

**Office of Chief Counsel  
Internal Revenue Service  
Memorandum**

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subject: Remediation of Gas Leaks

This Chief Counsel Advice responds to your request for assistance. You requested our comments on Taxpayer's position that, under §172(f), it can carry back, for 10 years, alleged specified liability losses attributable to certain expenses incurred to maintain and repair natural gas pipelines as required by federal minimum safety standards promulgated by the Department of Transportation. This advice may not be used or cited as precedent.

LEGEND

Taxpayer =

\$A =

\$B =

\$C =

\$D =

\$E =

Year 1 =

Year 2 =

Firm =

State A =

### ISSUE

Do deductible costs that Taxpayer incurred to comply with federal pipeline safety regulations satisfy a federal or state law liability requiring the remediation of environmental contamination within the meaning of § 172(f)(1)?

### CONCLUSION

Deductible costs that Taxpayer incurred to comply with federal pipeline safety regulations do not satisfy a federal or state law liability requiring the remediation of environmental contamination within the meaning of § 172(f)(1).

### FACTS

Taxpayer is an accrual-method taxpayer that files, as the common parent, a consolidated return with its subsidiaries. Among other activities in the energy sector, Taxpayer uses pipelines and other pipeline facilities to distribute natural gas to customers<sup>1</sup>. In Year 1 and Year 2, Taxpayer incurred costs under pipeline maintenance plans known as distribution integrity management programs (DIMPs) to repair pipeline leaks, to protect its pipelines from the risk of leaks, and to replace pipelines.<sup>2</sup> Taxpayer asserts that these costs were deductible in the year incurred. Taxpayer also asserts that such deductions increased the amount of Taxpayer's specified liability loss, as determined under § 172(f) of the Internal Revenue Code,<sup>3</sup> for the taxable year the deductions were allowable. For Year 2, Taxpayer provided a detailed list of such costs as follows:

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. For purposes of this memorandum gas distribution pipelines include all parts of those physical facilities through which gas moves in transportation, including pipe, valves, and other appurtenances attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies.

<sup>2</sup> DIMPs are required under regulations promulgated by the Pipeline and Hazardous Materials Safety Administration (PHMSA) of the U.S. Department of Transportation.

<sup>3</sup> Unless specified otherwise, unmodified references to sections of statutes are references to sections of either the Internal Revenue Code of 1954 or 1986 as applicable.

Replace Mains	\$A
Replace Services	\$B
Cathodic Protection	\$C
Leak Clamping	<u>\$D</u>
Total	\$E

For purposes of this memorandum we will assume that the DIMP costs that Taxpayer incurred in Year 2 are also representative of the DIMP costs that Taxpayer incurred in Year 1. Because the facts in this case are rather voluminous, we will provide additional facts as they become relevant to the discussion.

## LAW AND ANALYSIS

### A. § 172(f)(1)(B)(i)

Section 172(a) provides a deduction for the taxable year equal to the aggregate of the taxpayer's net operating loss carryovers and carrybacks to the taxable year. With certain modifications, § 172(c) defines a net operating loss (NOL) as the excess of the deductions allowed under chapter 1 of the Internal Revenue Code (Code) over the taxpayer's gross income for the taxable year.

For the taxable years at issue, § 172(b)(1)(A) generally provides that an NOL shall be carried back to the 2 taxable years preceding the taxable year of the loss and shall be a NOL carryover to the 20 taxable years following the taxable year of the loss. However, to the extent an NOL qualifies as a specified liability loss, instead of the 2-year carryback period provided for by § 172(b)(1)(A), § 172(b)(1)(C) provides that such loss shall be an NOL carryback to each of the 10 taxable years preceding the taxable year of such loss. Although the aforementioned statutory provisions provide that an NOL is carried to each of the taxable years in the carryback and carryover period applicable to that NOL, § 172(b)(2) makes clear that the portion of the NOL that is used to reduce a modified version of taxable income in the carryback or carryover year is not eligible to be carried to any taxable year subsequent to that taxable year.

Section 172(f)(1) defines a specified liability loss in part as the sum of the following amounts taken into account in computing the taxpayer's NOL for the taxable year:

(B)(i) any amount allowable as a deduction under chapter 1 of the Code (other than § 468(a)(1) or 468A(a)) which is in satisfaction of a liability under a federal or state law requiring:

- (I) the reclamation of land,
- (II) the decommissioning of a nuclear power plant (or any unit thereof),

- (III) the dismantlement of a drilling platform,
- (IV) the remediation of environmental contamination, or
- (V) a payment under any workers compensation act (within the meaning of section 461(h)(2)(C)(i).

However, § 172(f)(1)(B)(ii) provides that even if § 172(f)(1)(B)(i) is satisfied, amounts will not generate a specified liability loss unless the act (or failure to act) giving rise to such liability occurs at least 3 years before the beginning of the taxable year such costs are deductible (the 3-year rule).

