental performance.

- Requiring companies to aggregate similar types of environmental liabilities would not necessarily be useful to investors because rolling up the potential costs of individual sites—along with the uncertainties associated with each of them—might distort the actual risks a company faces.
Some stakeholders who believe the requirements are sufficient linked problems with inadequate disclosure—to the extent such problems exist—to inadequate oversight and enforcement. For example, while they did not see a need to change the current standards and guidance, the stakeholders said that SEC could improve companies' environmental disclosure with more thorough reviews of environmental information in companies' filings. Company representatives and auditors we contacted do not share this concern, but rather they believe that SEC efforts are adequate, given the relative importance of environmental information to most companies' financial condition.

Little Is Known about the Extent to Which Companies Are Disclosing Environmental Information in SEC Filings

Determining what companies should be disclosing in SEC filings is extremely challenging without having access to company records and considering the flexibility in the disclosure requirements. Existing studies of environmental disclosure all have strong-to-severe methodological limitations. Some of the studies provide tentative insights about the amount of environmental information companies are disclosing but not the adequacy. Our limited review of disclosures related to potential controls over greenhouse gas emissions shows a wide variation in company filings and also illustrates some of the challenges facing researchers.

Several Factors Make It Difficult to Determine Whether Companies Are Fully Disclosing Material Environmental Information

Assessing companies' disclosure of environmental information is difficult, primarily because researchers have no way of knowing what environmental information is (1) potentially subject to disclosure and (2) material in the context of a company's specific circumstances, and therefore required to be reported. Because company records are generally not publicly available, it is virtually impossible for an external party to know what information companies should be disclosing. In the case of existing environmental contamination, for example, evaluating the adequacy of companies' disclosure may require information on the number of sites, the nature of the contamination, projected cleanup costs, and the extent to which the companies' liability may be shared by others or mitigated by insurance, among other things. Evaluating companies' disclosures regarding potential future risks, such as the impact of potential changes in environmental regulations, poses similar problems.

Another obstacle to assessing companies' disclosure is the flexibility inherent in certain reporting requirements and related guidance. A number of key requirements use terms that are general enough to accommodate a
range of situations and allow company management to exercise judgment regarding the amount and type of information they disclose. For example, in determining whether an existing or potential environmental liability should be reported in financial statements, company officials must determine if the occurrence of such liabilities is “reasonably possible” and the amounts are “reasonably estimable.” SEC, the Financial Accounting Standards Board, and the AICPA have all issued standards and guidance to assist companies and their independent auditors in making these determinations, but inevitably, some subjective judgments remain. Similarly, in assessing the materiality of environmental information, SEC’s guidance says that companies should consider information that a “reasonable person” would need to make an investment decision.

Generally, SEC’s regulations and guidance do not establish any minimum thresholds for materiality. Finally, in the case of disclosing future risks, companies have some flexibility in deciding what qualifies as “known material trends, events, and uncertainties” that would cause the companies’ reported financial information to not be indicative of future operating results or financial condition.

One of the consequences of disclosure requirements that are subject to interpretation—and of not having direct access to company records—is the difficulty of determining with any certainty whether a low level of disclosure indicates that the company does not have existing or potential environmental liabilities, has determined that such liabilities are not material, or is not adequately complying with disclosure requirements. The varying formats used for disclosure pose another problem for researchers. Much of the environmental information that is subject to disclosure can be reported in a number of different sections of the 10-K filing, including the financial statements, related footnotes, and various narrative sections of the report. In addition, the information may be stated in general or specific terms and companies often use different terminology to describe similar issues.
While Limited and Not Generalizable, Existing Studies Indicate That the Extent of Disclosure Has Increased Over Time and Can Vary Substantially within Industries

We identified 27 studies and papers that (1) were published, presented at conferences, or provided by the authors from 1995 to 2003 and (2) contained original research on companies’ environmental disclosures. We eliminated 12 studies that either had severe methodological limitations or did not address aspects of environmental disclosure relevant to our objectives. (App. III contains abbreviated descriptions of the studies we identified, excluding those with severe limitations and those that were outside our focus.) While the remaining 15 studies all contain strong limitations, they provide tentative insights about the amount and type of information being disclosed. For example, as several of these studies acknowledged, the small sample sizes and focus on particular industries prevent the study results from being generalizable beyond the specific companies reviewed. In addition, while the 15 studies shed some light on the amount and type of information disclosed by selected companies—and how it varied among them or changed over time—in some instances, the researchers drew conclusions beyond what was supported by their analysis.

Eleven of the studies found variations in the amount of information specific companies were disclosing in their filings with SEC. Some of these studies focused on the disclosure of existing environmental liabilities while others examined disclosures related to future potential risks, ranging from impending regulations to larger issues such as global climate change. For example, a 1998 study on disclosure of Superfund remediation liabilities by

Among the studies included in our initial selection were two EPA-sponsored studies on the disclosure of environmental legal proceedings. Although the studies have never been published, the results of one were included in a paper presented at a conference and have been widely cited in the literature. According to EPA officials, the agency stopped short of publishing the studies because of concerns about the methodology used and the validity of the results obtained. For example, when EPA officials attempted to verify the results of one study, they found many instances in which the companies had actually disclosed some of the information that EPA’s contractor had determined to be unreported. EPA officials identified several reasons for the discrepancies, including instances in which the companies had disclosed legal proceedings prior to the time frame reviewed by the contractor, inappropriate criteria for determining whether particular disclosures were “correct,” and the use of search terms that were not sufficient to identify company disclosures. According to EPA officials, both studies used similar methodologies. We also identified methodological limitations and eliminated the EPA-sponsored studies from our analysis.

Our 1993 report, Environmental Liability: Property and Casualty Insurer Disclosure of Environmental Liabilities, GAO/RCED-93-108 (Washington, D.C.: June 2, 1993), did not fall within the time frame we established for this review. If the report had been included, however, certain limitations, such as a small sample size and narrow scope, would have affected the extent to which conclusions could be drawn from the study.
140 companies found that the amount of information they disclosed about the number and location of the sites, the materiality of the liabilities, and the estimated amounts varied substantially. Some of the companies did not disclose any information and others did not provide enough information to allow a meaningful assessment of the companies’ risks, according to the authors. Six of the 11 studies found that variations among companies within the same industry can be substantial. For example, a 2003 study that looked at how 38 coal-fired electric utilities reported on the impact of the Clean Air Act Amendments of 1990 found wide variation in the types of disclosures by these companies. Among other things, the study found that in their filings for 1990, 22 of the utilities disclosed their estimated compliance costs while 16 did not provide an estimate.

Five studies, including three from the previous group, indicated that the amount and type of information specific companies were disclosing increased over time. In two instances, researchers linked the increased disclosure to the issuance of guidance that assisted companies in determining what information should be reported. For example, a study of nearly 200 companies that had been identified as potentially responsible parties at multiple hazardous waste sites indicated that the number of companies reporting environmental liabilities increased following the issuance of SEC’s Staff Accounting Bulletin 92, which provided examples of the types of information SEC expected to see regarding such sites. In the other case, a 1995 study of environmental disclosures by 234 companies found that the amount of information reported in 10-Ks and the companies’


annual reports to shareholders increased following the issuance of guidance from SEC and the Financial Accounting Standards Board.\textsuperscript{17}

Nine of the 15 studies attempted to address the extent or adequacy of companies’ environmental disclosure in terms of meeting SEC’s reporting requirements.\textsuperscript{18} In most of these cases, the studies concluded that environmental disclosures were inadequate. However, because the criteria used to assess the disclosures may not have been appropriate, it is impossible to validate the studies’ conclusions about how well or poorly companies are meeting SEC reporting requirements. All of these studies used criteria that either included items not required by SEC or reflected the researchers’ interpretations of SEC reporting requirements and related guidance. In several instances, the researchers acknowledged that their interpretation of the requirements would not necessarily be consistent with others’ views.

A Limited Review of Disclosures Related to Potential Controls Over Greenhouse Gas Emissions Shows Wide Variation in Company Filings

To supplement our analysis of existing studies, we reviewed disclosures by 20 U.S. electric utility companies that were among the largest emitters of carbon dioxide, a major component of greenhouse gas emissions.\textsuperscript{19} While various investor organizations, pension fund managers, and environmental interest groups have called on companies to make more information available on this subject, disclosures about the impact of potential greenhouse gas controls are not necessarily required at this time, according to officials at SEC’s Division of Corporation Finance, because controls do not appear imminent at the federal level through ratification of the Kyoto

\textsuperscript{17}For example, the study cited the issuance of SEC’s 1989 guidance, \textit{SEC Interpretation: Management’s Discussion and Analysis of Financial Condition and Results of Operations; Certain Investment Company Disclosures}. See George O. Gamble, Kathy Hsu, Devaun Kite, and Robin R. Radtke, “Environmental Disclosures in Annual Reports and 10Ks: An Examination,” \textit{Accounting Horizons}, Vol. 9, No. 3, (September 1995).

\textsuperscript{18}Three of these studies are among those that examined changes in the amount of disclosure over time.

\textsuperscript{19}Greenhouse gases include carbon dioxide (mainly from burning coal, oil, and natural gas); methane and nitrous oxide (largely due to agriculture and changes in land use); and hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (manufactured by industry). These gases trap heat in the atmosphere and are believed to contribute to climate change, including global warming.
Protocol or legislation. At the same time, the officials did not rule out such disclosures, commenting that there may be circumstances in which a company can identify a material impact and must disclose it in the filing.

Some companies have opted to include information regarding potential controls over greenhouse gas emissions in their SEC filings, partly in response to public interest. To the extent that companies make disclosures regarding controls over greenhouse gas emissions or other potential future risks, investors may find the information useful in deciding whether to buy or sell individual securities. However, because disclosure of such information is not necessarily required, investors cannot draw conclusions about the lack of such information in a company’s SEC filing or compare companies within an industry.

For each utility company, we reviewed the annual and quarterly SEC filings for 2003 to determine whether and how the companies discussed the impact of potential controls over greenhouse gas emissions and found that the amount and type of information disclosed varied widely. Of the 20 electric utility companies included in our review, we found that 1 made no disclosures regarding greenhouse gas controls in its filings. The filings for 18 of the remaining 19 companies described one or more potential controls, including the Kyoto Protocol and other international requirements; proposals for federal legislation requiring reductions in greenhouse gas emissions; and current and proposed state requirements. In addition, while all 19 companies referred to the potential impact of controls, the level of detail varied among the companies. Moreover, while none of the 19 companies attempted to estimate the dollar value of the impact, citing uncertainty over the specific nature of the requirements that might take effect, they generally indicated that the impact could be material. Table 1 summarizes the types of information the electric utility companies disclosed about the impact of potential controls over greenhouse gas emissions.

