In depth

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Accounting and disclosure implications of natural disasters

What's inside:

At a glance

This year has seen its share of natural disasters—from wildfires to floods to tornadoes to hurricanes. While the first priority is and always should be the safety of those impacted, thoughts quickly turn to recovery and rebuilding as soon as the immediate crisis is past.

This *In depth* discusses the accounting and disclosure-related matters companies may encounter when impacted by a natural disaster. We've compiled guidance that addresses topics ranging from how to account for physical damage to accounting for insurance proceeds and government assistance. It's meant as a resource to be applied to any number of natural disasters, whether widespread or localized.

Asset impairments

Companies may need to assess whether an asset impairment has occurred as a result of a natural disaster. In some cases, buildings or other assets may have been damaged or destroyed. In other cases, a company's operations or financial performance may be significantly affected by the loss of a significant supplier or customer or another event. Assets potentially affected include fixed assets, goodwill, intangibles, investments, inventories, deferred taxes, and receivables.

When assessing impairment, a company should distinguish between assets that are damaged and those whose value is impacted by changes in projected cash flows as a result of the disaster. Assets that are destroyed should be written off to expense. Assets that are damaged may need to be written down or their useful lives may need to be revisited. Assets impacted by changes in cash flows (e.g., output declines due to reduced demand) may need to be tested for impairment.

Goodwill, intangibles, and long-lived assets

The nature and need for an impairment test will vary depending on the type of asset. The following chart summarizes the requirements for impairment testing under ASC 350, *Intangibles - Goodwill and Other*, and ASC 360, *Property, Plant, and Equipment*.

	Goodwill	**Indefinite-lived intangible assets**	**Amortizable intangible assets and other long-lived assets**
Accounting standard	ASC 350	ASC 350	ASC 360
Frequency	Annual test / trigger-based	Annual test / trigger-based	Trigger-based
Methodology	One step*	One step	Two step
Level at which impairment test is performed	Reporting unit	Individual asset/ combined unit of accounting	Asset group
Focus	Fair value of reporting unit*	Individual asset fair value	Recoverability of carrying amount of the asset group

* Assumes adoption of ASU 2017-04, *Simplifying the Test for Goodwill Impairment*

Additional guidance may be found at:

- PwC's *Property, plant, equipment and other assets* guide, *Chapter 5*
- PwC's *Business combinations* guide, *Section 8.3*
- PwC's *Business combinations* guide, *Section 9.5*
- ASC 350, *Intangibles — Goodwill and Other*
- ASC 360, *Property, Plant, and Equipment*

Customer receivables

Companies may have receivables due from businesses and consumers affected by natural disasters. While challenging, companies should assess the collectibility of their receivables since write-offs or additional reserves may be necessary. If a company continues to sell products and services to a customer when it is uncertain whether collection is probable—due to the potential deterioration of its customer's financial position or that customer's current inability to settle outstanding receivables—the question arises as to whether revenue can be recognized on new transactions with that customer. Because revenue can be recognized only when collection of consideration is probable, management should evaluate the appropriateness of recognizing revenue and bad debt expense in the same period from the same customer, and the effect of granting extended payment terms.

Additional guidance may be found at:

- PwC's *Revenue from contracts with customers* guide, *Section 2.6.1*, *Section 2.6.2*, and *Section 2.6.3*
- PwC's *Loans and investments* guide, *Section 7.7*
- ASC 310, *Receivables*
- ASC 606, *Revenue from Contracts with Customers*

Debt and liquidity issues

Companies may need to seek additional financing or amend the terms of existing credit agreements due to lost revenue, uninsured losses, or losses for which insurance recoveries have not yet been received. For example, a company may have a credit agreement in which its borrowing capacity is equal to the outstanding balance of its eligible accounts receivable and inventory. Due to the business disruption from natural disasters and their aftermath, the company may experience a decrease in its borrowing capacity but not have a corresponding decrease in its expenses. In that case, the company may seek to amend the terms of its financing arrangement with its lender to temporarily or permanently increase its borrowing capacity. Such an amendment should be analyzed to determine whether it should be accounted for as a modification of the existing borrowing arrangement or an extinguishment of the existing arrangement and consummation of a new arrangement.