Congress modified § 172(f)(1)(B) in 1998 by narrowing the type of liabilities which would generate a specified liability loss from a much broader base of applicable liabilities. Unfortunately, the legislative history provides no guidance concerning how to interpret the phrase “remediation of environmental contamination” as used in § 172(f)(1)(B)(i)(IV).

#### B. Taxpayer’s Position

Taxpayer provided the Service a short memorandum prepared by Firm which provides a condensed statement of facts and a brief legal argument in favor of treating the costs at issue as eligible to generate specified liability losses. We will treat the assertions and arguments made in the Firm memorandum as those of Taxpayer.

Taxpayer asserts that the relevant costs at issue include those that it incurred under projected repair programs governed and required by the Pipeline Hazardous Materials Safety Administration (PHMSA)<sup>4</sup> as part of its DIMP. Taxpayer contends that the costs were incurred to protect its pipelines from risks, to repair leaks, and to replace corroded pipeline. According to Taxpayer, its DIMP was periodically re-evaluated and adjusted based on an algorithm that takes into account statutorily mandated risks on a historical basis to repair leaks that may be unknown and to prevent future leaks. In addition, Taxpayer states that some of the relevant costs included repairs for significant leaks outside of its DIMP as the leaks were discovered. However, Taxpayer states that not all leaks are necessarily repaired when found. Depending on the severity, leaks may be left for up to 3 years before repair occurs.

Taxpayer asserts that the relevant costs at issue satisfy the requirements of § 172(f)(1)(B), including that such costs are deductible, that they are incurred in the remediation of environmental contamination and that such costs satisfy the 3-year rule of § 172(f)(1)(B)(ii). Taxpayer relies upon Title 49 of the United States Code, which states that the minimum federal safety standards must be designed to meet the need for gas pipeline safety and protecting the environment. Finally, Taxpayer asserts that it satisfies the 3-year rule because Taxpayer became an owner and an operator of the pipelines for which the environmental remediation costs were incurred 3 or more years before the beginning of the taxable year the relevant costs were deductible.

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<sup>4</sup> The Pipeline and Hazardous Materials Safety Administration (PHMSA) is a United States DOT agency created in 2004. It is responsible for developing and enforcing the pipeline safety regulations. It is made up of the Office of Pipeline Safety and the Office of Hazardous Materials Safety.

*C. Sealy*

Following the enactment of the extended carryback period for deferred statutory or tort liability losses, some taxpayers adopted an aggressive stance regarding when the act or failure to act occurred for purposes of the 3-year rule. These taxpayers asserted that the relevant act or failure to act occurred when an event occurred that made the incurrence of the liability foreseeable, not when an act or failure to act actually made the taxpayer liable for the particular obligation. In *Sealy Corp. v. Commissioner*, 107 T.C. 177 (1996), *aff'd*, 171 F.3d 655 (9th Cir. 1999), the petitioners asserted that the portion of NOLs generated by deductions for the following expenses constituted specified liability losses within the meaning of § 172(f)(1)(B):

- (1) professional fees incurred to comply with reporting, filing, and disclosure requirements imposed by the Securities and Exchange Act of 1934 (the 1934 Act),
- (2) professional fees incurred to comply with ERISA reporting requirements, and
- (3) professional fees incurred in connection with an IRS income tax audit.

This case might have been decided in favor of the government on the grounds that the 3-year rule was not satisfied with regard to any of the liabilities. However, the Tax Court did not focus on application of the 3-year rule. Instead, the Tax Court held that deduction of the above expenses did not result in specified liability losses because the liabilities for the expenses did not arise under a federal or state law within the meaning of § 172(f)(1)(B). The Tax Court gave three reasons for its conclusion.

First, the court noted that the federal law cited by the petitioners did not establish the petitioners' liability to pay the amounts at issue:

It is true that the 1934 Act, ERISA, and the Internal Revenue Code require petitioners to file financial reports and disclosure statements, maintain and provide books and records, and cooperate with IRS audits. However, those provisions do not establish petitioners' liability to pay the amounts at issue. Petitioners' liability to pay those amounts did not arise until petitioners contracted for and received the services. Petitioners' choice of the means of compliance, and not the regulatory provisions, determined the nature and amount of their costs. If, on the other hand, petitioners had failed to comply with the auditing and reporting requirements or had not obtained the particular services in issue here, their liability would have been in amounts not measured by the value of services. Thus, petitioners' liability did not arise under Federal law.

107 T.C. at 184.

Second, the court read the legislative history of § 172(f)(1)(B) to suggest that Congress intended the provision to apply only to liabilities the deduction of which the economic performance requirement caused to be deferred. Because the economic performance requirement did not delay petitioner's accrual of the deductions at issue, the court concluded

that Congress did not intend for NOLs generated by those deductions to qualify as specified liability losses. *Id.* at 185-86.