In December 1997, the United States participated in drafting the Kyoto Protocol, an international agreement to specifically limit greenhouse gas emissions. Although the U.S. government signed the Protocol in 1998, the Clinton administration did not submit it to the Senate for advice and consent, which are necessary for ratification. In March 2001, President Bush announced that he opposed the Protocol.

In some instances, the company filings use terms like “significant,” “substantial,” or “far-reaching” to characterize the potential impacts, without referring specifically to materiality.
Table 1: Disclosures Related to Potential Impacts of Current or Proposed Requirements to Reduce Greenhouse Gas Emissions

<table>
<thead>
<tr>
<th>Number of utility companies reporting potential impact</th>
<th>Description of potential impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impacts related to Kyoto Protocol</strong></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td><em>U.S. operations only</em>: Compliance costs could require significant capital, operating, or other expenditures and/or have materially adverse impacts on generating facilities or future financial position, results of operations, or liquidity, if associated costs cannot be recovered from customers.</td>
</tr>
<tr>
<td>3</td>
<td><em>U.S. and international operations</em>: Compliance costs could be material and/or there could be far-reaching and significant impacts on operations.</td>
</tr>
<tr>
<td>2</td>
<td><em>International operations only</em>: Significant compliance costs may affect operations.</td>
</tr>
<tr>
<td>1</td>
<td><em>U.S. operations only</em>: Specific impacts on operations could not be identified because of uncertainties.</td>
</tr>
<tr>
<td>6</td>
<td>None.</td>
</tr>
<tr>
<td><strong>Impacts related to current administration policy on voluntary reductions</strong></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The company stated it was unable to determine the potential impact.</td>
</tr>
<tr>
<td>4</td>
<td>Compliance costs could be significant or material, and/or possible impacts on operations.</td>
</tr>
<tr>
<td>11</td>
<td>None.</td>
</tr>
<tr>
<td><strong>Impacts related to other current or proposed federal, state, or international requirements</strong></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td><em>Federal requirements only</em>: Compliance costs could have a significant or material impact (either positive or negative) on the company's generating facilities and/or future financial position, results of operations, liquidity, or cash flows, if the costs are not recoverable from customers.</td>
</tr>
<tr>
<td>5</td>
<td><em>Federal and state requirements</em>: Compliance costs could have a significantly or materially adverse affect on the company's operations, consolidated financial position, results of operations, cash flow, or profitability, if associated costs cannot be recovered from customers.</td>
</tr>
<tr>
<td>3</td>
<td><em>Federal, state, and international requirements</em>: There are substantial or material implications for the company's costs; plants; global business operations; or future consolidated results of operations, cash flows, or financial position.</td>
</tr>
<tr>
<td>1</td>
<td><em>General statement only</em>: The company may incur liabilities because of its emission of gases that may contribute to global warming.</td>
</tr>
<tr>
<td>1</td>
<td><em>Federal requirements only</em>: The company stated it was unable to determine the potential future impacts on its financial condition and operations.</td>
</tr>
<tr>
<td>1</td>
<td><em>Federal, state, and international requirements</em>: The company stated it was unable to determine the potential future impacts on its financial condition and operations.</td>
</tr>
<tr>
<td>4</td>
<td>None.</td>
</tr>
</tbody>
</table>

Source: GAO analysis.

In addition to differences in the level of detail companies provided, we found considerable variation in where the disclosures were located within the filings, posing a challenge for researchers trying to find information on
particular topics. Of the 19 companies that provided information on the impact of potential controls over greenhouse gas emissions,

- 7 disclosed such information only in the S-K item 101, “Description of Business” section of the company’s 10-K or 10-Q reports;
- 2 disclosed information only in S-K items 301 and 302, “Selected Financial Data” and “Supplementary Financial Information” sections of the company’s 10-K or 10-Q reports;
- 2 disclosed information only in S-K item 303, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of the company’s 10-K or 10-Q reports; and
- 8 disclosed information in multiple sections of the 10-K, 10-Q, or the company’s annual report to shareholders.

Ten of the 20 utility companies disclosed planned efforts to voluntarily reduce their greenhouse gas emissions—or to avoid increasing them—over the next several years. For example, one company reported that it had joined the Chicago Climate Exchange, a pilot greenhouse gas emission reduction and trading program, and had committed to reducing or offsetting 18 million tons of carbon dioxide emissions by 2006. Two other companies reported joining EPA’s Climate Leaders program, in one case committing to an 18 percent reduction of greenhouse gas emissions from a 2001 baseline by 2008. Only one of the companies estimated its projected spending on voluntary reduction efforts: the company reported that it planned to spend $21 million between 2004 and 2010 on projects to reduce or offset its greenhouse gas emissions.

Adequacy of SEC’s Efforts to Monitor and Enforce Compliance with Environmental Disclosure Requirements Cannot Be Determined

Without better information on the extent of environmental disclosure and results of SEC’s reviews of companies’ filings, the adequacy of SEC’s efforts to monitor and enforce compliance with environmental disclosure requirements cannot be determined. SEC does not maintain a database on the substance of its comments and company responses, and thus SEC cannot use the information to identify trends or set priorities. Over the years, SEC and EPA have made sporadic efforts to coordinate on improving environmental disclosure. Currently, EPA periodically shares limited information on specific, environment-related legal proceedings, such as those involving monetary sanctions.
SEC’s primary means to monitor and enforce requirements for the disclosure of material information—including environmental matters—are the review of companies’ filings and the issuance of comment letters to obtain additional information, as appropriate. According to officials from the Division of Corporation Finance, SEC relies on reporting companies and their independent auditors to completely and accurately disclose material information to investors; SEC’s role is to help companies ensure that they are making the required disclosures and properly interpreting the requirements. Even if SEC’s role were broader, SEC officials told us that the agency does not have the resources to review all company filings or conduct on-site examinations to proactively ensure that companies are disclosing all material information.

Reviewers in the Division of Corporation Finance do a preliminary review of companies’ annual 10-K filings to determine which reports warrant further scrutiny and at what level. Of those reports, SEC usually conducts either a full review, which covers all aspects of the filing, or a financial review, which focuses primarily on the financial statements and related material, such as the section including management’s discussion and analysis. SEC may also choose to conduct a limited review of specific issues that have been identified as needing attention. For example, a limited review might focus on a company’s accounting policy for recognizing revenue in its financial records and reports. As table 2 shows, SEC reviewed about 8 to 20 percent of the annual filings each year from 1999 through 2003.

For our review, we focused on SEC’s monitoring of companies’ annual 10-K reports. SEC also reviews quarterly filings, known as 10-Qs, and various “transactional” filings related to newly issued securities, efforts to raise additional capital, and mergers and acquisitions. According to SEC officials, the reviewers examine most filings related to initial public offerings and selectively review other transactional filings as well as a sampling of the annual and quarterly filings.
Table 2: SEC’s Reviews of Companies’ Annual 10-K Filings, Fiscal Years 1999 through 2003

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000a</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual filings</td>
<td>13,460</td>
<td>14,280</td>
<td>14,060</td>
<td>13,550</td>
<td>12,830</td>
</tr>
<tr>
<td>Annual filings reviewed by SEC</td>
<td>2,345</td>
<td>1,160</td>
<td>2,305</td>
<td>2,695</td>
<td>2,170</td>
</tr>
<tr>
<td>Percentage of filings reviewed</td>
<td>17.4</td>
<td>8.1</td>
<td>16.4</td>
<td>19.9</td>
<td>16.9</td>
</tr>
</tbody>
</table>

Table notes:

aSEC’s reviews declined in fiscal year 2000 because the high volume of filings related to initial public offerings limited the agency’s ability to review other filings.

To ensure consistency across reviewers, SEC uses guidance that provides an organizational structure for each review and the documentation that supports it. The guidance identifies, as a reminder for the reviewers, various aspects of the filing that should be covered in the review, depending on the particular company and the industry it represents; among other things, the guidance cites the adequacy of disclosures related to environmental liabilities. If a reviewer questions the accuracy or completeness of the filing and believes that further disclosures may be warranted, SEC issues a comment letter requesting additional information. SEC officials said that companies may sometimes be reluctant to respond to the comment letters, claiming that providing the requested information is too difficult or expensive or will hurt their competitive position. In the case of time-critical transactional filings, companies have an incentive to respond to SEC’s comment letters because the companies cannot raise additional capital by issuing securities until SEC has cleared the filings. Although the Division of Corporation Finance does not have a similar “stick” to compel companies to respond in the case of the 10-K or 10-Q filings, the companies generally comply, according to SEC officials.

When a company’s failure to respond is particularly egregious, SEC may refer the case to its Division of Enforcement. According to information from the Division of Enforcement and other sources, we identified four enforcement actions related to inadequate environmental disclosure since 1977, none of which were referred by the Division of Corporation Finance. Enforcement officials were not aware of any additional cases and said that

23Other actions resulting from a filing review can include requesting an amendment of a past report or advising the company to make a disclosure in a future report.
while they track enforcement cases by broad program area, such as broker-dealer fraud, insider trading, and issuer financial disclosure, they do not track the number of cases in which environmental disclosure is the primary issue. According to an official in the Division of Enforcement, most enforcement actions are prompted by company whistleblowers or news reports of company wrongdoing rather than referrals from the Division of Corporation Finance.

SEC officials noted that reviewing company filings is an iterative process; a single filing often generates multiple comment letters and responses before SEC is satisfied that all matters have been resolved. In some instances, SEC raises one or more questions about the disclosures in a company’s filing and, based on the company’s response, is either satisfied with the explanation or decides that the matter does not warrant additional follow-up.

SEC’s Division of Corporation Finance does not systematically track the issues raised in comment letters. According to SEC officials, they do not have a database on the comment letters that would enable them to determine the most frequently identified problem areas, analyze trends over time or within particular industries, or assess the need for additional guidance in certain areas. SEC officials told us that for the most part, they rely on the reviewers’ knowledge and experience to get a sense of the most common problem areas. While SEC did not have any statistics on the frequency with which its comment letters questioned companies’ environmental disclosures, Division of Corporation Finance officials told us that, based on their experience, environmental disclosure is rarely among the issues cited if one considers all of the filings SEC reviews, partly because of the nature of the businesses involved. Within particular industries, however, SEC officials said that reviewers regularly and frequently comment on environmental disclosure.

In the absence of a formal tracking system, an SEC study of annual 10-K filings from the Fortune 500 companies for the year 2002 provided some information on the most common disclosure issues. To conduct the study, SEC screened the companies’ filings and then selected a substantial number for further review; ultimately, SEC sent comment letters to more than 350 companies. According to officials from the Division of Corporation Finance, the type and frequency of comments identified in the
Fortune 500 study were consistent with their observations generally.  

SEC’s summary report noted that environmental disclosure prompted comments more frequently in particular industries, such as oil and gas and mining companies and certain manufacturing companies. The reviewers questioned companies’ disclosure of critical accounting policies related to environmental liabilities including, among other things, the adequacy of information on estimates of potential losses and litigation costs.