Debt covenant compliance

In some cases, companies may experience significant liquidity issues that may call into question whether the company is in compliance with its debt covenants. In addition, arrangements may be backed or collateralized by assets that were destroyed or damaged. In either case, an event of default may be triggered.

Debt is classified as current if the debt is puttable at the balance sheet date due to the covenant violation. If a lender waives its right to put the debt based on that particular covenant violation for at least one year from the balance sheet date, the debt will not automatically be classified as noncurrent. A company that has to meet the same or a more restrictive covenant going forward must determine if it is probable that it will fail those covenants within one year from the balance sheet date. If it is probable, the debt must be classified as current despite the waiver.

The same assessment must be done if debt is modified to avoid a covenant violation at the balance sheet date.

If a violation happened after the balance sheet date or is anticipated in the future, the debt would generally be classified as noncurrent, but transparent disclosure of the violation or potential violation is required.

When a covenant violation occurs related to a debt instrument, a careful analysis of cross default provisions in all other debt or other agreements (e.g., lease agreements) should be performed to ensure proper classification of those agreements.

Debt agreements may contain a subjective acceleration clause (SAC) in which the lender can accelerate repayment if the borrower experiences an adverse change. These covenants are typically referred to as material adverse change (MAC) or material adverse effect (MAE) clauses. The likelihood of payment being accelerated impacts the classification of debt with a SAC. If acceleration of the due date is probable based on facts and circumstances at the balance sheet date, debt subject to a SAC should be classified as current. The accounting guidance indicates that liquidity issues and recurring losses are examples of instances that may make acceleration of debt probable.

An audit report with an additional paragraph related to liquidity risks and uncertainties may indicate it is probable that the SAC will be exercised. Although the audit report is issued after the balance sheet date, the liquidity issues resulting in the additional paragraph may have existed at the balance sheet date. Even with no additional paragraph in the audit report, management's disclosure of liquidity issues may also indicate it is probable that the SAC will be exercised.

Additional guidance may be found at:

- PwC's *Financing transactions* guide, Chapter 3
- PwC's *Financial statement presentation* guide, Chapter 12
- ASC 470, *Debt*

Derivative and hedging

Forecasted cash flow hedges

Companies that have designated forecasted transactions in cash flow hedging relationships, such as raw materials purchases, sales or revenues, debt issuances, or interest payments, may experience a delay in the occurrence of the actual transaction as compared to the forecasted date. If the forecasted transaction is probable of occurring by the end of the originally-specified time period or within an additional two-month period, hedge accounting should still be permissible. The deferred derivative gains or losses should continue to be reported in accumulated other comprehensive income. If at any time the likelihood of the hedged forecasted transaction ceases to be probable of occurring, hedge accounting will cease prospectively and all future changes in the fair value of the derivative will be recognized directly in earnings. Any derivative gains or losses deferred in AOCI prior to the change in likelihood will remain in AOCI until the forecasted transaction impacts earnings (or until the forecasted transaction becomes probable of not occurring). If a company determines that the hedged forecasted transaction is probable of not occurring by the end of the originally specified time period (or within an additional two month window thereafter), amounts deferred in AOCI are required to be recognized in earnings immediately. In rare circumstances, the existence of extenuating circumstances that are related to the nature of the forecasted transaction and are outside the control or influence of the company may cause the forecasted transaction to be probable of occurring on a date that is beyond the additional two-month period of time. In such rare circumstances, ASC 815-30-40-4 permits the net derivative gain or loss related to the discontinued cash flow hedge to remain in AOCI until the forecasted transaction impacts earnings. Additionally, companies are required to disclose the amount of gains and losses reclassified from AOCI into earnings as a result of the discontinuance of hedge accounting.

Normal purchase and normal sales exception

Some companies apply the derivative scope exception for normal purchases and normal sales (NPNS) to commodity contracts. To qualify for this exception, a company must conclude that it is probable—at inception and throughout the term of the contract—that the contract will not net settle (i.e., physical delivery will occur). Companies with derivative contracts that have been previously designated under the NPNS derivative scope exception should consider the impact of lower sales or purchase volumes on the assertion that physical delivery is probable. Under the NPNS exception, a company must conclude that it is probable—at inception and throughout the term of the contract—that physical delivery will occur.