Third, in determining the scope of liabilities arising under either federal or state law within the meaning of § 172(f)(1)(B), the court considered the specific types of liabilities referred to in § 172(f): product liability, nuclear decommissioning liabilities, and torts. Invoking the statutory construction rule of *eiusdem generis*, the court concluded that Congress intended the 10-year carryback to apply to a relatively narrow class of liabilities similar to those identified in the statute. The court thought the costs at issue in *Sealy* were routine costs not like those identified in the statute. *Id.* at 186.

Having decided that the liabilities at issue were not imposed under federal law, the Tax Court provided no analysis regarding the proper application of the 3-year rule. On appeal, however, the Ninth Circuit did address the failure to satisfy the 3-year rule:

It is, therefore, not simply an expense incurred with respect to an obligation under federal law but an act "giving rise" to the liability that qualifies as a specified liability under the statute. The act giving rise to each of the liabilities in question was the contractual act by which *Sealy* engaged lawyers or accountants. In each of these instances the act did not occur at least three years before the beginning of the taxable year.

*Sealy's* argument essentially is that the act giving rise to the liability is the first event in a chain of causes which gives rise to the liability. The argument leads to a *reductio ad absurdum*. The organization of the company gave rise to an obligation to comply with all pertinent state and federal laws and thereby gave rise to the liabilities incurred in complying with these laws. According to this logic, every corporation would have a specified liability carryback for all costs the corporation incurred to comply with relevant laws. Congress did not create such a windfall.

171 F.3d 657-58.

In *Sealy*, the taxpayer had argued that the act giving rise to all of its obligations to file annual and quarterly reports with the Securities and Exchange Commission, for purposes of the 3-year rule, occurred when it went public in 1970 initially causing it to become subject to the reporting requirements of the 1934 Act. The Ninth Circuit made clear that the initial act by which a taxpayer becomes subject to a statutory and/or regulatory regime does not constitute the act or failure to act for purposes of the 3-year rule with regard to all the liabilities that a taxpayer might become subject to under that regime.

In the wake of *Sealy*, in accordance with the Tax Court's third rationale for its decision in that case, the Service took the position that only a narrow class of liabilities arose under federal or state law for purposes of § 172(f)(1)(B). The Service took the position that the liability had to be a kind whose fundamental nature meant that the deduction of the liability would be delayed because of the economic performance requirement ("inherent delay liabilities"). For example, a mining reclamation liability imposed by state or federal law qualifies

as an inherent delay liability. This is because in the normal course of events there will be a significant delay between when the mine is created and the obligation to restore the land arises and when the land is actually restored. Because any restoration deduction will not be allowable until the land is restored, there is an inherent delay between the creation of the liability and the deduction attributable to the economic performance requirement.

Following this inherent delay approach, the Service asserted that state income tax liabilities did not arise under state law under § 172(f)(1)(B) because such liabilities do not qualify as inherent delay liabilities. In *Host Marriott Corp. v. United States*, 113 F.Supp. 2d 790 (D. Md. 2000), *aff'd*, 267 F.3d 363 (4th Cir. 2001), the Service took the position that deductions attributable to liabilities for workers' compensation and interest on federal income tax underpayments did not arise under either federal or state law for purposes of § 172(f)(1)(B). The district court rejected that position, noting that state and federal statutes imposed those liabilities. The district court concluded that was all that was required to satisfy the 'arising under federal or state law' requirement. This position was upheld on appeal. The district court also concluded that the act or failure to act, for purposes of applying the 3-year rule to the workers' compensation liabilities occurred when the workers were injured. See also *Internet Corp. v. Comm'r*, 117 T.C. 133 (2001).

In Notice 2005-20, 2005-1 C.B. 635, the Service abandoned its position that only inherent delay liabilities arise under federal or state law for purposes of § 172(f)(1)(B). Consistent with the Tax Court's first rationale for its decision in *Sealy*, the Service stated that to arise under federal or state law within the meaning of § 172(f)(1)(B), the liability must be directly imposed by federal or state law and must not be the result of decisions made by the taxpayer or others. Further, the Service took the position that the act or failure to act in the chain of causation leading to the creation of a liability that is relevant for purposes of the 3-year rule is that act or failure to act that establishes the taxpayer's legal obligation to satisfy the liability.

#### D. Methane as a Pollutant

In 1999, a consortium petitioned the EPA to regulate greenhouse gas (GHG) emissions from new motor vehicles under § 202 of the Clean Air Act (CAA). In *Massachusetts v. EPA*, 549 U.S. 497 (2007), the Supreme Court held that if the EPA made a finding of endangerment under the CAA, then the EPA had the authority to regulate GHGs.

In response, the EPA made a finding that GHGs in the atmosphere may reasonably be anticipated both to endanger public health and to endanger public welfare. *Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act* 74 FR 66496 (December 15, 2009) (the endangerment finding). Specifically, the EPA defined the "air pollution" referred to in CAA section 202(a) to include the mix of the following six long-lived and directly-emitted greenhouse gases: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). In the endangerment finding the EPA referred to these six gases as "well-mixed greenhouse gases".

