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Colleen M. Sauser

University of Tennessee at Chattanooga, cqx495@mocs.utc.edu

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**“A Review of the Accounting Treatment for Contingencies Arising from Environmental
Issues”**

Colleen Sauser

Departmental Honors Thesis

The University of Tennessee at Chattanooga

Accounting Department

Project Director: Dr. Marilyn Willis

Examination Date: March 27, 2015

Dr. Joanie Sompayrac

Dr. John Trussel

Dr. Randy Evans

Signatures:

Project Director

Department Examiner

Department Examiner

Liaison, Departmental Honors Committee

Chair, Departmental Honors Committee

INTRODUCTION

Historically, accountants have always had to account for contingencies. Users of financial information rely on the disclosure of possible future liabilities. How the disclosure of an existing condition that might negatively affect an entity, contingent to some future event is disclosed, changes. One of the major areas of concern in the recognition of contingencies is environmental issues. The purpose of this review is to examine the development of accounting principles and guidelines in response to major environmental laws and regulations¹.

Contingencies arising from environmental legislations and environmental remediation liabilities are a concern for public-held companies and affect all companies either directly or indirectly. Congress began establishing environmental legislation in the 1960s, and with the establishment of the Environmental Protection Agency (EPA) on December 2, 1970, by executive order signed by President Richard Nixon and later ratified by congress, environmental concerns came under the oversight of a national agency with the power to enforce national standards.

Five years later, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (FAS) No. 5, Accounting for Contingencies. FAS No. 5 defines a contingency as “an existing condition, situation, or set of circumstances involving uncertainty as to possible gain (gain contingency) or loss (loss contingency) to an enterprise that will ultimately be resolved when one or more future

¹ See Appendix Tables 1 & 2 for accounting principles and environmental laws and regulations.

events occur or fail to occur” (Financial Accounting Standards Board, 1975). FASB Interpretation No. 14 (FIN), Reasonable Estimation of the Amount of a Loss, was issued in 1976.

While accounting literature provided guidance for the treatment of contingencies, the accounting industry lacked authoritative literature for contingencies arising specifically from environmental issues. This lack of accounting literature became an issue when the legal climate in the United States changed due to environmental laws passed by Congress, most notably the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, in response to various environmental incidents occurring in the latter half of the twentieth century. CERCLA (also known as the Superfund Act) gave the EPA the authority to hold liable parties accountable for the remediation of Superfund Sites² (Stanwick, 1997).

There are largely two types of environmental laws. There are laws that “impose liability for remediation of environmental pollution arising from some past act”, such as CERCLA, and there are pollution control and prevention laws (Stanwick, 1997). This review is concerned with the first type of law imposing liability for remediation of environmental pollution. “The possibility of becoming subject to liability for environmental remediation costs associated with past waste disposal practices based on strict liability can affect transactions involving the acquisition or merger of enterprises

² “A Superfund Site is an uncontrolled or abandoned place where hazardous waste is located, possibly affecting local ecosystems or people.” (U.S. Environmental Protection Agency, 2015)

or the purchase of land. In sum, the explosion of federal and state environmental laws and regulations has affected all manner of business transactions” (SOP 96-1, 1996).

No industry is exempt from dealing with environmental legislation, and as time has progressed companies are faced with an increasing number of environmental issues for which they need to account. It is important to review the accounting treatment for environmental issues; the environmental laws passed in the 1970s and 1980s have yet to be repealed. CERCLA itself was initially issued in 1980 and reauthorized in 1986. This is an example of the evolving relationship of the environmental movement and business and as this relationship evolves so too should the accounting treatment. This review will cover the history and the current accounting standards of environmental liabilities.

ACCOUNTING INDUSTRY: BEFORE AND AFTER CERCLA

Before CERCLA was passed in 1980, there were two pronouncements to use as a basis for measuring environmental contingencies: FASB No. 5 and FIN 14. FASB No. 5 established when an estimated loss from a loss contingency must be accrued by a charge to income. An estimated loss contingency shall be accrued when both of the following conditions are met:

- (a) “Information available prior to issuance of the financial statements indicates that it is probable³ that an asset had been impaired or a liability had been incurred at the date of the

³ FASB 5 uses the term “probable” to signify the future event or events are likely to occur.

financial statements. It is implicit in this condition that it must be probable that one or more future events will occur confirming the fact of the loss, and

(b) The amount of loss can be reasonably estimated”⁴ (FAS 5: Accounting for Contingencies, 1975).