If a company determines that it is no longer probable that a contract will result in physical delivery, it may need to discontinue its application of the NPNS exception. Whether and when a company should discontinue application of the normal purchases and normal sales scope exception partially depends on the form of net settlement (see Figure DH 3-4 in section DH 3.2.4.3 of PwC's *Derivatives and hedging* guide).

In addition, the implications for similar contracts would need to be considered.

Additional guidance may be found at:

- PwC's *Derivatives and hedging* guide*,* *Chapter 3* and *Chapter 10*
- ASC 815, *Derivatives and Hedging*

Government assistance

Companies and not-for-profit organizations impacted by disasters may receive various forms of assistance from government entities or from private sector sources. Entities that accept disaster assistance must monitor their compliance with the terms or administrative requirements imposed by the entity providing the assistance (e.g., to use the proceeds only for specified purposes or to follow specific guidelines when procuring materials, goods, or services with the proceeds). Failure to do so could result in loss of the grant or an obligation to repay funds received.

There is no US GAAP that specifically addresses the accounting by business entities for government assistance. When this occurs, ASC 105, G*enerally Accepted Accounting Principles*, instructs companies to first look for guidance for a similar transaction or event within US GAAP and apply that guidance by analogy. If no guidance for similar transactions is identified, a company may consider nonauthoritative guidance from other sources (e.g., guidance issued by other standard-setters).

Not-for-profits account for government assistance under ASC 958-605, *Not-for-Profit Entities - Revenue Recognition.* While transfers of assets from governments to business entities are excluded from the scope of ASC 958, it can be applied by analogy under ASC 105. Alternatively, companies may analogize to IAS 20, *Accounting for Government Grants and Disclosure of Government Assistance*. The accounting for government assistance under ASC 958-605 and IAS 20 differs in a few key areas.

	ASC 958-605	IAS 20
Recognition when conditions are present	When the conditions have been substantially met	When there is reasonable assurance that the entity will comply with the conditions and that the grant will be received
Timing and pattern of recognition	When grant is awarded or, if conditional, immediately once the condition is substantially met. Recipients should also consider whether grantor-imposed restrictions exist	Using a systematic basis over the periods in which the entity recognizes the related expenses or losses that the grants are intended to compensate When the grant becomes receivable if it compensates for expenses or losses already incurred.
Presentation of grant income	Grant income is presented on a gross basis (i.e., grant revenue or other income)	May be reported separately as "other income" or deducted from the related expense

Considerations for FEMA grants

While for-profit entities are not eligible for FEMA awards, not-for-profit organizations that receive FEMA public assistance awards for damages to facilities, equipment, or inventory will also need to consider the interaction between the FEMA grants and insurance coverage when applying the involuntary conversion rules in ASC 610-30, *Gains and losses on involuntary conversions*. FEMA funding supplements financial assistance from other sources (including insurance), in effect acting as a "backstop" to ensure that the not-for-profit organization will be reimbursed for some portion of its losses. In some situations, a receivable for a FEMA grant may be recognizable earlier than an insurance recovery under the involuntary conversion rules.

Insurance

Natural disasters may cause a significant amount of damage to property, making repairs and replacements of assets necessary. In addition, business may be interrupted and may be halted or slowed for some time. Many companies have insurance policies covering such property, casualty, and business interruption claims.

Careful consideration should be given to the accounting for insurance recoveries as the recognition of such amounts will depend on the nature of the claim.

Property and casualty

Property and casualty claims (e.g., involving fixed assets) should be analyzed using a loss recovery model. If recovery under the insurance contract is probable, the company should recognize a receivable for the amount expected to be recovered, not to exceed the related loss—from the impairment of the asset—recognized in the financial statements. Any amounts in excess of a recorded loss that are expected to be covered by insurance should be accounted for as a gain contingency. That is, the gain should not be recognized until it is realized or realizable.