Shortly after making the endangerment finding, the EPA issued a final rule designed to limit GHG emissions from certain vehicles under section 202(a) of the CAA. See *Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards* 75 FR 25324 (May 7, 2010) (the tailpipe rule). The regulations did not require a reduction in methane emissions from the regulated vehicles. However, the regulations did set an upper limit on methane emissions per mile of travel of the regulated vehicles. Thus, methane became a regulated pollutant under the CAA under the tailpipe rule<sup>5</sup>.

## E. Application to the Taxpayer

### 1. Introduction

With regard to whether the expenses at issue are for environmental remediation, Taxpayer points out that under 49 U.S.C. § 60102(b) the PHMSA is required to issue regulations that are designed to meet the need for gas pipeline safety and protecting the environment. Taxpayer argues that if the PHMSA issued regulations that did not provide for both pipeline safety and the protection of the environment, the regulations would be invalid. Based on the assumption that the pipeline safety regulations are valid, Taxpayer contends that the pipeline safety regulations must provide for the protection of the environment which means that the pipeline safety regulations must provide for the remediation of environmental contamination within the meaning of § 172(f)(1)(B)(i)(IV).

We start with Taxpayer's last argument first. Taxpayer equates the phrase "protecting the environment" with the phrase "remediation of environmental contamination". Although protecting the environment could encompass the remediation of environmental contamination this is not necessarily the case. For example, protecting the environment could include protection of sensitive ecosystems such as an endangered species' habitat from damage from potential gas explosions or fires originating from gas pipelines. However, expenses incurred to do this would not qualify as environmental remediation costs.

Even if the phrase "protecting the environment" and "remediation of environmental contamination" were equivalent in meaning, Taxpayer's argument regarding the validity of the pipeline safety regulations would fail. Taxpayer appears to be improperly conflating the rules of logic with the canons of statutory construction. A logical statement (a statement) is a declarative sentence that purports to convey factual information. If the information is correct the statement is true. If the information is false, then the statement is false. In logic, if multiple statements are conjunctively combined by inserting an "and" between the statements, the entire statement is true only if all of the individual statements are true. For example, where  $p$  and  $q$  are declarative statements that purport to convey factual information, the statement  $p$  and  $q$  is true only if both  $p$  and  $q$  are true. However, the federal pipeline safety statutes are not drafted as a declarative statement that provides that the DOT has issued pipeline safety regulations that provide for protection against risks to life, property damage, and protection of the environment, the truth of which can be evaluated under the rules of logic.

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<sup>5</sup> However, in *Utility Air Regulatory Group v. EPA*, 573 U.S. 302 (2014), the Supreme Court held that GHGs are not 'air pollutants' for certain operative provisions of the CAA even though such gases meet the general definition of an air pollutant under that act..

Instead, the federal pipeline safety statutes as a whole direct the DOT to issue regulations that provide adequate protection against risks to life and property and also provide for the protection of the environment. In construing federal statutes, a court's goal "is to ascertain the congressional intent and give effect to the legislative will." *Philbrook v. Glodgett*, 421 U.S. 707, 713 (1975). The DOT's obligation to issue federal pipeline safety regulations designed to protect against injuries to people and damage to property pre-date the requirement to issue regulations that provide for the protection of the environment. The DOT issued a number of pipeline safety regulations designed to protect against injuries to people or property damage prior to the passage of the Pipeline Safety Act of 1992 (the 1992 Act). Although there may be substantial overlap between the considerations that go into issuing pipeline safety regulations that protect against injuries to people and property damage, the same cannot be said for the issuance of regulations that provide for the protection of the environment. The DOT can, and has in the past, issued pipeline safety regulations that protect against injuries to people and property damage without also issuing regulations that are designed to protect the environment.

Environmental protection is not so integrally related to protecting against injuries to people and property damage that it is impossible to issue regulations that serve these objectives without also issuing regulations that provide for environmental protection. Congress intended for the DOT to issue regulations that would advance all three objectives when it enacted the 1992 Act.<sup>6</sup> Completely invalidating regulations that provide for protection against injuries to people and property damage, but fail to provide for protection of the environment, would result in frustrating congressional intent with respect to all three objectives, not just the objective of protecting the environment. Achieving two out of three congressional objectives furthers congressional intent better than failing to achieve any of Congress's objectives. Thus, Taxpayer's assertion that if the pipeline safety regulations did not provide for the protection of the environment that would automatically require such regulations to be invalid cannot be true.

Even if Taxpayer's assertion as to the validity of the regulations were correct, that would not establish that federal law imposes an obligation on Taxpayer to incur expenses to remediate environmental contamination. In the absence of valid regulations that require Taxpayer to do that, it is impossible to infer such a duty from the actual language used in the federal pipeline safety regulations. The statutory provisions direct the DOT to issue regulations that would require gas pipeline owners or operators to take actions to protect the environment. The statutory provisions do not specify the required actions and thus the statutory provisions themselves do not impose an obligation on Taxpayer to remediate environmental contamination.