Although SEC does not have a database of its comment letters and the company responses, officials from the Division of Corporation Finance told us that much of the information can be obtained from other sources. The officials explained that at least one private company has been submitting thousands of requests for the comment letters and responses under the Freedom of Information Act and is making the information available to the public for a fee. According to the officials, responding to these requests has absorbed a considerable amount of SEC staff time and other resources.

SEC has taken steps to facilitate its ability to analyze the results of its monitoring process. For example, SEC is establishing a new Office of Disclosure Standards. Among other things, the office will be responsible for ensuring the quality and consistency of reviews across reviewers and different industry groups. As part of that effort, in March 2004, SEC began to require reviewers to prepare a closing memorandum containing a listing of all documents examined by SEC reviewers, a summary of the major issues raised during their review, and how they were resolved. While these memoranda are being prepared in electronic form, the information is currently not coded or organized to facilitate analysis across multiple filings. SEC is still determining how it might organize and use these data.

Among the most common problems identified in the Fortune 500 study were the need for better analysis of—and less boilerplate information on—companies’ financial condition and results of operations; expanded discussion of companies’ critical accounting policies, including, for example, the most difficult and judgmental estimates and the areas most sensitive to material change from external factors; clarification of how companies recognize revenue; and more comprehensive disclosures related to restructuring charges and pension plans.
SEC and EPA Have Made Limited Efforts to Improve Environmental Disclosure through Coordination

Over the past 20 years, SEC and EPA have made sporadic efforts to improve environmental disclosure through coordination, but the two agencies have not formally agreed to share relevant information and the extent of information sharing is currently limited. According to EPA, information sharing began informally in the mid-1980s, and in February 1990, SEC and EPA reached an agreement under which EPA would provide enforcement-related data to SEC’s Division of Corporation Finance on a quarterly basis. As a result of the agreement, EPA began providing information on recently concluded cases filed under federal environmental laws as well as other information related to hazardous waste sites and facilities. EPA officials indicated that their staff also assisted SEC by (1) commenting on the accuracy of environmental disclosures by some companies and (2) training Division of Corporation Finance reviewers to understand the environmental statutes administered by EPA and interpret the enforcement data from EPA.

Although the 1990 agreement was conceived as the basis for a formal memorandum of understanding between the two agencies, agency representatives never signed such a memorandum. While there are conflicting reports on when the regular transfer of information halted, officials from SEC and EPA agree that some problems arose because the volume and complexity of the data that EPA was providing were not useful to SEC reviewers. For example, SEC questioned the usefulness of some data because they were facility-specific, and SEC could not readily identify the parent company responsible for reporting to SEC.

Currently, information sharing occurs less frequently and is focused on specific legal proceedings, such as those involving monetary sanctions for environmental violations. SEC officials said that their reviewers use EPA data only to raise “red flags” pointing them to situations in which companies may not be disclosing potentially material information. Once a reviewer identifies a potential disclosure problem, the next step is following up with the individual company to request information. EPA officials indicated that they would be willing to work with SEC to explore options for improving the usefulness of the data. SEC officials said that they were willing to work with EPA, but downplayed the need for additional coordination, saying that the information in EPA’s Enforcement and Compliance History Online database is sufficient for the purpose of identifying potential disclosure problems.
Experts Suggest Changes to Requirements and Guidance, Increased Oversight, and Nonregulatory Actions to Increase and Improve Environmental Disclosure

The experts that we surveyed generally concur with the concerns identified by stakeholders and offered a variety of suggestions for improving disclosure or, in some instances, comments about why particular proposals are unnecessary or unworkable. For the most part, the experts believe that the identified concerns contribute to the inadequate disclosure of environmental information, and a few experts identified lawsuits in which shareholders alleged that their ability to make investment decisions was impaired as a result of the concerns regarding inadequate environmental disclosure. (See information on shareholder suits below.) The suggestions we obtained fell into three broad categories: modifying disclosure requirements and guidance, increasing oversight and enforcement, and adopting nonregulatory approaches to improving disclosure. To gain the perspective of companies that would be affected by the suggestions, we contacted representatives of reporting companies, who asserted that some of the suggestions would not improve disclosure of environmental information and to some extent, might hinder the ability of investors to make sound investment decisions.

Shareholder Suits Allege Inadequate Environmental Disclosure

Experts identified a few shareholder lawsuits alleging that corporate securities statements have contained material misrepresentations or omissions concerning the companies’ potential environmental liabilities, thus leading shareholders to purchase the companies’ stock at artificially inflated prices. The courts did not rule on whether the alleged failure to disclose actually caused whatever financial harm the shareholders may have suffered. To prevail in such cases, shareholders must demonstrate that (1) the company intentionally misled them by misstating or withholding material information about environmental risks or liabilities and (2) the misstatements or omissions caused the shareholders to suffer a financial loss. In some cases similar to those identified in our survey, the corporate officers reached settlements with the shareholders.

Some Experts Suggested Modifying Existing Disclosure Requirements and Related Guidance

About half (13 of 30) of the experts who participated in our survey offered suggestions on how SEC and other standard-setting bodies could improve the current requirements and guidance for disclosing environmental information. These suggestions are summarized below along with contrasting views from a few of the experts we surveyed and representatives of reporting companies, including the American Chemistry

25Appendix IV contains a list of the experts that participated in our survey and appendix V includes our questionnaire and a summary of the responses to the closed-ended questions.
Council, the Business Roundtable, the Edison Electric Institute, and the U.S. Business Council for Sustainable Development.

On limiting the flexibility of existing requirements: Some experts suggested that SEC or the Financial Accounting Standards Board, as appropriate, clarify terms such as “probable,” “reasonably possible,” and “remote” relative to the occurrence of environmental liabilities, or require or recommend the use of expected value analysis in estimating the amounts of liabilities, as advocated by ASTM International.\(^{26}\) In addition, several experts commented on the need for more guidance on materiality, calling for clarification or more specific criteria. One participant suggested that SEC establish a presumption of materiality for environmental liabilities, thus shifting the burden of proving that such liabilities are not material to companies. In contrast, another expert commented that more specific guidance on estimating the amounts of liabilities would lead to rules not well suited for all companies and would mislead users of company filings by making estimates appear to be more precise than they really are. Company representatives made similar comments, saying that uncertainties about the nature and extent of environmental contamination, potential remediation costs, and the extent of the company’s liability all affect the feasibility of deriving precise estimates. Company representatives also objected to requiring the use of the expected value method of cost estimation advocated by ASTM International, saying that it would lead to misleading disclosures because, for example, the method does not allow companies to factor in contributions from other potentially responsible parties in estimating their own potential liabilities. Finally, company representatives maintained that existing guidance on materiality is sufficiently clear and necessarily flexible to accommodate companies’ individual circumstances.

On reporting existing environmental liabilities: A few experts suggested that SEC or the Financial Accounting Standards Board, as appropriate, clarify the accounting and disclosure procedures for unasserted but enforceable claims related to the cleanup of environmental contamination at current and former company facilities. This clarification would, among other things, specify the point at which such liabilities occur (and a

\(^{26}\)ASTM International is a standard-setting organization originally known as the American Society for Testing and Materials. Expected value analysis is a method of estimating the mean value of an unknown quantity, which represents a probability-weighted average over the range of all possible values.
disclosure obligation may exist)—when the release happens or when a third party initiates action against the company. Representatives of reporting companies did not agree with this suggestion. They said that environmental laws require companies to study and remediate contaminated sites, and disclosing possible sites—based merely on their existence—does not advance investors’ understanding of a company’s economic value. Company representatives pointed to guidance from the Financial Accounting Standards Board, which notes that the existence of an environmental liability becomes determinable and the related costs estimable over a continuum of events and activities that help define the liability. Once a third party intervenes and companies learn more about the extent of the problem, they can make and disclose better estimates.

On disclosing future risks: Another suggestion from the experts was that SEC issue guidance clarifying when certain potential environmental issues should be disclosed, citing, in particular, the potential impacts of global climate change and controls over greenhouse gas emissions. More specifically, one expert commented that in the case of climate change, SEC should issue guidance advising companies to report their internal assessments of the impact of complying with pending environmental regulations over a specified time period, including the range of possible actions being considered by a company, how the actions might affect the financial condition and operations of the company, and whether the effects would be material to shareholders. Company representatives and a few of the experts commented that it is inappropriate to single out particular issues, such as climate change, for disclosure or to use SEC’s disclosure requirements to advance the interests of particular groups. According to one expert, the current rules and guidance for disclosing future environmental risks are clear and companies know they cannot avoid disclosure of such risks by categorizing them as “forward-looking” information. Company representatives also questioned the value of disclosing “speculative” information to investors. Moreover, the representatives pointed out that such requirements could have significant ramifications for disclosure in general, depending on where one draws the line in deciding when the impact of potential legislation should be disclosed.

On requiring companies to report environmental performance information: Five of the experts we surveyed said that SEC should require companies to provide information on their environmental performance (e.g., pollutant releases and remediation expenditures) or issue guidance stating that such information might be considered material by investors. In
one case, an expert suggested that SEC use the Global Reporting Initiative as a model for the types of environmental performance measures that should be disclosed. Some experts disagreed with proposals for reporting requirements involving companies’ environmental performance, saying that such information is publicly available outside of SEC filings. One expert also questioned the justification for singling out environmental performance as opposed to other potentially important social issues. While some company representatives acknowledged that environmental performance data and intangible assets such as environmental management systems might be considered important by some investors, they said that such information is already available to the public through company Web sites; special reports on environment, health, and safety issues; and federal and state regulatory agencies.

On changing requirements for reporting monetary sanctions and aggregating liabilities: Some experts believe that SEC should (1) change the definition of monetary sanctions to include supplemental environmental projects that companies fund in exchange for reduced sanctions so that investors have a more complete picture of companies’ potential costs and (2) issue guidance recommending that companies aggregate the estimated costs of similar liabilities before assessing materiality and the need for disclosure. Representatives of reporting companies questioned the proposed inclusion of supplemental environmental projects as monetary sanctions because companies are generally not permitted to use dollar-for-dollar offsets when they agree to a supplemental project. Some of the experts we surveyed commented that the threshold for monetary sanctions should be updated or abolished altogether. Company representatives also thought that the fixed thresholds for disclosures related to legal proceedings were outdated. They commented, for example, that the $100,000 threshold for monetary sanctions should be raised to $1 million to reflect increases in penalty amounts since the regulation was promulgated over 20 years ago.

