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POLICY POINT

The Reinstated Superfund Excise Taxes

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The Infrastructure Investment and Jobs Act (the IIJA), signed into law on November 15, 2021, reinstated two environmental excise taxes that had been terminated over twenty-five years ago. The Chemicals Superfund Tax and the Hazardous Substances Tax took effect on July 1, 2022 with a ten-year effective period until January 1, 2032. A third excise tax on crude oil and petroleum products was reinstated in the Inflation Reduction Act (the IRA), effective January 1, 2023. The Joint Committee estimated that these taxes would increase revenues by approximately $52 billion over a 10-year period.

These excise taxes take place in a context of higher global oil and gas prices and worldwide supply chain issues that have affected chemicals and consumer goods. They will have an impact on the oil and gas industry, the petrochemicals industry, and the chemicals industry, as well as the prices that consumers pay for gasoline at the pump, natural gas to heat their homes, and a wide variety of other consumer goods that depend on petroleum products. There are, however, several special rules and exemptions that apply specifically to fuel applications, including fuel production activities, and that may limit any negative impact.

This article provides an illustration of the challenges faced by the oil and gas industry in applying one of these special rules related to two products derived from natural gas: methane and butane. Methane, butane, and other natural gas liquids are used by refineries to produce motor fuels, by the petrochemical industry as feedstock to produce consumer goods after further processing, and in industrial and home heating uses.

I. Background

The Comprehensive Environmental Response, Compensation, and Liability Act,[1] commonly known as Superfund, was historically funded by three separate, interrelated excise taxes applicable to crude oil and petroleum products, chemicals, and hazardous substances (collectively referred to as Superfund excise taxes). The Superfund excise taxes funded the Hazardous Substance Superfund, which funds the cleanup of hazardous waste sites. The following sections describe the reinstatement of these taxes.

[1] 42 U.S.C. § 9601 *et seq.*

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A. Superfund Excise Tax on Chemicals

The IIJA reinstated the Chemicals Superfund Tax, an excise tax imposed on the sale or use by a manufacturer, producer, or importer of 42 specified feedstock chemicals (taxable chemicals). The tax applies to both feedstock chemicals manufactured or produced in the United States, and those imported into the United States for consumption, use, or warehousing.[2] The tax rate varies by chemical from $0.44 to $9.74 per ton, which is twice the previously enacted rates.[3] The highest tax rate applies to the following petrochemicals to the extent they are not used or sold for a qualified fuel use: acetylene, benzene, butane, butylene, butadiene, ethylene, naphthalene, propylene, toluene and xylene.

Numerous exceptions and special rules apply to the Chemicals Superfund Tax, including those for methane or butane used as a fuel, certain chemicals used in the production of fertilizer or animal feed, chemicals used in the production of motor fuel, chemicals having a transitory presence during refining, and intermediate hydrocarbon streams, among others.[4]

B. Superfund Excise Tax on Hazardous Substances

In addition, the IIJA enacted the Hazardous Substances Tax, an excise tax imposed on certain hazardous substances sold or used by an importer. Hazardous substances are substances produced using one or more of the precursor chemicals that are taxed by the Chemicals Superfund tax. The importer is the party entering a taxable substance into the United States for consumption, use, or warehousing.[5] The Hazardous Substances Tax ensures that importers of substances containing chemicals covered by the Chemicals Superfund Tax also pay an excise tax.

The Hazardous Substances Tax is imposed at the rate that would have been applicable to the taxable chemicals used to produce the taxable substances, as if the taxable substance had been produced in the United States. Taxpayers have the option to use an Internal Revenue Service (IRS) prescribed rate or derive a rate based on the unique chemical composition of the taxpayer's specific imported hazardous substance.[6] If the IRS has not yet provided a rate, and the importer does not have sufficient information to calculate its own rate, then the tax is imposed at a rate of 10 percent of the appraised value of the substance on entry.[7] This rate is also twice the previously enacted rate.

The Hazardous Substances Tax, as in effect from 1987 to 1995, applied to a statutory list of 50 taxable substances. It was administratively extended to approximately 100 additional substances in guidance published by the IRS. The additional substances (the IRS-determined list) were determined by the IRS and the Treasury Department, in consultation with the Administrator of the Environmental Protection Agency and the Commissioner of Customs, to have been produced with taxable chemicals that constituted more than 50 percent of the weight (or value) of the materials used to produce such substance.