In the 1992 Act, Congress expanded the DOT's authority to include environmental protection as a factor in regulating gas pipelines. The legislative history to the 1992 Act indicates that in doing so Congress did not intend for the DOT's responsibility to cross over into that of the Federal Energy Regulatory Commission (FERC), the states, the Corps of

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<sup>6</sup> See §101 and § 102 of the Pipeline Safety Act of 1992 for gas pipelines.

Engineers, or the EPA.<sup>7</sup> Prior to Congress's enactment of the 1992 Act, it was well established that the EPA had the authority and the responsibility for the federal regulation of air pollution. Notwithstanding comments at one of the hearings<sup>8</sup>, based on the bulk of the legislative history to the 1992 Act, it appears that Congress did not intend for the DOT to issue regulations either defining or regulating pollutants emitted from gas pipelines under that act. From this it can be inferred that in the case of gas pipelines the phrase "protecting the environment", for purposes of the pipeline safety statutes, was intended to encompass protection of sensitive ecosystems from damage from explosions or fires arising as a result of leaks from gas pipelines.

Having equated the meanings of the phrases "protecting the environment" and "the remediation of environmental contamination", Taxpayer makes no attempt to (1) define what is meant by the phrase "remediation of environmental contamination" and (2) then demonstrate why the statutes and regulations cited by Taxpayer require it to incur costs to remediate environmental contamination. However, if the DOT were to issue regulations regulating the emission of pollutants from gas pipelines, the phrase "protecting the environment" is broad and vague enough that such regulations might very well be found to be valid. The only way to determine if the federal pipeline safety regulations impose an obligation on owners or operators of gas pipelines to remediate environmental contamination is to examine the actual language of the regulations.

## 2. Required Elements for Remediation of Environmental Contamination

### (i) Environment

Although it appears that a small percentage of Taxpayer's gas pipelines are . The primary purpose of gas distribution pipelines is to distribute natural gas to the customers who use the gas for heating, cooking, and other end uses. Processed natural gas delivered to end use customers is almost all methane, although some non-methane components of natural gas such as small amounts of ethane may remain in the natural gas delivered to customers. In addition, because most methane is odorless and colorless, a small amount of odorant is generally added to the gas distributed to customers so that gas leaks may be detected by the smell of leaking gas.

Almost everything that leaks from a gas distribution pipeline or facilities associated with that pipeline is methane. The leaked methane that makes it past any methanotrophic bacteria<sup>9</sup> that might be living in any soil that is covering the pipeline may enter the earth's atmosphere.

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<sup>7</sup> See H.R. Rep. (Part 1) No. 102-247, 1<sup>st</sup> Sess. 18 (1991).

<sup>8</sup> See House Hearing 102-63, *Pipeline Safety Reauthorization Hearing Before the Subcommittee on Energy and Power of the Committee on Energy and Commerce House of Representatives*, 102d Cong., 1<sup>st</sup> Sess. 78, 145-6 (May 22, 1991).

<sup>9</sup> It has been estimated that soil oxidation of methane reduces the amount of methane that reaches the atmosphere from distribution underground pipeline leaks by about 18%. See Campbell, Campbell, & Epperson *Methane Emissions from the Natural Gas Industry, Volume 9: Underground Pipelines Final Report 2* (1996).

Nothing in the pipeline safety statutes or the pipeline safety regulations expressly treats the earth's atmosphere as an environment that must be protected from leaked emissions from gas pipelines or from which such emissions must be removed. Nor does Taxpayer expressly identify the earth's atmosphere as the relevant environment for purposes of determining if the costs at issue are environmental remediation costs. Nevertheless, the earth's atmosphere appears to be the only environment that could be relevant under the facts of this case. Moreover, implicit in Taxpayer's arguments is the underlying assumption that the relevant environment is the earth's atmosphere.

(ii) Pollutant

Taxpayer points to its obligation under the pipeline safety regulations to repair certain pipeline leaks and to take steps to prevent future leaks, such as replacing certain pipelines. Taxpayer asserts that costs incurred to do these things are environmental remediation costs. Taxpayer does not expressly identify methane as the relevant pollutant for purposes of determining if the costs at issue are environmental remediation costs. However, almost everything that leaks from a gas distribution pipeline is methane. Thus, it stands to reason that Taxpayer is implicitly arguing that methane is a regulated pollutant under the pipeline safety regulations.

That GHGs are generally treated as an air pollutant for certain sources under the CAA is not sufficient to make such gases regulated pollutants under particular operative sections of the CAA. It follows that the fact that GHGs are generally treated as air pollutants under the CAA does not make such gases regulated air pollutants under federal statutes other than the CAA. For GHGs to be treated as regulated air pollutants under a particular set of statutes other than the CAA, that set of statutes or the implementing regulations thereunder must treat them as such.