Regarding calls for aggregation of similar liabilities, one of the experts and some company representatives said that such a requirement would mislead investors by portraying a company that is one of many potentially

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27The Global Reporting Initiative develops and disseminates globally applicable sustainability reporting guidelines for voluntary use by organizations for reporting on the economic, environmental, and social dimensions of their activities, products, and services. Examples of environmental indicators include energy, material, and water use; greenhouse gas and other emissions; effluents and waste generation; use of hazardous materials; and recycling, pollution, waste reduction, and other environmental programs.
responsible parties for several environmental remediation sites as equivalent to a company that is likely to be responsible for one or two larger cleanup sites, when the companies’ actual liabilities could differ significantly. Other company representatives commented that although aggregation of liabilities related by some common cause or probability seems reasonable, aggregation of any and all environmental liabilities with differing circumstances would be arbitrary and not very useful to investors in analyzing a company’s risks.

*On other regulatory approaches to improving disclosure:* Experts’ suggestions included a call for SEC to issue new guidance that focuses specifically on environmental disclosure as a way of underscoring its importance. Another suggestion was that the Public Company Accounting Oversight Board take action to improve procedures for evaluating the effectiveness of companies’ internal control policies and procedures as they relate to environmental matters, in connection with the annual management assessment of internal controls required by the Sarbanes-Oxley Act of 2002. Among other things, according to one expert, the board should issue guidance calling for independent auditors to verify environmental remediation liabilities during financial statement audits, with the assistance of specialists as necessary. Regarding the suggestion for guidance focusing on environmental disclosure issues, representatives of reporting companies said that SEC should first determine if there is a compliance problem and, if one exists, the agency could issue special guidance to highlight the importance of environmental disclosure requirements. Company representatives did not see a need for specific guidance on assessing internal controls over environmental matters. They commented that the Public Company Accounting Oversight Board has already issued a number of proposed rules for the auditing of companies’ internal controls, which will encompass controls for environmental information.

Some Experts Called for Better Monitoring and Targeted Enforcement Actions to Increase Environmental Disclosure

A similar number (14 of 30) of the experts who participated in our survey had suggestions for enhancing SEC oversight of environmental disclosure through increased monitoring, enforcement, or coordination with EPA. Specifically, some experts said that SEC should review more filings in industries for which environmental disclosure is more likely to be a concern and issue more comment letters for problematic filings to force companies to reexamine their internal controls for the reporting of environmental information. Some experts also suggested that SEC put more emphasis on enforcing environmental disclosure requirements to (1)
establish legal precedents for adequate disclosure, (2) achieve greater consistency in company reporting of environmental liabilities, and (3) ensure that companies take seriously the reporting of environmental information. While the experts did not specify how SEC should increase its enforcement, many of those that offered suggestions believe that increasing the emphasis on enforcement—for example, by initiating a few high-profile cases—would better deter nondisclosure of important environmental information. Two of the experts we surveyed did not see a need for increasing SEC’s monitoring and enforcement. They commented that SEC is probably doing a reasonable job, given competing priorities and the lack of evidence that disclosure of material environmental information is inadequate. Representatives of reporting companies pointed out that the frequency of SEC’s reviews of annual 10-K filings and the amount of resources available to conduct such reviews has increased significantly as a result of the Sarbanes-Oxley Act of 2002.

Another suggestion from the experts was for better coordination between SEC and EPA and state environmental agencies to obtain information useful for evaluating companies’ environmental disclosures. For example, one expert suggested that SEC work with EPA to develop a protocol for using EPA data on environmental remediation liabilities as an indicator of whether companies are adequately reporting environmental information in their filings. It was also suggested that SEC develop a mechanism for comparing real-time information on environmental liabilities and their related monetary sanctions with companies’ filings. Some representatives of reporting companies believed that coordination between EPA and SEC is already occurring to the extent that SEC has access to publicly available databases such as the Enforcement and Compliance History Online and Toxics Release Inventory. 28 For the most part, company representatives did not think increased coordination would yield much improvement in disclosure because many environmental regulatory agencies do not have expertise in financial disclosure.

28The Enforcement and Compliance History Online is a Web-based tool that integrates information from data systems across EPA programs and provides public access to monitoring, compliance, and enforcement information for approximately 800,000 EPA-regulated facilities. The Toxics Release Inventory is another publicly accessible database that contains information on estimated releases of hundreds of chemicals, which companies report annually to EPA and the states.
Some Experts Said Certain Nonregulatory Approaches Could Increase and Improve Environmental Disclosure

One-third of the experts that participated in our survey (10 of 30) had suggestions for improving environmental disclosure by nonregulatory means. For example, they cited several voluntary disclosure initiatives, such as the Global Reporting Initiative and the Carbon Disclosure Project, in which companies might participate to demonstrate their commitment toward good governance on environmental issues.29 Another potential vehicle for improving environmental disclosure, according to some experts, is secondary markets, such as insurance and financial services. If these markets started incorporating environmental information into their company assessments, then companies would be more likely to disclose such information to improve their relative standing. One expert suggested creating a public database of companies’ disclosure of environmental performance measures, similar to the Toxics Release Inventory database maintained by EPA. Such a database would allow investors to compare companies’ environmental performance across industries, thus creating an incentive for companies to compete on that basis. Finally, some experts cited shareholder resolutions as a vehicle for encouraging companies to disclose environmental information or issue reports on corporate environmental performance by petitioning for a proxy vote on such matters by the entire body of shareholders.30

Representatives of reporting companies agreed that nonregulatory approaches can be effective in making company management aware of public interest in environmental disclosure. For example, some representatives said that companies and trade associations have adopted voluntary disclosure guidelines for environmental information, although they also commented that projects such as the Global Reporting Initiative do not inform investors with broad interests. According to the American Chemistry Council, all of its members are required to publicly report on

29The Carbon Disclosure Project is an organization of institutional investors representing assets in excess of $1 trillion. Its mission is to inform investors about the “significant risks and opportunities” presented by climate change and company management about shareholder concerns regarding the impact of such issues on company value. The project has written to the 500 largest companies in the world by market capitalization, asking for disclosure of investment-relevant information concerning their greenhouse gas emissions.

30According to statistics compiled by the Investor Responsibility Research Center, shareholders filed 66 petitions on environmental issues in 2003 and had filed 57 as of mid-April 2004. Among other things, the petitions have called for companies to report on their greenhouse gas emissions, how climate change will affect their operations, or their performance against environmental and other indicators using the reporting guidelines established for the Global Reporting Initiative.
their environmental management systems. While company representatives acknowledged the growing number of socially responsible investors, particularly among institutional investors, they said that investment analysts have not demanded more information about environmental risks and liabilities. The representatives also commented that secondary markets would indeed prompt environmental disclosure if such information were in demand. Finally, while company representatives agreed that shareholder resolutions are one avenue for getting companies to disclose certain information, particularly information that would not be appropriate in SEC filings, the representatives believe that shareholders and other interest groups should also pursue informal discussions with company management.

Conclusions

Without more compelling evidence that the disclosure of environmental information is inadequate, the need for changes to existing disclosure requirements and guidance or increased monitoring and enforcement by SEC is unclear. SEC is already taking steps to collect information on the results of its reviews of company filings. As part of this process, we believe that SEC should ensure that it has the information it needs to allocate its oversight resources and determine where additional guidance might be warranted. In addition, because SEC’s comment letters and the company responses are already available to the public on a piecemeal basis as a result of requests under the Freedom of Information Act, we believe that SEC should consider making the information more readily accessible by creating its own electronic database available through the agency’s Web site. Doing so would have several benefits; it would (1) free up SEC resources, (2) ensure that companies and investors are informed about the nature and results of SEC’s oversight regarding the disclosure of environmental and other information important to investors, and (3) enable researchers to do more robust analyses of companies’ disclosures within and across industries. Finally, despite previous problems with the usefulness of EPA’s data, because environmental disclosure is one issue that is specifically addressed in SEC’s regulations—and is important to a growing number of investors—it makes sense for SEC to ensure that its staff is taking advantage of relevant information available from EPA.

Recommendations for Executive Action

To improve the tracking and transparency of information on environmental disclosure problems, we recommend that the Chairman, SEC, take the
following two actions, recognizing that they will also affect the amount of information available to SEC and the public on other disclosure issues:

- As SEC develops its new procedures for closing memoranda following its reviews of company filings, take steps to ensure that key information from the memoranda is electronically tracked and organized in a way that would facilitate its analysis across multiple filings. Among other things, SEC should consider organizing the information so that agency officials can systematically determine the most frequently identified problem areas, analyze trends over time or within particular industries, and assess the need for additional guidance in certain areas.

- Explore the creation of a searchable database of SEC comment letters and company responses that would be accessible to the public.

We also recommend that the Chairman, SEC, work with the Administrator, EPA, to explore opportunities to take better advantage of EPA data that may be relevant to environmental disclosure and examine ways to improve its usefulness.

**Agency Comments**

We provided a draft of this report to SEC and EPA for review and comment. We received comments from officials within SEC’s Division of Corporation Finance and EPA’s Office of Enforcement and Compliance Assurance. (See app. VI for the full text of SEC’s comments.) SEC agreed with the report’s recommendations and is taking some actions to implement them. Regarding the tracking of key information from its reviews of company filings, SEC said that it is creating a searchable electronic database that will facilitate analysis across multiple filings. In addition, SEC agreed to make its comment letters and the company responses available to the public and, in late June, announced that the information will be accessible through its Web site, beginning with August 2004 filings. SEC also agreed to consider our recommendation for taking better advantage of relevant EPA data in its future efforts to work with EPA. EPA generally agreed with the information presented in the report but did not provide a letter. SEC and EPA provided technical comments, which we have incorporated as appropriate.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to appropriate congressional committees; the
Chairman of SEC; the Administrator, EPA; and the Director of the Office of Management and Budget. We will also make copies available at no charge on the GAO Web site at http://www.gao.gov.

Please call me at (202) 512-3841 if you or your staff have any questions. Major contributors to this report are listed in appendix VII.

John B. Stephenson
Director, Natural Resources
and Environment
Scope and Methodology

To determine key stakeholders’ views on how well SEC has defined the requirements for environmental disclosure, we first identified what environmental information companies are required to disclose. Specifically, we reviewed SEC’s disclosure regulations, generally accepted accounting principles promulgated by the Financial Accounting Standards Board, auditing standards issued by the AICPA, and applicable guidance issued by all three entities. To confirm that we had identified all relevant disclosure requirements and to clarify our understanding of them, we interviewed officials within SEC’s Division of Corporation Finance and Office of Chief Accountant. We met with a variety of groups that had a stakeholder interest in the disclosure requirements because they (1) had a particular interest in environmental disclosure; (2) used disclosure information as investors, financial analysts, or researchers; or (3) were involved in the disclosure process as reporters or preparers of SEC filings. Our stakeholder contacts included representatives of investor organizations, including those that identify themselves as socially responsible and those with general investment interests; financial services institutions; environmental groups, attorneys, and consultants; business associations; credit rating agencies; and public accounting firms.