A point of contention with part (b) is that in certain situations, the amount of a loss is estimated in a range, and no part of the range is more likely than the other, so which estimate does the company disclose? The FASB provided clarification on this issue with FIN 14, Reasonable Estimation of the Amount of a Loss. FIN 14 states:

“When some amount within the range appears at the time to be a better estimate than any other amount within a range, that amount shall be accrued. When no amount within the range is a better estimate than any other amount, the minimum amount in the range shall be accrued” (FIN 14, 1976).⁵

Prior to 1980 these documents provided adequate guidance in valuating and disclosing loss contingencies. However, environmental loss contingencies became more complex after Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

⁴ See Appendix Figure 1: Accruing and Disclosing Contingencies Framework

⁵ FIN 14 Reasonable Estimation of a Loss: “Even though the minimum amount in the range is not necessarily the amount of loss that will be ultimately determined, it is not likely that the ultimate loss will be less than the minimum amount” (p.2)

CERCLA was the result of roughly twenty years of environmental incidents and catastrophes as well as pressure from a public increasingly concerned with the environmental movement. One such incident that served as a catalyst was the now famous Love Canal in 1979.

Congress passed CERCLA in the year following the Love Canal incident. The act's purpose was to "provide for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and the cleanup of inactive substances released into the environment and the cleanup of inactive hazardous waste disposal sites⁶" (CERCLA, 1980). Specifically, this law "enacted a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the Environment" (CERCLA, 1980). These broad Federal powers give the EPA the authority to order liable parties to remediate sites or use Superfund money to remediate them and then seek to recover its costs and additional damages (SOP 96-1, 1996).

CERCLA was important in its passing because it strictly defined the liability in these hazardous substance situations. The criteria for determination of the liable party, or potentially responsible party (PRP), are found under Section 107 of CERCLA. Cornell Law summarizes the liable parties as:

⁶ "Inactive Hazardous Sites" by definition are any areas where a hazardous substance release has come to be located and would include active and inactive facilities and a variety of property types. The term "inactive" refers to the fact that cleanup was inactive at large numbers of sites at the time of program enactment. (Inactive Hazardous Sites)

- (1) the current owner/operator
- (2) the past owner/operator
- (3) the arrangers, and
- (4) the transporters (Cornell Law, 2015)

Section 107 also defines the concepts of “strict liability” and “joint and several liability”. Strict liability, as defined by the EPA, is the assessment of liability for damages without requiring proof of negligence. Strict liability disregards whether or not a waste disposal company complied with regulations at the time; their past actions are held to current day regulations. Joint and several liability is “a concept which dictates that parties who contribute to a site’s pollution are each liable as if each alone polluted the site” (Environmental Protection Agency). Under this concept any one party may be held liable for all cleanup costs (Environmental Protection Agency). Joint and several liability hedges the risk that one liable party may not be able to pay the cost of fees and damages.

In 1986 Congress passed the Superfund Amendments and Reauthorization Act, increasing the fund amount for remediation, provided more detailed standards for remediation and settlements, and broadened criminal sanctions (SOP 96-1, 1996).

Many companies failed to disclose the full extent of potential losses related to environmental liabilities outlined in CERCLA. In 1993, the U.S. Securities and Exchange Commission (SEC) released Standard Accounting Bulletin 92 (SAB 92), Environmental Liability Disclosure Update. SAB 92 corrected the misleading reporting practice of

refusing to accrue and report any environmental liability, due to the inability to make a reasonable estimate (Goodman & Little, 2003). In the article *the Gap in GAAP*, it states that “before SAB 92, corporations could claim that, although a liability was probable, not enough information was available to develop a single estimate and therefore a range of estimates could be developed with the minimum of the range being zero” (Goodman & Little, 2003). The SEC states in SAB 92, that although the range of estimates may be broad, the minimum clean-up cost is unlikely to be zero (SAB 92, 1993). This minimum can be limited to what management believes it will spend on environmental costs in the *next year* (Goodman & Little, 2003).

In terms of disclosure for SAB 92, the SEC also requires contingent liabilities to be displayed on the face of the balance sheet separately from amounts of claims for recovery from insurance carriers or third parties (Roberts, 1995). Prior to SAB 92, it was common practice for some SEC registrants to practice offsetting their recoveries against estimated liabilities (Roberts, 1995).⁷ Offsetting liabilities with estimated recoveries allowed an entity to report fewer liabilities than they potentially had. This practice did not fairly represent the total amount the company might pay for its environmental liabilities and contingencies (Roberts, 1995).⁸ After SAB 92, companies may only

⁷Remarks on SAB 92, III. Staff Accounting Bulletin No. 92 – Offsetting: Before the SAB, some registrants offset or netted anticipated recoveries against the estimated liabilities, thereby minimizing the reported amount of the liabilities.