(iii) Remediation

Nothing in the federal pipeline safety statutes or in the pipeline safety regulations expressly identifies methane as a regulated pollutant for purposes of those provisions. For that reason alone, Taxpayer's claim that the costs it incurred to repair or replace pipelines qualify as environmental remediation costs falls short. Nevertheless, even if it were determined that that deficiency in the pipeline safety statutes and the pipeline safety regulations was not an impediment to Taxpayer's claim, it would still be necessary to determine if the pipeline safety regulations require the taxpayer to incur environmental remediation costs. Therefore, in the analysis that follows, solely for discussion purposes, we will assume that the relevant environment is the earth's atmosphere and the relevant pollutant is methane.

3. Specific Classes of Expenses

(i) Removal of Pollutants from a Specified Environment

As noted above, the exact scope of what constitutes environmental remediation costs is not entirely clear. However, where a taxpayer releases a pollutant into a specified environment, we believe that costs the taxpayer incurs to comply with federal or state law requirements to remove that pollutant from the specified environment falls within the scope of environmental remediation costs.

Under many environmental statutes, it is possible to remove from a specified environment the exact substances that the removing party released into that environment. For example, the same crude oil that was released into a waterway may be removed from that waterway. The same cannot be said for the removal of a gas that has been released into the earth's atmosphere. Nevertheless, because molecules of the gas are fungible, the same practical effect can be achieved by removing from the ambient air the same quantity of the pollutant gas that was released into the air.

Removal of certain gases from ambient air is possible. For example, it is possible to remove carbon dioxide from ambient air, and a taxpayer may receive a tax credit for doing so. See § 45Q. The same thing can be done in the case of methane. But because the concentration of methane in the earth's atmosphere is much lower than the concentration of carbon dioxide, removing methane from the ambient air is more costly than removing carbon dioxide and may not be practical<sup>10</sup>. In any event, neither the pipeline safety statutes nor the pipeline safety regulations required Taxpayer to remove methane from the earth's atmosphere and Taxpayer did not incur such costs.

(ii) Repair of Pipeline Leaks

(a) Overview

Taxpayer claims that leak clamping costs that it incurred qualify as environmental remediation costs. Our assumption is that leak clamping costs consist of costs to repair pipeline leaks. Leaks have been reported on the annual report required of gas distribution pipeline operators for many years. The instructions for completing the annual report define a leak as the unintentional release of gas from a pipeline.

In the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 (the PIPES Act), Congress directed the Secretary of the DOT to prescribe minimum standards for integrity management programs for gas distribution pipelines. Under the PIPES Act, the DOT was required to determine which gas distribution pipelines would be subject to the minimum standards and each operator of a gas distribution pipeline subject to the standards was required to develop and implement an integrity management program in accordance with those standards.

The PHMSA published the final rule establishing integrity management (IM) requirements for gas distribution pipeline systems on December 4, 2009 (74 FR 63906). The

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<sup>10</sup> See Lackner, K.S. Practical constraints on atmospheric methane removal. *Nat Sustain* 3, 357 (2020). <https://doi.org/10.1038/s41893-020-0496-7>.

effective date of the rule was February 12, 2010, resulting in IM regulations for gas distribution pipelines (49 CFR Part 192, Subpart P). Operators were given until August 2, 2011 to write and implement their DIMPs.

The purpose of a DIMP is to allocate resources for the purpose of ensuring the integrity of the gas distribution system in a manner that accounts for risks to the system and the potential consequences of those risks. The results of a DIMP are monitored and the plan is revised on a periodic basis to improve the plan based on prior experiences and advances in pipeline technology. The IM regulations require operators to develop, write, and implement a DIMP with the following elements: (1) knowledge-understand system design and material characteristics, operating conditions and environment, and maintenance and operating history, (2) identify existing and potential threats, (3) evaluate and rank risks, (4) identify and implement measures to address risks, (5) measure program performance, monitor results, and evaluate effectiveness, (6) periodically assess and improve the program, and (7) report performance results to PHMSA and, where applicable, also to states.

Prior to the enactment of the PIPES Act, 49 CFR § 192.703(c) already required operators of gas distribution pipelines to repair hazardous leaks promptly, although the regulation did not define what constituted a hazardous leak. One of the required elements of a DIMP is to determine and implement measures designed to reduce the risks from failure of the gas distribution pipeline. Such measures must include an effective leak management program (unless all leaks are repaired when found). See 49 CFR § 192.1007(d). Under the IM regulations, a hazardous leak is a leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous. See 49 CFR § 192.1001. This definition was drawn from the Gas Pipeline Technology Committee<sup>11</sup> (GPTC) Guide already used by many operators to classify leaks.

The GPTC Guide classifies leaks into three categories. Although we do not have access to the GPTC Guide as in effect for the taxable years at issue, based on what we can determine from other sources, it appears that the leak management program that Taxpayer adopted for its DIMP is generally consistent with the GPTC Guide.