When assessing whether a receivable should be recognized and at what amount, the following are examples of factors that should be considered:

- Terms of the agreement with the insurance carrier
- Viability of the insurance carrier
- Prior claims history with the insurance carrier
- Whether the claim is being disputed
- The amount of loss that has already been recognized in the financial statements

An asset for a probable insurance recovery cannot be recorded if coverage is in dispute or if the policy is unclear as to how to calculate the reimbursable amount. Therefore, a loss may be recognized in one period (when the asset impairment/loss is recognized) while the associated recovery may be recognized in a later period.

Business interruption

Business interruption insurance policies (e.g., loss of use of property or equipment typically as a result of an insurable event) generally cover losses of gross profit or reimbursement of certain expenses while a company is unable to conduct its business. When a business is interrupted, the unavoidable costs that continue to be incurred in the absence of revenues (e.g., salaries paid to idle workers, rents for property and equipment) would be considered “losses recognized in the financial statements” for purposes of applying the loss recovery model. An insurance recovery for that loss should be recorded when the realization of the claim for recovery is probable.

However, the absence of expected revenue or income is not a loss recognized in the financial statements. Thus, recovery of lost profits or revenue would be evaluated under the gain contingency guidance and not recognized until realized or realizable (i.e., the contingency surrounding quantification and coverage of the loss is considered resolved). Typically, a business interruption recovery gain would not be recognized prior to the insurance carrier acknowledging that the claim is covered and communicating the amount to be paid to the company. Any stipulation from the carrier (e.g., "pending final review") should be reviewed to determine whether it is an indication the claim may not be realizable. The company's history in collecting such claims should also be considered. When the insured has received payment without the expectation of repayment or refund, the contingency is considered resolved and the gain should be recognized.

Classification of insurance proceeds

The classification of insurance proceeds in the income statement depends on the nature of the insurance claim. The accounting guidance related to environmental claims recoveries (ASC 410-30-45-4) requires recoveries to be classified in the same line items as the related loss. ASC 220-30-45-1 indicates that companies have a choice in how to classify business interruption insurance recoveries as long as the classification is not contrary to other GAAP. However, income statement classification guidance is not provided for many other types of insurance claims. Judgment should be applied to determine what presentation is most meaningful. Once a recovery meets the requisite recognition threshold, it should be recognized in the income statement. In particular, if the insurance recoveries relate to property damage, the proceeds should not be recorded as a reduction of the cost to rebuild or replace the insured asset. Business interruption insurance recoveries, even if based in part on lost revenues, would generally not be classified as revenues since it is unlikely that receiving business interruption insurance recoveries is part of an entity’s ongoing, major, or central operations.

Insurance proceeds should be classified within the statement of cash flows based on the nature of the insured item, rather than how the company plans to utilize the proceeds. For example, if the insurance proceeds relate to an investing activity (e.g., damaged fixed assets), then the insurance proceeds for that damaged asset should be reflected as an investing cash inflow. However, if the insurance proceeds relate to an operating activity (e.g., inventory losses or business interruption), the insurance proceeds should be reflected as an operating cash inflow.

Additional guidance may be found at:

- PwC’s *Property, plant, equipment and other assets* guide*, Section 7.2*
- PwC’s *Financial statement presentation* guide*, Section 3.6.10*, *Section 6.9.22*, and *Section 23.4.3*
- ASC 410, *Asset Retirement and Environmental Obligations*
- ASC 450, *Contingencies*
- ASC 610-30, *Gains and losses on involuntary conversions*
- ASC 220*, Income statement - reporting comprehensive income*

Internal control implications

Companies whose operations have been impacted by natural disasters may have to relocate their facilities or may have key personnel unavailable on a temporary basis. Such a relocation may require separating functional groups within the company, such as separating finance and accounting from computer processing and information technology. This may also create a greater risk of cyber attacks because IT personnel that may be monitoring such threats may be diverted to rebuilding systems following the natural disaster. Additionally, companies may have to temporarily utilize third-party organizations or different employees to perform certain functions, such as invoicing or cash collection. These actions may impact the company's internal control over financial reporting, either in the nature of the control being performed or the person performing the control. There might be changes to the design of controls related to non-recurring accounting transactions (e.g., impairments, insurance recovery assessments).