⁸Remarks on SAB 92, III. Staff Accounting Bulletin No. 92 – Offsetting: Given the practice of netting, it was the Staff's view that some registrants may not have disclosed the true extent of exposure for probable environmental liabilities, because they presume that full recoveries were available under insurance policies, notwithstanding the reality that coverage could be, and probably would be, contested by the insurance company.

recognize an asset representing recoveries if it is probable that the amount will be realized (Roberts, 1995). The SEC goes even further to state that a company should not recognize any asset associated with recoveries if the payer is contesting indemnification.⁹

On December 30, 1994, the AICPA issued Statement of Position 94-6 (SOP 94-6), Disclosure of Certain Significant Risks and Uncertainties. The sections “Use of Estimates in Preparation of Financial Statements” and “Certain Significant Estimates” are of particular interest for this review. In “Use of Estimates...”, it states financial statements should include an explanation that financial statement preparation requires the use of management’s estimates, and consequently there is uncertainty involved (AICPA, 1994).

When disclosing an estimate involving a loss contingency covered by FASB No. 5, management should also include an estimate of “the possible loss or range of loss” (AICPA, 1994). If an estimate cannot be made, they must state that fact. Management is encouraged to disclose the circumstances that cause the estimate to be sensitive to change (SOP 94-6, 1994).

In addition to the requirements of FASB No. 5 and FIN No. 14, SOP 94-6 requires disclosures regarding estimates used in the determination of the carrying amounts of assets or liabilities or in disclosure of gain or loss contingencies (AICPA, 1994). Management should disclose estimates when information is known prior to the issuance of financial statements and that information indicates:

⁹ This statement is iterated in Emerging Issues Task Force (EITF) 93-5, incorporated and superseded by Statement of Position 96-1.

- (a) It is at least reasonably possible that the estimate of the effect on the financial statements of a condition, situation, or set of circumstances that existed at the date of the financial statements will change in the *near term*¹⁰ due to one or more future confirming events.
- (b) The effect of the change would be material to the financial statements.¹¹

Sop 94-6 includes a list of examples of assets, liabilities, related revenues and expenses, and of disclosure of gain or loss contingencies “included in the financial statements that, based on facts and circumstances existing at the date of the financial statements, may be based on estimate that are particularly sensitive to change in the near term” (SOP 94-6, 1994), and listed among those examples are:

- (a) Environmental remediation-related obligations
- (b) Litigation-related obligations
- (c) Contingent liabilities for obligations of other entities (SOP 94-6, 1994)

The Superfund Act holds companies liable for any remediation liabilities arising from a past disposal act, even if at the point of disposal the entity complied with the laws and regulations of the time, as evidenced by Statement of Position 96-1 (SOP 96-1), Environmental Remediation Liabilities. SOP 96-1 provides accounting guidance for these

¹⁰ SOP 94-6, Disclosure of Certain Significant Risks and Uncertainties, Certain Significant Estimates: If an estimate meets the SOP’s criteria for disclosure, the SOP requires disclosure of an indication that it is at least reasonably possibly that a change in the estimate will occur in the near term; FASB No. 5 does not distinguish between near-term and long-term contingencies.

¹¹ SOP 94-6, Disclosure of Certain Significant Risks and Uncertainties, Certain Significant Estimates: The disclosure should indicate the nature of the uncertainty and include an indication that it is at least reasonably possible that a change in the estimate will occur in the near term.

environmental remediation liabilities arising from some past act (SOP 96-1, 1996). FASB No. 5 requires the accrual of a liability if there is information prior to the issuance of the financial statements that an asset has been impaired or is likely to be impaired, and the amount which it is impaired by is reasonably estimable. Environmental remediation liabilities have difficulty meeting these two requirements because “the amount of the liability is not typically determinable at a specific point in time, nor is the amount fixed as of a certain date. A series of events typically must occur over a period of time to help structure the events.”¹²

The FASB No.5 criteria of probable and reasonably estimable are met if litigation has commenced or a claim has been asserted and the outcome is likely to be unfavorable (Stanwick, 1997). If a company has been identified as a potentially responsible party and litigation has commenced, it is more likely than not that the outcome will be unfavorable¹³ and they will be liable for the costs of remediation (FASB Accounting Standards Codification, 2009).

While it may be apparent that a company is facing a liability for environmental remediation costs, estimating those costs prove difficult. Estimates in the early stages of the process vary greatly due to variations in the extent and type of the hazardous

¹² Understanding SOP 96-1: SOP 96-1 states “An entity’s environmental remediation obligation that results in a liability generally does not become determinable as a distinct event, nor is the amount of the liability generally fixed and determinable at a specific point in time...the liability for environmental remediation costs becomes determinable and the amount of the liability becomes estimable over a continuum of events and activities...”

¹³ ASC 410-25-6: There is generally a presumption that the litigation will be unfavorable if both of the following conditions exist: 1) litigation has commenced or a claim or an assessment has been asserted, or commencement of litigation or assertion of a claim or assessment is probable; 2) the reporting entity is associated with the site – that is, it in fact arranged for the disposal of hazardous substances to the site or is the current or previous owner or operator of the site.

substance at the site, the range of technologies that can be used for remediation, evolving standards of what constitutes acceptable remediation, and the number and financial condition of other potentially responsible parties and the extent of their responsibility for the remediation (SOP 96-1, 1996). Estimate of the liability includes the entity's portion of the liability for a specific site and share of amounts related to the site that will not be paid by another potentially responsible party or the government (SOP 96-1, 1996). Per FASB Interpretation No. 14, the FASB No. 5 criterion (the amount of loss can be reasonably estimated) for disclosure is satisfied when a "range of loss can be reasonably estimated" (SOP 96-1, 1996).