To determine the extent to which companies are disclosing environmental information in their filings with SEC, we identified existing studies on environmental disclosure and analyzed their results and methodology. First, we conducted a literature search on the Internet, using the keywords “SEC,” “disclosure,” and “environmental,” to identify references, including studies, journal articles, and other material, that focused on the disclosure of environmental information by publicly held companies. We identified additional references by reviewing the bibliographies of the material from the initial Internet search and through contacts with study authors. Overall, we identified 152 references in material published from 1990 to 2003.

To zero in on the most useful material, we established two criteria: (1) the reference had to be relatively recent, with a date of 1995 or later, and (2) it had to contain original research. After eliminating 50 references that were published prior to 1995 and 75 references that reviewed or summarized research performed by others, we were left with 27 studies that met our criteria. (The studies were published, presented at a conference, or provided by the authors during 1995 to 2003.) We reviewed each of the remaining 27 studies in detail and (1) assessed each study’s research methodology, including its data quality, research design, and analytic techniques and (2) summarized its major findings and conclusions. When a study focused on compliance with disclosure requirements, we determined
whether the criteria used to assess the adequacy of companies’ disclosures were consistent with existing regulations, standards, and guidance. We also assessed the extent to which each study’s data and methods support its findings and conclusions.

Overall, we eliminated 8 of the 27 studies from our analyses because they had severe methodological limitations or provided little or no information on key aspects of the study methodology. We eliminated another four studies because they did not address environmental disclosure in terms of SEC’s reporting requirements or examine the amount of environmental information being disclosed. The latter four studies focused entirely on other issues such as the impact of environmental disclosure on investor behavior and the relationship between environmental disclosure and market value. The remaining 15 studies had strong limitations, which should be considered in interpreting the results, but the limitations were not so severe as to preclude the studies’ use. Appendix III briefly summarizes the objectives, scope, and limitations of the 15 studies included in our analyses.

To supplement our review of existing disclosure studies, we also conducted a limited examination of disclosures related to potential future risks, focusing on the impacts of potential controls on greenhouse gas emissions at 20 U.S. electric utilities with relatively high emissions of carbon dioxide. We obtained emissions data from EPA’s EGRID2002 database, using emissions in 2000 (the most recent data available), and identified 20 utilities with high emissions that are also publicly traded companies subject to SEC disclosure requirements. These companies were the AES Corporation; Allegheny Energy, Inc.; Ameren Corporation; American Electric Power Company, Inc.; CenterPoint Energy, Inc.; Cinergy Corporation; Dominion Resources, Inc.; DTE Energy Company; Duke Energy Corporation; Edison International; Entergy Corporation; FirstEnergy Corporation; FPL Group, Inc.; Mirant Corporation; PPL Corporation, Inc.; Progress Energy; Reliant Energy, Inc.; The Southern

1 The Tennessee Valley Authority and two non-U.S. companies were among the top 20 emitters in EPA’s database, but we excluded them from our analysis because they are not required to file 10-K reports. In addition, according to an EPA official, EPA makes a number of assumptions in allocating carbon dioxide emissions from facilities with multiple owners and the relative ranking of the top emitters could be affected as a result. Also, the measurement of carbon dioxide emissions for smaller sources involves estimates, which could affect the amounts by a small percentage. However, the official agreed that we had included companies that were among the highest emitters of carbon dioxide in our analysis.
For each company, we reviewed the most recent available annual and quarterly filings, namely, the fiscal year 2003 forms 10-K and 10-Q filings (including any such filings that were amended). We looked for disclosures related to the impact of potential controls over greenhouse gas emissions, including any discussion of estimated risks to the utilities’ operations or financial condition and the estimated cost impact. To ensure that we identified all relevant disclosures, we searched the documents for a number of key terms, including “global warming,” “climate change,” “Kyoto Protocol,” “greenhouse gases,” and specific elements of greenhouse gases such as “carbon dioxide.” We focused on the sections of the filings most likely to yield disclosures related to the impact of potential controls over greenhouse gas emissions, including Forward-Looking Information (when it was included as a separate section), item 1, Description of Business; item 3, Legal Proceedings; item 7, Management’s Discussion and Analysis of Results of Operations and Financial Condition; and item 8, Financial Statements and Supplemental Data. When a company included its annual report to shareholders in its filing by reference, we also reviewed that report in the same manner as the filing. After extracting the relevant excerpts from the filings, we created a table and categorized the disclosures by company and type of disclosure.

To assess the adequacy of SEC’s efforts to monitor and enforce compliance with the disclosure requirements, we obtained information from the Division of Corporation Finance, which is responsible for reviewing companies’ filings to check their compliance with disclosure requirements, and the Division of Enforcement, which has authority to initiate civil or criminal actions to enforce the requirements. Specifically, we obtained information on SEC’s procedures for reviewing company filings, issuing comment letters, and documenting the results; reviewed relevant documents, including SEC’s analysis of annual filings by Fortune 500 companies; obtained available statistics on SEC’s monitoring and enforcement process; and interviewed SEC reviewers responsible for reviewing annual filings of companies in industries with a greater likelihood of being affected by environmental disclosure requirements. We also obtained information on enforcement actions by SEC’s Division of Enforcement, including cases involving environmental disclosure, and met with officials within SEC and EPA’s Office of Enforcement and Compliance.

2Effective April 2004, Reliant Resources changed its name to Reliant Energy, Inc.
Assurance to obtain information on the nature of interagency coordination on environmental disclosure.

To obtain suggestions on actions for increasing and improving environmental disclosure, we conducted a Web-based survey of 30 experts on environmental disclosure issues. We selected the participants from a larger group of 52 widely recognized experts on environmental disclosure, which we compiled by consulting organizations and individuals with a stakeholder interest in environmental disclosure, relevant literature, authors of reports on disclosure issues, and other sources. We also obtained assistance from the National Academies of Science in identifying experts on environmental disclosure.

In compiling our initial list of experts, we sought to achieve balance in terms of various areas of expertise, including environmental laws and regulations, accounting and auditing standards and guidance, SEC disclosure requirements, the disclosure interests of socially responsible investors, the disclosure interests of investors with general investment interests; and the relationship between business strategy and corporate governance. We also sought to achieve participation by experts from fields that use the filings in some way, including auditing and accounting, consulting, financial services, insurance, nonprofit advocacy groups, the legal profession, public employee pension funds, credit rating agencies, nonprofit research groups, and academia. Appendix IV lists the 30 experts who participated in our survey.3

Our questionnaire focused on concerns about SEC’s environmental disclosure requirements, asking the experts for their views on the concerns and for suggestions on how best to resolve them. To identify concerns, we analyzed the results of 27 recent studies about environmental disclosure;4 reviewed other relevant literature; and, as discussed earlier, interviewed representatives of groups with a stakeholder interest in environmental disclosure. In total, we identified 15 concerns, which we categorized into five general areas: (1) addressing uncertainty regarding the likelihood and amount of existing and potential liabilities related to environmental contamination, (2) determining whether environmental information is

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3We initially asked 31 individuals to participate. One person declined.

4As noted earlier, our review of existing studies on environmental disclosure included 27 studies. However, at the time we were developing our questionnaire, we had identified only 25 of the studies.
material, (3) disclosing future risks, (4) ensuring disclosure of important environmental information, and (5) monitoring and enforcing environmental disclosure. For each concern, we asked the experts about the extent to which they shared the concern and thought that it contributed to inadequate disclosure of environmental information. We also asked a series of questions on the impact of inadequate disclosure and ways to address problems related to inadequate disclosure.

We pretested the questionnaire with five experts in Boston, Massachusetts, and Washington, D.C., revised it based on the feedback we received, and posted the final version on GAO's survey Web site. We notified the participants of the availability of the questionnaire with an e-mail message, which contained a unique user name and password for each. The participants were able to log on and fill out the questionnaire but did not have access to the responses of others. We obtained responses from all 30 experts for a response rate of 100 percent.

We analyzed the content of the responses given to the open-ended questions to identify suggestions for increasing and improving environmental disclosure. For each question, two coders independently read the responses and identified broad categories for the responses. We discussed these categories and reached agreement on which ones to use. Each coder then worked independently to classify responses into the categories. The coders then compared their classifications and resolved any differences through discussion so that there was 100 percent agreement.

Finally, we discussed the experts’ suggestions with representatives of businesses responsible for filing reports with SEC, including industries such as electric utilities and chemical manufacturing in which environmental disclosure is more likely to be relevant. We met with the American Chemistry Council, the Business Roundtable, the Edison Electric Institute, and the U.S. Business Council for Sustainable Development to get their views; in addition to the staff from these associations, representatives from approximately 10 companies participated in the discussions.
## Principal Requirements and Guidance Applicable to the Disclosure of Environmental Information in SEC Filings

### Appendix II

<table>
<thead>
<tr>
<th>Issue date</th>
<th>Document</th>
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</table>

Source: GAO.
Some of these documents have been amended since they were first issued.

SEC adopted Regulation S-X in 1940 and issued a comprehensive revision in 1972. Provisions of Regulation S-X relevant to environmental disclosure include 17 C.F.R. §210.3-01(a), which requires annual submission of consolidated audited balance sheets; §210.3-02(a), which requires annual submission of consolidated statements of income and cash flow; and §210.4-01(a)(1), which provides that financial statements filed with SEC that are not prepared in accordance with generally accepted accounting principles will be presumed to be misleading or inaccurate.

In 1982, SEC consolidated all existing uniform disclosure requirements under the federal securities laws, including those related to environmental information, into an integrated disclosure system under Regulation S-K. As part of this effort, SEC included interpretive releases issued prior to 1982, such as those related to the disclosure of environmental compliance costs (Conclusions and Final Action on Rulemaking Proposals Relating to Environmental Disclosure [Release Nos. 33-5704; 34-12414]) and environment-related legal proceedings (Proposed Amendments to Item 5 of Regulation S-K Regarding the Disclosure of Certain Environmental Proceedings [Release Nos. 33-6315; 34-17762]). The provisions of Regulation S-K most directly relevant to environmental disclosure include 17 C.F.R. §229.101 (Description of Business), §229.103 (Legal Proceedings), and §229.303 (Management's Discussion of Financial Condition and Results of Operations).
### Appendix III