Companies should consider their processes and controls as soon as possible, so that there is adequate time for them to be in place to prepare their financial statements and for management to conduct its assessment of the effectiveness of internal control over financial reporting. Companies should verify that there are effective controls in place that are operating effectively for quarter-end reporting. Changes in the company’s internal control over financial reporting may need to be disclosed. Item 308 of Regulation S-K requires the disclosure of any change in internal control over financial reporting that occurred during the last fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

Companies may also be dealing with the damage or destruction of accounting records. In such situations, management should consider the implications on the design and operating effectiveness of its disaster recovery controls that relate to financial reporting. This should also consider the vulnerability of backup systems used as part of a disaster recovery plan and ensuring security protections continue to operate under this environment.

Other costs

Other potential costs to companies associated with natural disasters may include lease terminations, abnormal production levels, and environmental exposures.

Lease terminations

A company may be subject to a lease agreement for property that was destroyed or is no longer usable. Depending on the terms of the agreement, the lease may terminate, or the lessee may still be responsible for obligations under the lease.

- If the lease terminates in its entirety before the expiration of the lease term, the lessee should remove the lease liability and right-of-use asset from its books and record the difference in the income statement as a gain or loss.
- If the lease does not terminate, the lessee will need to determine if any change in the lease terms is due to (1) an existing contractual right in the lease agreement that the lessee always had or (2) the lease terms being changed to provide relief to the lessee.

Lease agreements may not be very specific about what constitutes a natural disaster event and what the relief will be in such an event. Therefore, it can be challenging to determine if any relief due to the natural disaster is an existing contractual right or a modification. A lease modification would generally involve determining if the arrangement meets the definition of a lease, remeasuring and reallocating contract consideration based on revised payment terms to components based on their then-current relative standalone selling price, and reassessing the lease term, discount rate, and lease classification at the modification date.

Additional guidance may be found at:

- PwC's *Leases* guide, *Section 5.2*

Idle capacity and vacant facilities

In addition to inventory that has been destroyed or impaired, companies may have idle production capacity due to prolonged power outages, fuel shortages, or other effects of natural disasters. Reduced production levels could have an effect on fixed overhead allocations.

Inventory is initially measured at cost, which includes the cost of materials, and, for work-in-process and finished goods, the costs incurred directly or indirectly in production, which includes labor and overhead. Full absorption costing refers to the process of allocating (absorbing) overhead into the cost of inventory.

ASC 330-10-30-1 through ASC 330-10-30-8 indicates that variable production overhead costs should be allocated to each unit of production on the basis of the actual use of the production facilities. The allocation of fixed production overhead costs, however, is required to be based on the "normal capacity" of the production facilities, which is defined as the production expected to be achieved over a number of periods under normal circumstances, taking into consideration loss of capacity resulting from planned maintenance. The range of normal capacity will vary based on business and industry factors.

The amount of fixed overhead costs allocated to each unit of production should not be increased as a consequence of abnormally low production or an idle plant. Abnormal amounts of freight, handling costs, and wasted material (spoilage) should be recognized as current period charges and not included in the cost of inventory. Judgment is required to determine what represents an abnormally low production level and an abnormal amount of production costs.

Facilities that are temporarily vacant or idle should continue to be depreciated. Depreciation should cease if the facility is permanently abandoned.

Environmental exposures

Companies should assess whether the damage caused by a natural disaster resulted in new exposure to environmental remediation liabilities. A liability for such exposures should be recognized when it is probable a loss has been incurred and the amount of that loss can be reasonably estimated. Even when a liability is not recognized, disclosure of a possible loss or exposure may still be required.

Additional guidance may be found at:

- PwC's *Financial statement presentation* guide, *Section 11.5*
- ASC 360, *Property, Plant, and Equipment*
- ASC 410, *Asset Retirement and Environmental Obligations*

Reporting and disclosure

In connection with a company's upcoming interim and annual reports, disclosures may be necessary regarding the effects of recent natural disasters. Footnote disclosures may be necessary for losses incurred, insurance claims made, and expected insurance recoveries. Companies may also need to disclose information regarding any disputes or uncertainties related to their insurance claims and recoveries.