Once a probable liability has been established, the amount of the liability must be estimated and measured. Measurement addresses the amounts that will be reported in the financial statements (Stanwick, 1997). Remediating an environmentally damaged site could take years and regulations may change during that time period. Entities can not anticipate what changes will be made and when, so the Accounting Standards Executive Committee advises that entities should base all estimates on current laws and regulations. Similarly, estimates should be based on current technology and methodologies.

Once remediation liabilities have been estimated and measured, they must be displayed and disclosed on the financial statements. An entity may report several assets on the balance sheet in conjunction with environmental remediation. Some of these assets include:

- a) Receivables from other potentially responsible parties (PRPs) that are not providing initial funding
- b) Anticipated recoveries from insurers
- c) Anticipated recoveries from prior owners as a result of indemnification agreements (SOP 96-1, 1996).

An entity may offset their environmental remediation liabilities with a potential recovery provided that:

- a) Each of the two parties owes the other determinable amounts.
- b) The reporting party has the right to set off the amounts owed with the amount owed the other party.
- c) The reporting party intends to set off.
- d) The right of setoff is enforceable at law.

A debtor having a valid right of setoff may offset the related asset and liability and report the net amount (FASB Interpretation No. 39, 1992).¹⁴

In regards to the income statement and environmental remediation liabilities, there is usually an effect on income. In some cases, a gain contingency is reported on the income statement when it is realized (earned).

¹⁴ *FASB Interpretation No.39, Offsetting Amounts Related to Certain Contracts; SOP 96-1 Chapter 7 Balance Sheet Display:* A debtor that has a right of setoff that meets all of these conditions may offset the related asset and liability and report the net amount. It would be rare, if ever, that the facts and circumstances surrounding environmental remediation liabilities and related receivables and potential recoveries would meet all of these conditions.

Beyond disclosing the environmental remediation liabilities on the financial statements, entities must also disclose the accounting principles used in the notes section of the financial statements.

APB Opinion 22, paragraph 12, indicates that entities should disclose those accounting principles that “materially affect the determination of financial position or results of operations.” SOP 96-1 goes one step further to explain principles and their methods of application should be disclosed when alternatives exist. Because there is extensive estimation involved with environmental remediation liabilities, SOP 96-1 advises entities to disclose accrual benchmarks because they are useful to the financial statement user’s understanding of the entity (SOP 96-1, 1996). Entities are encouraged to disclose to the financial statement user the event, situation, or set of circumstances that generally triggers recognition of loss contingencies that arise out of the environmental remediation-related obligations (SOP 96-1, 1996).

In 1998, the Wiley Accounting Research Center identified anchoring as an issue in the disclosure of contingent environmental liabilities in its article “Disclosure of Contingent Environmental Liabilities: Some Unintended Consequences?” Anchoring is “the use of irrelevant information as a reference for evaluating or estimating some unknown value or information. When anchoring, people base decisions or estimates on events or values known to them, even though these facts may have no bearing on the actual event or value” (Investopedia, 2005).

Wiley's research "presents evidence that anchoring can influence the judgments and decisions of financial statement users presented with alternative disclosures of contingent environmental liabilities" (Kennedy, Mitchell, & Sefeik, 1998). Management has the option to disclose the minimum, best estimate, and maximum range of a contingent liability. The article's concern lies with the early stages of determination, when financial statement users form their initial expectations about the liability. Environmental liabilities tend to be very uncertain because they are estimated early on in the process, and they are usually accrued at the low end of the range because more investigation is needed to assess the contamination and refine the estimate. Anchoring has the greatest effect under these conditions (Kennedy, Mitchell, & Sefeik, 1998).

Another issue is remediation or obligations that arise from the normal operations of a long-lived asset and its retirement.

In 2001 the FASB issued Financial Accounting Statement No. 143, Accounting for Asset Retirement Obligations. "This statement addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs" (FASB 143, 2001). An asset retirement obligation is "the obligation associated with the retirement of a tangible long-lived asset" (Ernst & Young, 2010). "An environmental remediation liability that results from the normal operation of a long-lived asset and that is associated with the retirement of that asset (e.g., the obligation to decontaminate a nuclear power plant site or cap a landfill) is an ARO..." (Ernst & Young, 2010) The Board issued this statement due to

(1) Complaints from users of financial statements indicating that “diverse accounting practices that have developed for obligations associated with the retirement of tangible long-lived assets make it difficult to compare the financial position and results of operations of companies that have similar obligations but account for them differently, and because

(2) Obligations that meet the definition of a liability were not being recognized when those liabilities were incurred or the recognized liability was not consistently measured or presented” (FASB 143, 2001).