Taxpayer's leak management program separates leaks into three categories. For discussion purposes we will refer to these leaks as either Class 1, Class 2, or Class 3 leaks.

Class 1 leaks represent an existing or probable hazard to persons or property and requires prompt and continuous action until repaired or made safe. Class 2 leaks include

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<sup>11</sup> The GPTC Guide is The Gas Piping Technology Committee Guide for Gas Transmission and Distribution Piping Systems. The GPTC Guide is produced by the Gas Piping Technology Committee Z380, an accredited ANSI committee. The GPTC Guide's purpose is to provide recommendations and references for complying with the federal pipeline safety regulations. It includes suggested compliance activities to meet the intent of the performance-based regulations. Hart Energy, Just what is the GPTC Guide? (9/01/2009); <https://www.hartenergy.com/news/just-what-gptc-guide-49846>. The GPTC Guide is not by itself enforceable. However, its provisions become enforceable if adopted in either statutes or regulations pertaining to distribution pipelines

leaks that are recognized as not being an immediate hazard at the time of detection, but justify scheduled repair based on probable future hazard. Class 3 leaks are leaks that are non-hazardous when they are detected and can be reasonably expected to remain nonhazardous.

A leak repair is defined as each clamp, mechanical fitting repair or encapsulation kit used to stop the unintentional escape of gas. Alternatively, problems created by leaks may be eliminated by renewing the main or service, which we interpret as replacing the service or main where the leak is located.

#### (b) Environmental Remediation Expense

The first issue is whether the expenses that Taxpayer incurs to repair leaks are for the remediation of environmental contamination. The only leaks that the federal pipeline safety regulations expressly require the Taxpayer to repair are hazardous leaks, that is Class 1 leaks. The applicable regulation, 49 CFR § 192.703(c), requires Taxpayer to repair hazardous leaks promptly and has done so well before the enactment of the 1992 Act and the requirement for Taxpayer to have a DIMP.

Pursuant to 49 CFR § 1005, Taxpayer is required to develop and implement an IM program for its gas distribution pipelines that includes a written DIMP. Although the regulation does not specify what an effective leak management program requires, the preamble to the final DIMP regulations for gas distribution pipelines suggests that operators may look to guidance from the GPTC in formulating such a plan, which Taxpayer has done.

Neither the pipeline safety statutes nor the federal pipeline safety regulations issued thereunder expressly treat methane as a pollutant that must be removed from the earth's atmosphere or from which the earth's atmosphere must be protected. Moreover, such concerns are not even implicitly addressed in the federal pipeline safety regulations.

Under the DIMP regulations a hazardous leak is defined as a leak that represents an existing or probable hazard to *persons or property* [emphasis supplied] and requires immediate repair or continuous action until the conditions are no longer hazardous. See 49 CFR § 192.1001. All the examples of leaks classified as hazardous under the Taxpayer's DIMP involve situations in which there could be serious threats to life or property. Moreover, a Class 2 leak when detected is not hazardous, but justifies being repaired based on the leak's potential to become a hazardous leak. Finally, a Class 3 leak is a leak that is not a hazardous leak when detected and is expected to remain nonhazardous.

Nowhere in the federal pipeline safety regulations or in Taxpayer's DIMP are leaks required to be repaired based solely on the volume of methane finding its way into the atmosphere, either in absolute terms or as a percentage of the methane transported through the pipe, without regard to whether the leak presents a risk of fire or explosion. Whether a leak must be repaired promptly or scheduled for repair depends on the concentration of the methane in spaces where the potential for a fire or explosion exists. Class 3 leaks may remain unrepaired indefinitely irrespective of any adverse global warming effects caused by such leaks.

Taxpayer also cites 49 CFR § 192.751 for its position, a regulation in effect prior to the 1992 Act and the requirement to have a DIMP, apparently because the regulation refers to gas being vented into open year. The regulation provides in relevant part that each operator shall take steps to minimize the danger of accidental ignition of gas in any structure or area where the presence of gas constitutes a hazard of fire or explosion, including when a hazardous amount of gas is being vented into open air, each potential source of ignition must be removed from the area and a fire extinguisher must be provided. The essence of this regulation is a requirement to take steps to prevent a fire or explosion where the presence of gas presents a danger of such an occurrence. It would appear to apply even in situations in which gas is intentionally vented from a pipeline or another component of the pipeline system to allow for maintenance or testing. We fail to see how this regulation supports Taxpayer's assertion that the pipeline safety regulations require Taxpayer to incur environmental remediation costs.

We believe that for federal or state law to require the remediation of environmental contamination that law must require actions specifically designed to achieve that result, and not simply actions designed to achieve another result but which may, but not necessarily, have a beneficial effect on the environment as a corollary effect of achieving the primary result. Therefore, we conclude that Taxpayer's pipeline leak repair costs do not constitute costs to remediate environmental contamination within the meaning of § 172(f)(1)(B)(i)(IV).