[2] I.R.C. §§ 4661-62. Section references herein are to the Internal Revenue Code of 1986, as amended, unless otherwise identified.
[3] § 4661(b).
[4] § 4662(b).
[5] § 4672(b)(1).
[6] § 4671(b).
[7] § 4671(b)(2).

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Upon reenactment, the IIJA directed the IRS and Treasury to publish a new initial list of taxable substances, which the IRS did on December 14, 2021.[8] This list included each substance that was on the IRS-determined list when the Superfund excise taxes were first in effect. The IIJA lowered the threshold of taxable chemicals necessary to add a substance to the IRS-determined list from 50 percent to 20 percent.[9] Therefore, it is expected that additional substances will be added to the list over time.

Exemptions apply for hazardous substances sold for use or used as fuel, in the production of fertilizer, or in the production of animal feed.[10]

C. Superfund Excise Tax on Petroleum Products

On August 16, 2022, the IRA reinstated a third excise tax, the Petroleum Superfund Tax, at a rate of 16.4 cents per barrel on (1) crude oil received at a U.S. refinery; (2) imported petroleum products entered into the United States for consumption, use, or warehousing; and (3) any domestically produced crude oil that is used in (other than on the premises where produced for extracting oil or natural gas) or exported from the United States if, before such use or exportation, no taxes were imposed on the crude oil. This rate is almost twice the previously enacted rate.[11]

The Petroleum Superfund Tax will apply to an operator of a U.S. refinery, a person importing the product for consumption, use, or warehousing, or a person using or exporting the crude.[12]

Notably, the statutory definition of crude oil includes crude oil condensates and natural gasoline. The definition of petroleum product includes crude oil but is silent with respect to other products.[13]

The Petroleum Superfund Tax takes effect on January 1, 2023. It is indexed for inflation beginning after 2023.

D. Existing Oil Spill Tax on Domestic Crude and Imported Petroleum Products

The Oil Spill Tax is imposed on crude oil and imported petroleum products. The Oil Spill Tax currently applies at a rate of 9 cents per barrel.[14] Generally, the rules applicable to the Petroleum Superfund Tax currently apply with respect to the Oil Spill Tax.

Tax is already imposed by the Oil Spill Tax on domestic crude and imported petroleum products at a rate of 9 cents per barrel. The new Petroleum Superfund Tax adds to this burden by imposing an additional tax of 16.4 cents per barrel of domestic crude and imported petroleum products, for a total tax burden of 25.4 cents per barrel.

II. Complexity Under the Reinstated Regime

The reinstated Superfund excises taxes generally present the oil and gas industry with an additional compliance burden, such as the higher taxes per barrel of domestic crude and imported petroleum

[8] Notice 2021-66, 2021-52 I.R.B. 901.
[9] § 4672(a).
[10] § 4671(d).
[11] § 4611.
[12] § 4611(a)-(d).
[13] § 4612(a)(1)-(2).
[14] § 4611(c)(2)(B).

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products. Special rules and exemptions under the Chemical Superfund Tax and the Hazardous Substances Tax apply directly to fuel applications, including fuel production activities. These special rules and exemptions apply to methane and butane, certain hydrocarbons used in the production of motor fuel, chemicals having a transitory presence during refining, and intermediate hydrocarbon streams.[15] If correctly identified and applied, the special rules mitigate tax exposure.

This section sets forth an illustration that specifically addresses a special rule related to methane and butane. The illustration raises questions that are not addressed by the IRS in current guidance, resulting in a lack of clarity around when the special rule applies or what documentation the IRS may require to successfully apply the special rule.

A. Methane

In the oil and natural gas industry, natural gas withdrawn from crude oil wells is called "wet gas" because along with methane, it contains natural gas liquids. The wet gas is further processed into methane. The methane is then sold to a marketer and placed into a pipeline. The marketer may sell the methane as fuel for residential or industrial uses, an ingredient in fertilizer, or as a feedstock in the production of other compounds such as methanol.