Initially, under the FASB 5 approach, the liability had to be reasonably estimable. As stated earlier, “‘reasonably estimable’ has proved difficult to prove in many environmental liabilities since cleanup costs may dramatically change depending on the information available about the extent of the contamination and whether a remedy has been selected” (Schnapf, 2006).

Under FASB 143, asset retirement obligations would now be recognized at their fair value, and the fair value recognition would take place when the liability was incurred; if fair value is not apparent at that time, the asset will be recognized when a reasonable fair value estimate can be made (Financial Accounting Standards Board, 2001). “The fair value of a liability for an asset retirement obligation is the amount at which that liability could be settled in a current transaction between willing parties, that is, other than a forced or liquidation transaction” (FASB 143, 2001). “When the asset retirement cost is recognized, the entity shall capitalize the asset retirement amount

cost by increasing the carrying amount of the related long-lived asset by the same amount as the liability, and allocate the asset retirement cost to expense...” (Financial Accounting Standards Board, 2001) It is important to note that remediation costs resulting from improper use and or management of an asset do not fall under FAS 143— this is covered by SOP 96-1 (Schnapf, 2006).

Four years later the Board released Financial Accounting Standards Interpretation 47, Accounting for Conditional Asset Retirement Obligation (CARO). Conditional asset retirement obligation is the “legal obligation to perform an asset retirement activity where the timing or method of settlement is conditional on some future event that may not be within the control of the entity (Schnapf, 2006). This interpretation was issued because “diverse accounting practices have developed with respect to the timing of liability recognition for legal obligations associated with the retirement of tangible long-lived assets when the timing and (or) method of settlement of the obligation are conditional on a future event” (FIN 47, 2005). In this interpretation the Board concluded that asset retirement obligations that fall within the scope of FASB 143 and Concept Statements 6 should be recognized as a liability at fair value if fair value can be reasonably estimated (FIN 47, 2005).

Concept Statements 6 states that a liability has three essential characteristics:

- 1) “An entity has a present duty or responsibility to one or more entities that entails settlement by probable¹⁵ future transfer or use of assets at a specified or determinable date, on occurrence of a specified event, or on demand.
- 2) The duty or responsibility obligates a particular entity, leaving it little or no discretion to avoid the future sacrifice.
- 3) The event obligating the entity has already occurred” (FIN 47, 2005).”

Some companies neglected to record CAROs under the idea that they were not obligations because retirement activities could be put off indefinitely, meaning that under FASB 5 they did not fit the description of “probable” (Schnapf, 2006). However, under FIN 47, these future environmental costs for asset retirement must be accounted for even though they are not considered “probable” under FASB 5 conditions (Gracer, 2006) and “uncertainty about whether performance will be required does not defer the recognition of asset retirement obligation” (FIN 47, 2005).

CURRENT STANDARDS

In 2009 the Financial Accounting Standards Board codified all of the literature that comprised U.S. GAAP standards. It incorporates all past accounting literature¹⁶ in one location, and the codification supersedes and replaces all other non-SEC instructions

¹⁵ FASB Concepts Statement No. 6, Elements of Financial Statements: Probable in this scenario is used with its usual general meaning, rather than in a specific accounting or technical sense and refers to that which can reasonably be expected or believed on the basis of available evidence or logic but is neither certain nor proved.

¹⁶ The accounting statements and pronouncements in this review are included in the FASB Codification

(IFRS, 2009). Accounting Standards Codification (ASC) 410-30 is the current literature for environmental remediation liabilities and obligations.

In general:

ASC 410-30 “requires that an entity recognize a liability for obligations associated with environmental remediation liabilities that relate to pollution arising from some past act, generally as a result of the provisions of Superfund, the corrective-action provisions of the Resource Conservation and Recovery Act, or analogous state and non-U.S. laws and regulations” (FASB Accounting Standards Codification, 2009).¹⁷

Recognition

To recognize the environmental remediation liability in the financial statements, the underlying cause of the liability (whether from past or present ownership or operation of a site, or the contribution or transportation of waste to a site, at which remedial actions must take place) must have occurred on or before the date of the financial statements (FASB Accounting Standards Codification, 2009). To determine that it is probable a liability has been incurred, ASC 410-30 refers to ASC 410-25-4 stating that a liability has been incurred when:

¹⁷ ASC 410-30 General section; ASC 410-30 does not address accounting for environmental remediation actions that are undertaken at the sole discretion of management and that are not undertaken by the threat of assertion of litigation, a claim, or an assessment.