(c) Act or Failure to Act

Irrespective of whether Taxpayer's deductions for pipeline leak repair costs are incurred to satisfy an obligation imposed under federal or state law to remediate environmental contamination, such deductions do not qualify to generate a specified liability loss unless the act or failure to act giving rise to such liability occurred at least 3 years before the beginning of the taxable year of the deduction (the 3-year rule). The purpose of this rule is to only allow the extended carryback period for losses for liabilities the deduction of which is significantly deferred.

Taxpayer argues that the relevant act or failure to act for purposes of satisfying the 3-year rule is when it became an owner or operator of the pipelines at issue, which for purposes of this memorandum we are assuming are the same dates. Taxpayer points out that the minimum federal safety standards are imposed specifically on the owners or operators of pipeline facilities per 49 U.S.C. § 60102(a)(2). Additionally, both Subpart M of the federal pipeline safety regulations requiring repairs of hazardous leaks, and Subpart P of the federal pipeline safety regulations requires a DIMP, an element of which must be a leak management plan, attach liability to pipeline operators.

Alternatively, Taxpayer contends that liability may have attached when the statute came into effect. For this purpose, Taxpayer points to 49 U.S.C. § 60102(k) which required the Secretary of the DOT to issue regulations subjecting low-stress hazardous liquid pipelines to the same standards and regulations as other hazardous liquid pipelines by December 31, 2007, although the implementation of the applicable standards and regulatory requirements could be phased in.

It is not clear to us why Taxpayer pointed to a date that applies to low-stress hazardous liquid pipelines. What is clear to us, however, is that Taxpayer's argument that it satisfies the 3-year rule is a rehash of arguments already considered and rejected in *Sealy*. Essentially, Taxpayer is contending that once a taxpayer becomes subject to a statutory or regulatory scheme under which it might incur liabilities, the act or failure to act for any liabilities that might be imposed on the taxpayer under that scheme has occurred for purposes of the 3-year rule. Simply being the operator of a gas distribution pipeline when federal pipeline safety regulations come into effect is not sufficient to constitute "the act" for purposes of satisfying the 3-year rule with regard to any liabilities Taxpayer might become subject to under those regulations. To find otherwise would frustrate § 172(f)(1)(B)'s purpose to provide an extended carryback period for NOLs generated by existing liabilities the deduction of which has been significantly deferred.

"The act or failure to act" for purposes of the 3-year rule does not exist until facts have occurred from which it can be determined that a taxpayer is actually liable for something. In the case of an obligation to repair a pipeline leak, it stands to reason that the liability to do so cannot occur until the pipeline leaks. Under 49 CFR § 192.703(c), Taxpayer is required to repair hazardous leaks promptly. Taxpayer's DIMP leak management plan for Class 1, that is hazardous leaks, requires prompt and continuous action until the leak is repaired or made safe. The prompt and continuous action is to protect life and property by eliminating any hazardous conditions until the leak can be repaired or made safe. Examples of such actions include but are not limited to (1) evacuating premises and monitoring all buildings in the vicinity of a gas leak to ensure gas has not migrated into the buildings and (2) blocking off an area. However, Taxpayer's DIMP provides that these actions shall not be a substitute for repairing the leak.

It seems clear that Taxpayer has a legal obligation to repair leaks that are hazardous when they first occur. However, Taxpayer would not be complying with the federal pipeline safety regulations if Taxpayer delayed the repair of such a leak so long that the delay between the incurrence of the leak and the deduction of the costs for its repair caused Taxpayer to satisfy the 3-year rule. Therefore, absent evidence to the contrary, Taxpayer has not satisfied the 3-year rule for deductions for repairing such leaks.

There is no federal regulation that specifically requires Taxpayer to repair Class 2 leaks. Taxpayer is, however, required to have a leak management plan as part of its DIMP although the federal pipeline safety regulations do not specify minimum leak management plan standards. That being said, the preamble to the final federal pipeline safety regulations pertaining to DIMPs reference the GPTC Guide for guidance on what constitutes an acceptable leak management plan. Taxpayer has followed that guidance in formulating its plan. However, it does not appear that State A has adopted the standards in the GPTC Guide as legally required standards for an adequate leak management plan.

Notwithstanding the foregoing, if Taxpayer had adopted a leak management program under which it was only required to repair hazardous leaks, the requirement to have a leak management program as part of a DIMP would add nothing to the mandatory leak repair

obligations that Taxpayer was subject to prior to the requirement to have a leak management program. In light of the totality of the circumstances, we conclude that the federal pipeline safety regulations impose a legal obligation on Taxpayer to repair Class 2 leaks. Nevertheless, Taxpayer has not provided any evidence that any of the deductions it incurred for the repair of Class 2 leaks, or Class 2 leaks that evolved into Class 1 leaks, satisfied the 3-year rule.

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Please call 202-317-7006 if you have any further questions.