In its review of financial statement filings after other natural disasters, the SEC staff has asked registrants impacted by these events to expand their disclosures. Specifically, comments requested expanded disclosure to quantify the effect of the natural disaster on their current operations, the estimated impact and duration of the impact on future period results and cash flows, and any significant effect on their supply chain.

If considering adjusting GAAP financial results to exclude the impact of natural disasters, companies should keep in mind the requirements around the use of non-GAAP financial measures. The requirements differ depending on where a non-GAAP measure is disclosed.

	SEC filings (e.g., Forms 10-K or 10-Q)	**Earnings release**	**Any public disclosure (e.g., company's website, analyst presentation)**
Applicable rule	Reg S-K, Item 10(e)	Reg S-K, Item 10(e)(1)(i)	Reg G
1. The non-GAAP measure taken together with the accompanying information cannot be misleading	✔	✔	✔
2. The most directly comparable GAAP measure must be disclosed	✔	✔	✔
3. A reconciliation of the non-GAAP measure to the most directly comparable GAAP measure must be included	✔	✔	✔
4. The GAAP measure must be presented with equal or greater prominence than the non-GAAP measure	✔	✔	

5. Management must disclose why it believes the non-GAAP measure is useful to investors	✔	✔	
6. If material, management must disclose the additional purposes, if any, for which it uses the non-GAAP measure	✔	✔	
7. Charges or liabilities that require cash settlement cannot be excluded from any measure of liquidity	✔		
8. A measure cannot be labeled as nonrecurring or infrequent (or any similar title) if it excludes amounts resulting from an event that has occurred in the last two years or is expected to occur again in the next two years	✔		
9. Non-GAAP measures cannot be presented on the face of the financial statements or in the notes	✔		
10. Non-GAAP measures cannot be presented on the face of any pro-forma financial information	✔		
11. Non-GAAP measures must not use titles or descriptions that are the same as, or confusingly similar to, GAAP titles	✔		

Subsequent events

Companies need to consider subsequent events when preparing financial statements. Information may become available after the end of the reporting period that provides additional evidence about conditions that existed as of the balance sheet date, including estimates inherent in the process of preparing financial statements. Such estimates include those related to the extent of asset impairments and the availability of insurance recoveries. ASC 855-10-22 refers to this type of subsequent event as recognized subsequent events, meaning that the financial statements may need to be adjusted to recognize the effects of that subsequent information.

Events that provide evidence about conditions that did not exist at the date of the balance sheet but arose subsequent to that date are called nonrecognized subsequent events. Nonrecognized subsequent events generally do not relate to conditions existing at the balance sheet date and so they are not recognized in the financial statements. However, disclosure may be necessary based on the nature of the event to keep the financial statements from being misleading. Natural disasters that occur after the balance sheet date would be considered nonrecognized subsequent events. Because ASC 855 does not provide an explicit threshold for determining which subsequent events require disclosure, the decision regarding when to disclose a nonrecognized subsequent event is based on specific facts and circumstances, including materiality, and requires judgment. Generally, a subsequent event should be disclosed if it meets both of the following criteria:

- The event should have a determinable (even if not yet definitively quantified) significant effect on the balance sheet at the time of occurrence or on the future operations of the company.
- Without disclosure of it, the financial statements would be misleading.

ASC 855 does not require a company to include all subsequent event disclosures in a single footnote. Rather, management may determine where to include the disclosures in the context of the financial statements.

Additional guidance may be found at:

- PwC's *Financial statement presentation* guide, *Chapter 28*
- ASC 855, *Subsequent Events*

Tax considerations

Valuation allowance assessment

The natural disaster's unexpected costs and potential for long-term impact on a company's operations represent information that must be taken into account when determining the realizability of deferred tax assets. The valuation allowance assessment requires a company to consider both positive and negative evidence, and weights information that is objectively verifiable more heavily than information that is not. It also uses a "more-likely-than-not" model, which is different than some other areas of US GAAP. As a result, a company could determine that its deferred tax assets are not realizable even if the company's conclusion is that other assets are not impaired.

Additional guidance may be found at:

- PwC's *Income taxes* guide, *Chapter 5*

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