## Summary of Disclosure Studies Included in Our Analysis

<table>
<thead>
<tr>
<th>Study</th>
<th>Objective and scope (time frame)</th>
<th>Major limitations</th>
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<tbody>
<tr>
<td>Austin, Duncan and Amanda Sauer, <em>Changing Oil: Emerging Environmental Risks and Shareholder Value in the Oil and Gas Industry</em>, World Resources Institute, 2002.</td>
<td><strong>Objective</strong>: To assess the potential impact of various scenarios for (1) controls over greenhouse gas emissions and (2) pressures to restrict access to oil and gas reserves on shareholder value. <strong>Scope</strong>: 16 oil and gas companies (forward-looking).</td>
<td>Small sample size within a single industry. Estimates in study depend heavily on the accuracy of various assumptions. The authors attempted to incorporate input from various experts into the assignment of probabilities to final scenarios; however, the response rates from these experts was quite low. The authors then assigned probabilities on the basis of the limited responses and using their best judgment. Authors applied judgmental factors in attempting to distinguish different refinery product mixes.</td>
</tr>
<tr>
<td>Barth, Mary E.; Maureen F. McNichols; and Peter G. Wilson, “Factors Influencing Firms’ Disclosure about Environmental Liabilities,” <em>Review of Accounting Studies</em>, Vol. 2 (1997): pp. 35-64.</td>
<td><strong>Objective</strong>: To identify factors that influence companies’ decisions to disclose information about environmental liabilities. <strong>Scope</strong>: 257 companies that have a high concentration of Superfund exposure from four industries (1989 through 1993).</td>
<td>No information on how the matching to produce potentially responsible party sites was done or the accuracy of the matching process related to the use of industry data files. Study results not generalizable.</td>
</tr>
<tr>
<td>Freedman, Martin; Bikki Jaggi; and A.J. Stagliano, “Pollution Disclosures by Electric Utilities: An Evaluation at the Start of the First Phase of 1990 Clean Air Act,” Sixth Annual Conference of the Greening of Industry Network, (1997).</td>
<td><strong>Objective</strong>: To examine the extent of disclosures related to emissions controls required under the Clean Air Act Amendments of 1990. <strong>Scope</strong>: 38 public companies that owned 88 coal-fired electric utilities (1989, 1990, and 1995).</td>
<td>Analyses may have been affected by differences in collection of emissions data in 1990 and 1995. Small size of subgroups used in modeling affected ability to draw meaningful conclusions and design of subgroups relied on authors’ judgments. Conclusions go beyond what is supported by the analysis.</td>
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**Scope:** 193 companies that were potentially liable for Superfund remediation costs (1987). | Criteria for assessing adequacy of disclosure not consistent with the requirements.  
No information on how companies were identified for inclusion in the study or the extent to which the companies are representative of others.  
No description of the content analysis or steps taken to ensure inter-rater reliability. |
| Freedman, Martin and A.J. Stagliano, “Superfund Disclosures in Annual Accounting Reports: The Impact of AICPA Statement of Position 96-1,” provided by authors. | **Objective:** To determine whether the issuance of additional guidance (American Institute of Certified Public Accountants Statement of Position No. 96-1) led to improved disclosure of Superfund liabilities in companies’ annual filings with SEC.  
**Scope:** 137 companies identified as potentially responsible parties at 3 or more Superfund sites (1994 and 1997). | Criteria for assessing adequacy of disclosure not consistent with the requirements.  
Limited time period covered by analysis.  
Use of a “disclosure index” that is not defined.  
No information on data analysis techniques and study does not include tables.  
No information on methods used to measure dependent variables, the statistical tests conducted, the results of such tests, or methods used to interpret the results.  
Insufficient information to assess reasonableness of study conclusions. |
**Scope:** 140 companies that were potentially liable for Superfund costs (1987, 1989, and 1990). | No justification for the particular weighting scheme used in study, although finding of statistical significance is heavily dependent on it.  
Study results not generalizable. |
| Freedman, Martin and A.J. Stagliano, “Environmental Disclosure by Companies Involved in Initial Public Offerings,” *Accounting, Auditing and Accountability Journal*, Vol. 15, No. 1 (2002): pp. 94-105. | **Objective:** To determine whether differences exist in the disclosure of environmental liabilities by companies identified as potentially responsible parties at Superfund sites, depending on the companies’ involvement in initial public offerings.  
**Scope:** 26 companies making initial public stock offerings that were identified as potentially responsible parties under the Superfund program (1984 through 1993). | Small sample size.  
Initial sample of 45 was cut to 26 when some of the selected firms could not be paired with comparison firms; no discussion regarding the possible effects of reduced sample.  
Possible bias introduced because matching, in terms of both standard industrial codes and assets, is very imprecise.  
No information on steps taken to ensure inter-rater reliability of content coding. |
Summary of Disclosure Studies Included in Our Analysis

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<th>Study</th>
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<tbody>
<tr>
<td>Gamble, George O.; Kathy Hsu; Devaun Kite; and Robin R. Radtke, &quot;Environmental Disclosures in Annual Reports and 10Ks: An Examination,&quot; Accounting Horizons, Vol. 9, No. 3, (September 1995): pp. 34-54.</td>
<td>Objective: To determine the relative quality of disclosures over time and whether such information is sufficient to satisfy stakeholders' needs. Scope: 234 companies from 12 industries combined into six industry groups selected from Standard &amp; Poor's Compustat Services (1986 through 1991).</td>
<td>Criteria for assessing adequacy of disclosure not consistent with the requirements. No information on how the companies were selected. Requirement that at least six companies remain within an industry group could have influenced the analyses. No information on steps taken to ensure inter-rater reliability of content coding. Study results not generalizable. Conclusions go beyond what is supported by the analysis.</td>
</tr>
<tr>
<td>Kreuze, Jerry G.; Gale E. Newell; and Stephen J. Newell, &quot;What Companies Are Reporting (Environmental Disclosures),&quot; Management Accounting, Vol. 78, No. 1, (1996).</td>
<td>Objective: To examine the extent to which companies disclosed environmental information in their annual reports to shareholders. Scope: 645 Forbes 500 corporations (1991).</td>
<td>Criteria for assessing adequacy of disclosure not consistent with the requirements. No information on how the sample was chosen or the universe from which companies were selected. Limited time period covered by analysis. Study results not generalizable. Conclusions go beyond what is supported by the analysis.</td>
</tr>
<tr>
<td>Repetto, Robert and Duncan Austin, Coming Clean: Corporate Disclosure of Financially Significant Environmental Risks, World Resources Institute, 2000.</td>
<td>Objective: To assess the adequacy of companies' disclosure of material environmental exposures in accordance with SEC rules. Scope: 13 public pulp and paper companies (1998 and 1999).</td>
<td>Criteria for assessing adequacy of disclosure not consistent with the requirements. Small sample size. No information on how the companies were selected, the selection of experts who &quot;identified environmental pressures&quot; on firms, how authors identified these pressures, etc. Estimates in study depend heavily on the accuracy of various assumptions. Conclusions go beyond what is supported by the analysis.</td>
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<tr>
<td>Repetto, Robert and Duncan Austin, <em>Pure Profit: The Financial Implications of Environmental Performance</em>, World Resources Institute (2000).</td>
<td>Objective: To assess the potential financial impact of projected environmental developments such as pending air and water quality regulations. The study also examined the extent of companies’ disclosures related to future environmental expenditures and contingencies. &lt;br&gt; Scope: 13 pulp and paper companies that will be significantly impacted by near future environmental developments (forward-looking).</td>
<td>Criteria for assessing adequacy of disclosure not consistent with the requirements. &lt;br&gt; Small sample size. &lt;br&gt; No information on how the companies were selected, the selection of experts who “identified environmental pressures” on firms, how authors identified these pressures, etc. &lt;br&gt; Estimates in study depend heavily on the accuracy of various assumptions.</td>
</tr>
<tr>
<td>Stagliano, A.J. and W. Darrell Walden, “Assessing the Quality of Environmental Disclosure Themes,” Second Asian Pacific Interdisciplinary Research in Accounting Conference, Osaka City University, Osaka, Japan, August 1998.</td>
<td>Objective: To examine the quantity and quality of environmental disclosures in the financial and nonfinancial sections of corporate annual reports. &lt;br&gt; Scope: 53 companies in four industries (1989).</td>
<td>Criteria for assessing adequacy of disclosure not consistent with the requirements. &lt;br&gt; Small sample size. &lt;br&gt; No specific information on sample selection (e.g., no elaboration on “leaders in their respective industries”). &lt;br&gt; Possible sample selection bias cannot be determined. &lt;br&gt; Study results not generalizable.</td>
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</table>
Appendix III
Summary of Disclosure Studies Included in Our Analysis

Source: GAO.

The overall objectives of some studies did not focus explicitly on disclosure of environmental information under SEC rules. However, we included such studies in our analysis if they contained an assessment of the amount or adequacy of disclosure in addition to their primary focus.

This table combines studies with strong and very strong limitations. The column on “major limitations” includes some but not all of the major limitations we identified.
## Experts Who Participated in GAO Survey

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Gavin Anderson</td>
<td>GovernanceMetrix International, Inc.</td>
</tr>
<tr>
<td>Duncan Austin</td>
<td>World Resources Institute</td>
</tr>
<tr>
<td>Constance E. Bagley</td>
<td>Harvard Business School</td>
</tr>
<tr>
<td>Michelle Chan-Fishel</td>
<td>Friends of the Earth</td>
</tr>
<tr>
<td>Holly Clack</td>
<td>PricewaterhouseCoopers LLP</td>
</tr>
<tr>
<td>Doug Cogan</td>
<td>Investor Responsibility Research Center</td>
</tr>
<tr>
<td>Mark A. Cohen</td>
<td>Vanderbilt University</td>
</tr>
<tr>
<td>Andrew N. Davis</td>
<td>LeBeouf, Lamb, Greene, and MacRae, LLP</td>
</tr>
<tr>
<td>Martin Freedman</td>
<td>Towson University</td>
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<tr>
<td>Julie Gorte</td>
<td>Calvert Funds</td>
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<tr>
<td>Suellen Keiner</td>
<td>National Academy of Public Administration</td>
</tr>
<tr>
<td>Donald Kirshbaum</td>
<td>Office of Connecticut State Treasurer</td>
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<tr>
<td>Gayle S. Koch</td>
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<tr>
<td>Jerry G. Kreuze</td>
<td>Western Michigan University</td>
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<tr>
<td>Peter Lehner</td>
<td>Office of Attorney General, State of New York</td>
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<td>Tim Little</td>
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<tr>
<td>Steven D. Lydenberg</td>
<td>Domini Social Investments LLC</td>
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<tr>
<td>Thomas M. McMahon</td>
<td>Sidley Austin Brown &amp; Wood LLP</td>
</tr>
<tr>
<td>Dennis M. Patten</td>
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</tr>
<tr>
<td>Ken Radigan</td>
<td>AIG Environmental</td>
</tr>
<tr>
<td>Robert Repetto</td>
<td>Stratus Consulting, Inc.</td>
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<tr>
<td>Amy Ripepi</td>
<td>Financial Reporting Advisors LLC</td>
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<td>Greg Rogers</td>
<td>Guida, Slavich &amp; Flores, P.C.</td>
</tr>
<tr>
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<td>Standard &amp; Poor's</td>
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<td>William L. Thomas</td>
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<tr>
<td>Martin Whittaker</td>
<td>Innovest Strategic Value Advisors, Inc.</td>
</tr>
<tr>
<td>Cynthia Williams</td>
<td>University of Illinois College of Law</td>
</tr>
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The Web-based questionnaire included six sections. The first five sections began with an issue statement and background material for the questions followed by a series of closed-ended (radio button) questions and then, one or more open-ended (text box) questions. The last section also used a combination of closed-ended and open-ended questions, included general questions about the impact of inadequate disclosure, and asked for suggestions on ways to resolve concerns about disclosure.