- 1) Litigation, a claim, or an assessment has been asserted, or, based on available information; commencement of litigation or assertion of a claim or an assessment is probable.
- 2) Based on available information, it is probable that the outcome of such litigation will be unfavorable because of the nature of the liability¹⁸.

Accrual of a loss contingency is required when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated (FASB Accounting Standards Codification, 2009).

Measurement

Once an entity has determined it is probable that a liability has been incurred, the entity estimates the remediation liability based on available information and recognition of some amount of the liability, if estimable (FASB Accounting Standards Codification, 2009).

Estimate of the liability shall include:

- 1) The allocable share of the liability for a specific site
- 2) Share of amounts related to the site that will not be paid by other potentially responsible parties or the government (FASB ASC 410-30-30-8, 2009).

¹⁸ ASC 410-25-6; there is generally a presumption that the litigation will be unfavorable if both of the following conditions exist: 1) litigation has commenced or a claim or an assessment has been asserted, or commencement of litigation or assertion of a claim or assessment is probable; 2) the reporting entity is associated with the site – that is, it in fact arranged for the disposal of hazardous substances to the site or is the current or previous owner or operator of the site.

The allocable share of the liability for a specific site costs should include:

- The extent of the remedial actions that are required
- The type of remedial actions to be used
- The allocation of costs among potentially responsible parties
- Postremediation monitoring costs that are expected to be incurred after the remediation is complete
- Compensation and benefits for those employees who are expected to devote a significant amount of time directly to the remediation effort (FASB ASC 410-30-30, 2009).

An estimate of the range of an environmental remediation liability is typically derived by combining estimates of various components of the liability (FASB ASC 410-30-30-12, 2009). Environmental liabilities are difficult to estimate, and “uncertainties are pervasive”; reporting entities are required to recognize their “best estimate at a given point in time (or if no best estimate can be made, then the minimum estimate) of their share of the liability and to refine their estimate as events in the remediation process occur” (FASB ASC 410-30-25-13, 2009). All remediation liabilities should be estimated in accordance with current laws and regulations, (FASB ASC 410-30-30, 2009) and the liabilities should be based on the reporting entity’s estimate of what it will cost to perform each of the elements of the remediation effort when those elements are expected to be performed (Ernst & Young, 2010).

Potential recoveries may affect the amount of liability; potential recoveries may be claimed from a number of different sources (FASB ASC 410-30-35-8, 2009), however, the “amount of an environmental remediation liability should be determined independently from any potential claim for recovery and an asset relating to the recovery should be recognized only when realization of the claim for recovery is deemed probable” (Ernst & Young, 2010). Another factor in determining the amount of environmental liability is discounting. Discounting of environmental liabilities is not required, “but is permitted only if the aggregate amount of the obligation and the amount and timing of the cash payments are fixed or reliably determinable” (Ernst & Young, 2010).

Presentation

Liabilities associated with environmental remediation obligations are presented on the balance sheet in the financial statements. The balance sheet may include several assets in relation to environmental remediation liabilities and obligations.

Examples of these assets are:

- “receivables from other participating potentially responsible parties that are not providing initial funding
- anticipated recoveries from insurers, or

- anticipated recoveries from prior owners as a result of indemnification agreements” (FASB ASC 410-30-45-1, 2009).

Some entities would like to offset (net) their environmental liabilities with their potential recoveries. However, the right to offset environmental liabilities with assets exists only when:

- 1) Each of the two parties owes the other determinable amounts
- 2) The reporting party has the right to offset the amount owed with the amount owed by the other party
- 3) The reporting party intends to set off
- 4) The right of setoff is enforceable at law.

It is doubtful that an entity would meet all of these qualifications in order to offset.¹⁹ In relation to extraordinary items on the balance sheet, the FASB has determined that “the incurrence of environmental remediation obligations is not an event that is unusual in nature and as such...do not meet the criteria for classification as extraordinary” (FASB ASC 410-30-45-3, 2009).

Because environmental obligations have become a regular component of business activity for many reporting entities, environmental remediation-related expenses should be classified as a component of operating expenses on the income statement (Ernst & Young, 2010).

¹⁹ ASC 210-20-45; it would be rare, if ever, that the facts and circumstances surrounding environmental remediation liabilities and related receivables and potential recoveries would meet all of these conditions.

Disclosure

Concerning disclosure for environmental remediation liabilities, ASC 235 requires disclosure of the accounting principle applied and methods used to determine liability when alternative methods exist (Ernst & Young, 2010). This provides understanding of management's estimates. A liability will be accrued if information available before the financial statements are issued or are made available indicates that it is probable a liability has been incurred, and the liability is reasonably estimable²⁰ (FASB ASC 410-20-25-2, 2009). The financial statements shall disclose whether the accrual for environmental remediation liabilities is measured on a discounted basis (FASB ASC 410-30-50-4, 2009). Disclosure of a contingency should be made if there is a reasonable possibility of a loss, and either of the following conditions exists:

- “An accrual is not made for a loss contingency because any of the conditions in paragraph 450-20-25-2²¹ are not met
- An exposure to loss exists in excess of the amount accrued pursuant to the provisions of paragraph 450-20-30-1²²” (FASB ASC 450-20-50-3, 2009).

²⁰ See Figure 2: Example of Management's Disclosure of Environmental Liability

²¹ ASC 450-20-25-2: 1) information available before the financial statements are issued or are available to be issued indicates that it is probable that an asset had been impaired or a liability had been incurred at the date of the financial statements, and 2) the amount of the loss can be reasonably estimated.

²² ASC 450-20-30-1: even though the loss is unlikely to be the minimum amount in the range, it is unlikely for the cost to be lower than the minimum estimate of the range.

The article *Accounting for Contingencies: Disclosure of Future Business Risks* provides a brief example of an environmental liability disclosure in accordance with GAAP.

“In September 2009 the EPA informed Energizer that it had been identified as a potentially responsible party and may be obligated to pay the cost of remediation. When litigation commenced, Energizer disclosed the contingency on their financial statements in accordance with ASC 450. When the cost was reasonable and estimable, Energizer accrued their environmental liability on their balance sheet under “Other Liabilities”” (Jonathan Schiff, Allen Schiff, & Hannah Rozen, 2012).

CONCLUSION

Accounting for contingencies and proper recognition of the possible liabilities has always been complex. With the passage of CERCLA and the ensuing requirements to disclose any environmental remediation liabilities, the accounting community is compelled to adapt its framework and guidelines to meet the demands placed on their clients.

Even with current information and guidance the accounting for and reporting of environmental issues remains complex. Companies may know they are required to

accrue a contingent liability if it is probable and reasonably estimable, but meeting this requirement remains difficult.

A major hurdle for most companies is that the estimate is always based on current laws and regulations and current technology. These are subject to change with a new EPA ruling or change in technology. Regardless of the challenges, the client and the accountant must assure statements users that a “good faith effort” has been made to disclose the contingency; that the user is aware of the issue at hand; and be aware that management’s estimates play a role in the disclosure of financial statements.

ABBREVIATIONS

FASB	Financial Accounting Standards Board
FIN	Financial Accounting Standards Board Interpretation
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EPA	Environmental Protection Agency
GAAP	Generally Accepted Accounting Principles
SAB	Staff Accounting Bulletin
PRP	Potentially Responsible Party
APB	Accounting Principles Board
AICPA	American Institute of Certified Public Accountants

TABLE 1: Table of Environmental Laws and Agencies Mentioned

Year	Environmental Legislation	Description
1970	Environmental Protection Agency	Federal agency whose purpose is to protect human health and environmental health by passing and enforcing regulations based on laws passed by Congress (Environmental Protection Agency)
1980	Comprehensive Environmental Response, Compensation, and Liability Act	Provides for the liability, cleanup, and emergency response for hazardous substances released into the environment and the cleanup of inactive hazardous waste disposal sites. (CERLCA, 1980)
1986	Superfund Amendments and Reauthorization Act	Increased the funds for remediation, provided more detailed standards for remediation and settlements, and broadened criminal sanctions for violations of CERCLA (SOP 96-1, 1996).

TABLE 2: Accounting Literature Table

Year	Accounting Literature	Description
1975	Financial Accounting Standards No. 5	Established when an estimated loss contingency must be accrued by a charge to income
1976	FASB Interpretation No. 14	Clarified when an amount for a probable contingency was reasonably estimable
1993	Standard Accounting Bulletin 92	<ul style="list-style-type: none"> • Clarified that offsetting a liability with a potential recovery is not acceptable • Corrected the misleading reporting practice of refusing to accrue and report any environmental liability, due to the inability to make a reasonable estimate.
1994	Statement of Position 96-4	<ul style="list-style-type: none"> • Financial statements require use of management's estimates
1996	Statement of Position 96-1	Provides guidance on when to accrue environmental liability, how to measure and estimate liability, and where to disclose
1996	Accounting Principles Board Opinion 22	Entities should disclose those accounting principles that materially affect the determination of financial position or results of operations. (SOP 96-1, 1996)
2001	Financial Accounting Standards No. 143	Asset Retirement Obligations are recognized at fair value
2005	FASB Interpretation No. 47	Conditional Asset Retirement Obligations should be recognized as a liability at fair value if fair value can be reasonably estimated. (FIN 47, 2005)

FIGURE 1: Accruing and Disclosing Contingencies Framework (JD Supra)