**Section I. Addressing Uncertainty Regarding the Likelihood and Amount of Existing and Potential Liabilities Related to Environmental Contamination**

**Issue Statement**: Companies may not be providing enough information about environmental liabilities in their financial statements because of uncertainties about (1) whether they have a liability that must be disclosed and (2) if so, how to estimate the amount of the liability. Without more specific standards and guidance, some companies conclude that they have nothing to disclose, cannot calculate an estimate, or default to a minimum amount rather than develop a best estimate.

**Background**: Under generally accepted accounting principles, companies must report environmental and other types of liabilities in their financial statements if such liabilities are “reasonably likely” to occur and the amounts are “reasonably estimable.” (In addition to liabilities, losses may take the form of permanent reductions in asset value.) SEC, the Financial Accounting Standards Board, and the American Institute of Certified Public Accountants have all issued standards and guidance to assist companies (and their independent auditors) in making determinations about when and what amount to disclose.

The standards and guidance on when to disclose a liability consider a range of probabilities that the liability will occur—from “likely” to “remote”—and provide some benchmarks by which companies can judge the likelihood of a liability resulting from environmental contamination (for example, notification by the Environmental Protection Agency that they have been identified as a responsible party at a hazardous waste site).

The standards and guidance on what amount to disclose specify the cost elements that should be included in an estimate and require companies to use the best information currently available. In addition, the guidance helps companies determine an appropriate amount to disclose if they estimate that the liability will fall within a particular dollar range.
Concern #1: The guidance on assessing the likelihood of an environmental liability and determining when it must be disclosed is not sufficiently clear. For example, opinions vary on whether a disclosure obligation exists at the time the environmental contamination occurs or the point at which a regulatory agency (or some other third party) has taken action against a company to force a cleanup.

<table>
<thead>
<tr>
<th>Q1. Do you share this concern?</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
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</thead>
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<tr>
<td>Definitely no</td>
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<td>13.33</td>
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Q2. Does the lack of clear guidance for assessing the likelihood of an environmental liability contribute to inadequate disclosure of environmental information?

<table>
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<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
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<tbody>
<tr>
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Concern #2: The standards and guidance applicable to estimating the amount of environmental liabilities are not specific enough to help companies deal with the uncertainties inherent in deriving the estimates. Such uncertainties include the extent to which cleanup costs might be shared with other responsible parties or offset by insurance recoveries, the extent of contamination and required cleanup, the state of the art of available cleanup technology, and the stringency of environmental cleanup standards.

Q3. Do you share this concern?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
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</thead>
<tbody>
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Q4. Does the lack of specific standards and guidance for estimating the amount of environmental liabilities contribute to inadequate disclosure of environmental information?

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<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
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<tbody>
<tr>
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<tr>
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<td>3.33</td>
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<tr>
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Q5. Please provide any additional comments you have, or further elaboration on your responses for Section I, “Addressing Uncertainty Regarding the Likelihood and Amount of Existing and Potential Liabilities Related to Environmental Contamination,” in the space below.

<table>
<thead>
<tr>
<th>Response categories</th>
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<tbody>
<tr>
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<td>Wrote comments</td>
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</table>
Section II: Determining Whether Environmental Information is Material

Issue Statement: Companies may not be providing environmental information in their SEC filings that would be considered material by "reasonable investors."

Background: Applicable regulations and guidance generally define materiality in terms of information that is important to investors’ investment decisions or necessary for the fair presentation of the financial statements in accordance with generally accepted accounting principles. For example, SEC’s regulations define material information as “matters about which an average prudent investor ought reasonably to be informed.” As another example, guidance issued by the Financial Accounting Standards Board states that the omission or misstatement of an item in a financial report is material if, in the light of surrounding circumstances, the magnitude of the item is such that it is probable that the judgment of a reasonable person relying on the report would have been changed or influenced by the inclusion or correction of the item.

SEC’s regulations and guidance generally do not establish numeric thresholds for determining materiality. However, SEC Regulation S-K, item 103 “Legal Proceedings” contains two exceptions: (1) losses resulting from any administrative or judicial proceeding involving federal, state, or local environmental laws, if the amount of the losses exceeds 10 percent of the company’s current assets and (2) monetary sanctions greater than $100,000, if a governmental authority is a party to the proceeding.

Concern #3: The regulations and guidance issued by SEC and other standard-setting bodies are not specific enough to ensure adequate disclosure of material information, environmental or otherwise. For example, the regulations and guidance lack any metrics that could serve as minimum thresholds for materiality and do not sufficiently emphasize intangible, nonquantifiable factors in materiality determinations (for example, the impact of environmental contamination on a company’s reputation).

Q6. Do you share this concern?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
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</table>
Q7. Does the lack of specific regulations and guidance for determining materiality contribute to inadequate disclosure of environmental information?

<table>
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<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
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Concern #4: SEC’s regulations do not require companies to aggregate the estimated costs of potential environmental liabilities (for example, multiple hazardous waste sites) when assessing materiality.

Q8. Do you share this concern?

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<tr>
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<th>Number of respondents</th>
<th>Percent of respondents</th>
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Q9. Does the lack of a requirement to aggregate the estimated costs of potential environmental liabilities contribute to inadequate disclosure of environmental information?

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</table>
Concern #5: The $100,000 threshold for monetary sanctions may be outdated. For example, the threshold has not been adjusted since it was established in 1981.

Q10. Do you share this concern?

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<th>Response categories</th>
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Q11. Does the outdated monetary threshold contribute to inadequate disclosure of environmental information?

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<tr>
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<tr>
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</tbody>
</table>
Concern #6: The $100,000 threshold for monetary sanctions may be too restrictive. For example, certain costs related to the sanctions, such as the costs associated with (1) environmental remediation and (2) supplemental environmental projects conducted in lieu of paying sanctions, are not counted in determining whether the threshold has been met.

Q12. Do you share this concern?

<table>
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<th>Response categories</th>
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<td>20.00</td>
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Q13. Does the too restrictive definition of monetary sanction contribute to inadequate disclosure of environmental information?

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Q14. Please provide any additional comments you have, or further elaboration on your responses for Section II, “Determining Whether Environmental Information is Material,” in the space below.

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<tr>
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</table>
Section III: Disclosing Future Environmental Risks

Issue Statement: Companies may not be providing enough information on potentially significant environmental problems or regulatory initiatives that could pose a future financial risk.

Background: SEC’s regulations and guidance categorize companies’ disclosure of information regarding their future condition, including environmental risks, in two different ways. SEC Regulation S-K, item 303, “Management Discussion and Analysis” requires companies to discuss in their filings with SEC any known material trends, events, and uncertainties that would cause the companies’ liquidity, capital resources, and results of operations, as reported, to not be indicative of future operating results or financial condition. On the other hand, SEC’s instructions for this requirement encourage, but do not require, companies to discuss forward-looking information in their filings. According to SEC, reporting forward-looking information involves anticipating a future trend or event, or anticipating a less predictable impact of a known event, trend or uncertainty.

Concern #7: SEC’s regulations and guidance do not clearly distinguish between “known information that might impact future operating results” and “forward-looking information.”

<table>
<thead>
<tr>
<th>Q15. Do you share this concern?</th>
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<tbody>
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<tr>
<td>Definitely yes</td>
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<tr>
<td>No answer</td>
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</table>

Q16. Does the lack of a clear distinction between “known information that might impact future operating results” and “forward-looking information” contribute to inadequate disclosure of environmental information?

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<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
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<tbody>
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<td>1</td>
<td>3.33</td>
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<tr>
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<tr>
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<td>13.33</td>
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<td>No answer</td>
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</tbody>
</table>
Concern #8: SEC’s regulations and guidance do not specify how far into the future companies should look in identifying and discussing “known” or “forward-looking” information (including information on environmental risks) and the potential impacts of such information.

Q17. Do you share this concern?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
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</table>

Q18. Does the lack of specific regulations and guidance on the timeframes for “known” and “forward-looking” information lead to inadequate disclosure of environmental information?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
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<td>6.67</td>
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<tr>
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<td>Uncertain</td>
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<td>10.00</td>
</tr>
<tr>
<td>Probably yes</td>
<td>13</td>
<td>43.33</td>
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<tr>
<td>Definitely yes</td>
<td>10</td>
<td>33.33</td>
</tr>
<tr>
<td>No basis to judge</td>
<td>0</td>
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<tr>
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Q19. Please provide any additional comments you have, or further elaboration on your responses for Section III, “Disclosing Future Environmental Risks,” in the space below.

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<thead>
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<th>Response categories</th>
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<tr>
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<tr>
<td>Wrote comments</td>
<td>23</td>
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</table>
Section IV: Ensuring Disclosure of Important Environmental Information

Issue Statement: Existing standards and guidance from SEC, the Financial Accounting Standards Board, and the American Institute of Certified Public Accountants do not require companies to disclose certain types of information that some investors believe is important for making investment decisions.

Background: According to SEC, the existing disclosure requirements focus on providing a reasonable investor with sufficient information to assess the financial condition of a company. Regarding environmental information, the standards and guidance issued by SEC and other authorities require companies to disclose in their filings (1) material environmental liabilities and other losses, (2) the impact of certain material trends, events, and uncertainties—including those related to environmental risks—on the companies’ capital expenditures and results of operations, and (3) certain legal proceedings involving environmental matters.

Organizations that promote socially conscious investments argue that SEC should expand its requirements for corporate disclosure of environmental information because these organizations believe such information could be material to many investors and serves as a proxy for effective corporate governance. In response to litigation during the 1970s, SEC concluded that it is authorized and required by the National Environmental Policy Act to consider the promotion of environmental protection as a factor in exercising its rulemaking authority. At that time, however, SEC argued that relevant statutes and legislative history suggested that its disclosure authority be used to require the dissemination of “economically significant” information. SEC also noted the lack of reliable evidence regarding the extent of investor interest in expanded environmental disclosure.

Concern #9: Companies are not required to disclose information about their environmental assets (for example, emission trading credits) and environmental performance. A growing body of “socially conscious” investors want such information because they believe many investors may find this information material or because it indicates the effectiveness of corporate management.

Q20. Do you share this concern?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely no</td>
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<td>10.00</td>
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<td>16</td>
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</tr>
<tr>
<td>No answer</td>
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</table>
Q21. How important is it for investors to have information on companies’ environmental assets and environmental performance when making investment decisions?

<table>
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<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
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<tr>
<td>Not important</td>
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<tr>
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<tr>
<td>Greatly important</td>
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<tr>
<td>No answer</td>
<td>1</td>
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Concern #10: Companies are not required to disclose quantitative information on the total number of their environmental remediation sites, related claims, or the associated costs.