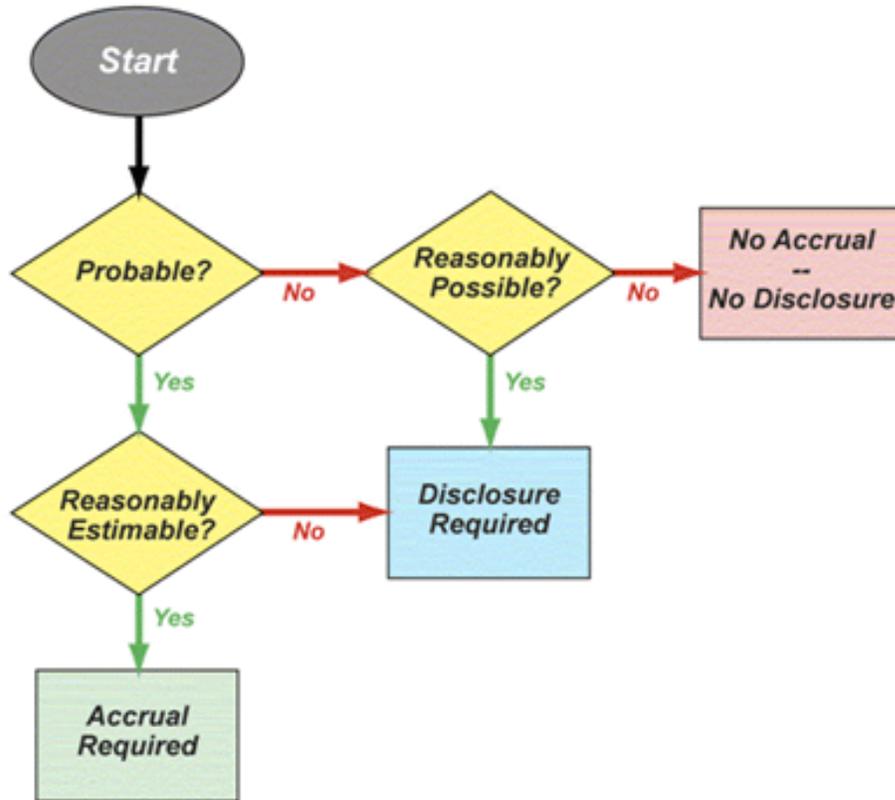


FIGURE 2: Example of Management’s Disclosure of Environmental Liability

Excerpts from Exxon Mobile’s 2013 Financial Statements

MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

ENVIRONMENTAL MATTERS

Environmental Expenditures

	2013	2012
	<i>(millions of dollars)</i>	
Capital expenditures	2,474	1,989
Other expenditures	3,538	3,523
Total	6,012	5,512

Throughout ExxonMobil’s businesses, new and ongoing measures are taken to prevent and minimize the impact of our operations on air, water and ground. These include a significant investment in refining infrastructure and technology to manufacture clean fuels as well as projects to monitor and reduce nitrogen oxide, sulfur oxide and greenhouse gas emissions and expenditures for asset retirement obligations. Using definitions and guidelines established by the American Petroleum Institute, ExxonMobil’s 2013 worldwide environmental expenditures for all such preventative and remediation steps, including ExxonMobil’s share of equity company expenditures, were about \$6.0 billion. The total cost for such activities is expected to remain in this range in 2014 and 2015 (with capital expenditures approximately 45 percent of the total).

Environmental Liabilities

The Corporation accrues environmental liabilities when it is probable that obligations have been incurred and the amounts can be reasonably estimated. This policy applies to assets or businesses currently owned or previously disposed. ExxonMobil has accrued liabilities for probable environmental remediation obligations at various sites, including multiparty sites where the U.S. Environmental Protection Agency has identified ExxonMobil as one of the potentially responsible parties. The involvement of other financially responsible companies at these multiparty sites could mitigate ExxonMobil’s actual joint and several liability exposure. At present, no individual site is expected to have losses material to ExxonMobil’s operations or financial condition. Consolidated company provisions made in 2013 for environmental liabilities were \$321 million (\$391 million in 2012) and the balance sheet reflects accumulated liabilities of \$773 million as of December 31, 2013, and \$841 million as of December 31, 2012.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

the properties. Properties that are not individually significant are aggregated by groups and amortized based on development risk and average holding period. The valuation allowances are reviewed at least annually.

Gains on sales of proved and unproved properties are only recognized when there is neither uncertainty about the recovery of costs applicable to any interest retained nor any substantial obligation for future performance by the Corporation.

Losses on properties sold are recognized when incurred or when the properties are held for sale and the fair value of the properties is less than the carrying value.

Asset Retirement Obligations and Environmental Liabilities. The Corporation incurs retirement obligations for certain assets. The fair values of these obligations are recorded as liabilities on a discounted basis, which is typically at the time the assets are installed. The costs associated with these liabilities are capitalized as part of the related assets and depreciated. Over time, the liabilities are accreted for the change in their present value.

Liabilities for environmental costs are recorded when it is probable that obligations have been incurred and the amounts can be reasonably estimated. These liabilities are not reduced by possible recoveries from third parties and projected cash expenditures are not discounted.

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