Q22. Do you share this concern?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely no</td>
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<tr>
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<td>3.33</td>
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<tr>
<td>No answer</td>
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Q23. How important is it for investors to have quantitative information about the total number of environmental remediation sites, related claims, or the associated costs when making investment decisions?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
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<tbody>
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<td>6.67</td>
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<tr>
<td>Moderately important</td>
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<tr>
<td>Extremely important</td>
<td>10</td>
<td>33.33</td>
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<tr>
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<tr>
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</tr>
</tbody>
</table>
Q24. Please provide any additional comments you have, or further elaboration on your responses for Section IV, “Ensuring Disclosure of Important Environmental Information,” in the space below.

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
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<td>7</td>
<td>23.33</td>
</tr>
<tr>
<td>Wrote comments</td>
<td>23</td>
<td>76.67</td>
</tr>
</tbody>
</table>
Section V: Monitoring and Enforcing Environmental Disclosure

Issue Statement: Companies’ management, their internal accountants and independent auditors, and reviewers at SEC may not be adequately fulfilling their responsibilities for ensuring that companies properly disclose material information, including environmental information.

Background: In terms of environmental disclosure, companies’ managers are responsible for establishing effective internal controls to gather and report information about environmental liabilities and other losses. Companies’ internal accountants are responsible for recording and reporting transactions, including those related to environmental liabilities, using generally accepted accounting principles promulgated by the Financial Accounting Standards Board. Independent auditors attest to whether a company has properly accounted for environmental liabilities, actual or contingent, and other losses related to environmental contamination, in accordance with auditing standards and guidance from the American Institute of Certified Public Accountants and SEC’s regulations and guidance. To ensure that investors are protected, SEC staff review company filings to determine if they comply with SEC’s disclosure requirements and take action if necessary. In fulfilling its monitoring and enforcement role, SEC has a variety of options available, ranging from making inquiries to issuing comment letters to taking legal action.

Concern #11: Companies’ internal controls are not adequate to ensure that environmental liabilities and other losses are brought to management’s attention and reported in companies’ financial statements as appropriate.

Q25. Do you share this concern?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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</tr>
<tr>
<td>No answer</td>
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</table>
Q26. Do weak internal controls within companies contribute to inadequate disclosure of environmental information?

<table>
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<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
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<tr>
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<tr>
<td>No answer</td>
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<td>3.33</td>
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</table>

Concern #12: Companies' internal accountants may not be making an adequate effort to identify and appropriately report all environmental liabilities and other losses in the companies' financial statements.

Q27. Do you share this concern?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
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<tbody>
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<tr>
<td>Definitely yes</td>
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</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>3.33</td>
</tr>
</tbody>
</table>

Q28. Does insufficient effort on the part of internal accountants contribute to inadequate disclosure of environmental information?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>No answer</td>
<td>2</td>
<td>6.67</td>
</tr>
</tbody>
</table>
Concern #13: Independent auditors may not be exercising “due professional care” in their efforts to verify the accuracy and completeness of information on environmental liabilities and other losses that companies report in their financial statements.

Q29. Do you share this concern?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
</thead>
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</tr>
<tr>
<td>No answer</td>
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Q30. Does the lack of “due professional care” by independent auditors contribute to inadequate disclosure of environmental information?

<table>
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<tr>
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<th>Number of respondents</th>
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<tbody>
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<tr>
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<td>10.00</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>3.33</td>
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</tbody>
</table>
Concern #14: SEC's monitoring and enforcement activities related to environmental disclosure are limited. For example, SEC infrequently conducts full reviews of companies' periodic filings and, in particular, rarely focuses on environmental disclosure. Enforcement actions related to environmental disclosure are also rare.

Q31. Do you share this concern?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
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<td>10.00</td>
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Q32. Do SEC's limited monitoring and enforcement activities contribute to inadequate disclosure of environmental information?

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<td>20.00</td>
</tr>
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<td>66.67</td>
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</tr>
<tr>
<td>No answer</td>
<td>0</td>
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</tbody>
</table>
Concern #15: SEC is not effectively using EPA’s enforcement data or otherwise coordinating with EPA.

Q33. Do you share this concern?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<td>0.0</td>
</tr>
<tr>
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<td>3.33</td>
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<tr>
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</tr>
<tr>
<td>Definitely yes</td>
<td>12</td>
<td>40.00</td>
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</tr>
<tr>
<td>No answer</td>
<td>0</td>
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</table>

Q34. Does the ineffective coordination with EPA contribute to inadequate disclosure of environmental information?

<table>
<thead>
<tr>
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<th>Percent of respondents</th>
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<tr>
<td>No answer</td>
<td>0</td>
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</tbody>
</table>

Q35. Please provide any additional comments you have, or further elaboration on your responses for Section V, “Monitoring and Enforcing Environmental Disclosure,” in the space below.

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<tr>
<th>Response categories</th>
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</table>
Section VI: Additional Concerns, Impact, and Recommendations

This questionnaire has identified a number of concerns that may contribute to inadequate disclosure of environmental liabilities or other losses. This section asks you to describe any additional concerns you may have. In addition, it asks about the impact of inadequate environmental disclosure on investors and how you would address inadequate disclosure.

Q36. Please describe any other significant concerns that contribute to inadequate disclosure of environmental liabilities or losses.

<table>
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<tr>
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<th>Number of respondents</th>
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<tbody>
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</tr>
<tr>
<td>Wrote comments</td>
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</table>

Q37. To what extent, if at all, does inadequate disclosure of environmental information hinder investors' ability to assess the overall financial condition of a company?

<table>
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<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
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<tbody>
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<td>0.0</td>
</tr>
<tr>
<td>Slightly hinders</td>
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<td>Moderately hinders</td>
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<td>0.0</td>
</tr>
<tr>
<td>No answer</td>
<td>3</td>
<td>10.00</td>
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</tbody>
</table>

Q38. To what extent, if at all, does inadequate disclosure of environmental information hinder investors' ability to assess the overall future risks that a company faces?

<table>
<thead>
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</tr>
<tr>
<td>No answer</td>
<td>3</td>
<td>10.00</td>
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</tbody>
</table>
Q39. To what extent, if at all, does inadequate disclosure of environmental information hinder investors' ability to assess other aspects of a company's overall performance (for example, corporate governance) that determine whether the company is a good investment?

<table>
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<td>6.67</td>
</tr>
</tbody>
</table>

Q40. To what extent, if at all, does inadequate disclosure of environmental information hinder investors' ability to compare the overall performance of companies within an industry?

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not hinder</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Slightly hinders</td>
<td>1</td>
<td>3.33</td>
</tr>
<tr>
<td>Moderately hinders</td>
<td>14</td>
<td>46.67</td>
</tr>
<tr>
<td>Greatly hinders</td>
<td>12</td>
<td>40.00</td>
</tr>
<tr>
<td>No basis to judge</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>No answer</td>
<td>3</td>
<td>10.00</td>
</tr>
</tbody>
</table>

Q41. If you are aware of any specific examples in which the ability of investors to make investment decisions was impaired as a result of the issues and concerns identified in this questionnaire, please describe them here. It would be helpful to us if, in your response, you could link each example to a specific issue or concern.

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not write any comments</td>
<td>12</td>
<td>40.00</td>
</tr>
<tr>
<td>Wrote comments</td>
<td>18</td>
<td>60.00</td>
</tr>
</tbody>
</table>
Q42. How could problems related to inadequate disclosure be addressed? In your answer, consider what entities would be the most effective or appropriate vehicle for addressing the problems, including:
1) SEC;
2) other governmental entities, such as other federal agencies and the Congress; and
3) nongovernmental entities, such as the Financial Accounting Standards Board or shareholder or public interest groups.

It would be helpful to us if, in your response, you could link each example to a specific issue or concern.

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not write any comments</td>
<td>6</td>
<td>20.00</td>
</tr>
<tr>
<td>Wrote comments</td>
<td>24</td>
<td>80.00</td>
</tr>
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</table>

Q43. Please provide any additional comments you have, or further elaboration on your responses for Section VI, “Additional Concerns, Impact, and Recommendations,” in the space below.

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Number of respondents</th>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not write any comments</td>
<td>17</td>
<td>56.67</td>
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<tr>
<td>Wrote comments</td>
<td>13</td>
<td>43.33</td>
</tr>
</tbody>
</table>
Appendix VI

Comments from the Securities and Exchange Commission

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

July 2, 2004

John B. Stephenson
Environmental Issue Director, Natural Resources and Environment Team
General Accounting Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Stephenson:

Thank you for the opportunity to review and comment on the General Accounting Office’s draft report regarding Environmental Disclosure. The GAO recommends three actions for executive action, and I appreciate your seeking our input on these recommendations as you finalize your report.

First, the GAO has recommended that the SEC take steps to ensure that information from staff examinations of corporate filings is electronically sorted and tracked to facilitate its analysis across filings. As you indicate, the Division of Corporation Finance has recently implemented a procedure to do just that. Through the process of collecting a summary of our work product in what we call a closing memo, we have already begun to implement your recommendation. You are correct in noting that we are currently documenting our final work product on paper; however, our work on creating a searchable electronic database of this information is nearly complete. We wholeheartedly agree with your recommendation that we track the results of our reviews, and, as you noted in your report, our efforts in this area have been underway for some time.

The GAO also recommends that the SEC create a publicly available searchable database of its comment letters and company responses to those letters. For some time now, this topic has also been under consideration, and, on June 24th, the SEC announced its plans to make public staff filing related correspondence. Again, we wholeheartedly agree with your recommendation and our efforts to implement it are underway.

Finally, we note your recommendation that the SEC continue to work with the EPA to explore opportunities to take better advantage of EPA data in evaluating public company disclosure in filings made with us. As the report indicates, there have been efforts in the past to work together, and we will fully take this recommendation into account in our future efforts.
Appendix VI
Comments from the Securities and Exchange Commission

John B. Stephenson
Environmental Issue Director, Natural Resources and Environment Team
General Accounting Office
Page 2

As a final point, we reviewed the information in your report regarding the views of stakeholders, and the SEC values the input of all interested parties. We have not commented on this section of the report, as we believe their views speak for themselves.

Thank you for the courtesy the GAO extended to the SEC during the course of preparing its report, and thank you again for the opportunity to provide comments to the GAO as it prepares its final draft of the report.

Sincerely,

[Signature]
Alan L. Beller
Director
## GAO Contacts and Staff Acknowledgments

### GAO Contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
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</tr>
<tr>
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<td>(617) 788-0517</td>
</tr>
</tbody>
</table>

### Staff Acknowledgments

In addition to the individuals named above, Kate Bittinger, Mark Braza, Stephen Cleary, Evan Gilman, Kevin Jackson, Rich Johnson, Tom Melito, Lynn Musser, Cynthia Norris, and Judy Pagano made key contributions to this report.
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