Methane is subject to the Chemicals Superfund Tax, however, because it is a taxable chemical and is taxed at a rate of $6.88 per ton.[16] There is an exemption, however, for methane used as a fuel or in the production of fuel. Specifically, there is a special rule in the statute that treats methane as a taxable chemical only if it is used otherwise than as a fuel or in the manufacture or production of any motor fuel, diesel fuel, aviation fuel, or jet fuel (and, for purposes of section 4661(a), the person so using it is treated as the manufacturer).[17] In other words, methane is exempt from the Superfund Chemical Tax to the extent it is used as a fuel or in the production of the fuels specified in the special rule.[18]

The IRS and Treasury issued proposed regulations in 1983 addressing the administration of the Petroleum Superfund Tax and the Chemicals Superfund Tax.[19] Although these regulations were later withdrawn, they provided useful examples of the exemption for methane used as a fuel.

> Example (1). M imports methane and sells it to N, who uses it otherwise than as a fuel. N is treated as the manufacturer of the methane and must pay the tax imposed on it by section 4661(a). Although M is the importer of the methane and M sold the methane, M is not liable for the tax because M did not use the methane otherwise than as a fuel. Moreover, M is not liable for the petroleum tax [section 4661] because methane is not a petroleum product.
>
> Example (2). N produces methane and uses it to fire the process furnaces at N's refinery. N uses the methane as a fuel, and the methane will not be treated as a taxable chemical.

These examples demonstrate that the sale of methane by a natural gas producer to a marketer is not a taxable event because a sale is not a use. Similarly, if a marketer sells methane to a refinery for use

15 § 4662(b).
16 § 4661(b).
17 § 4662(b)(1).
18 An additional special rule applies to methane used to produce ammonia (which is a qualified fertilizer substance) or to produce animal feed. §§ 4662(b)(2), (9).
19 48 F.R. 48839, 48847, Prop. Reg. § 52.4662-2(a).

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as a fuel or in the production of motor fuels, the methane would be excepted from being treated as a taxable chemical. It is clear that the mere sale of methane is not a taxable event, but how do we identify a taxable use?

The proposed and withdrawn regulations also provided that the term "use" includes a broad range of activities.

> A taxable chemical will be considered used when it is consumed; its chemical composition is changed; or its chemical composition remains unchanged, but the chemical reaction in which it plays a role would not have occurred without it.[20]

Additionally, the proposed and withdrawn regulations provided that

> Methane or butane is used as a fuel when it is used as a source of heat or when it is dissolved or mixed (*without any change in its chemical composition*) in gasoline to enhance the overall performance of the gasoline.[21]

IRS Notice 89-61 took a similar approach to the definition of the term "use".

[T]axable chemicals and taxable substances are USED when they are consumed, when they function as a catalyst, or when they change their characteristics or chemical composition. However, loss or destruction through spillage, fire, or other casualty is not considered a use.[22]

Under the proposed and withdrawn regulations and IRS Notice 89-61, it appears that any chemical change of methane would trigger a taxable event. However, proposed and withdrawn regulations are not precedential and are afforded little weight. Additionally, Notice 89-61 has been superseded by an IRS Revenue Procedure (Rev. Proc. 2022-26) and can no longer be relied upon.[23] Notably, Rev. Proc. 2022-26 did not adopt the definition of "use" from the proposed and withdrawn regulations or from Notice 89-61, nor did it provide an updated definition for the term.

An interesting question arises if the refinery uses the methane to produce another chemical or substance which is ultimately used in the production of motor fuel. For example, in relatively new technology, some refineries "crack" methane into its components, hydrogen and carbon, and then use the hydrogen as a fuel or in the production of motor fuel. Is this a taxable "use" because a chemical change has occurred? Or does the hydrogen component's ultimate use in motor fuel shield the methane itself from taxation? Based solely on the previously withdrawn proposed regulations and Notice 89-61, the use of methane to produce another chemical or substance, such as hydrogen, would appear to be a taxable use "otherwise than as a fuel" even when the new chemical or substance is ultimately used as a fuel or in the production of motor fuel.

The story does not end there, however. In the 1990s, methane was used to produce methanol, which was in turn used to produce methyl tert-butyl ether (MTBE) and tertiary amyl methyl ether (TAME), which at the time were commonly used as gasoline additives. The IRS issued a private letter ruling analyzing the application of the special methane rule to methane that was used to make methanol, which in turn was used to make MTBE, TAME, or other compounds that were ultimately used in the

[20] 48 F.R. 48839, 48845, Prop. Reg. § 52.4661-1(f).
[21] 48 F.R. 48839, 48847, Prop. Reg. § 52.4662-2(a) (emphasis added).
[22] IRS Notice 89-61, 1989 C.B. 717.
[23] 2022-29 I.R.B 90.

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production of gasoline.[24] The IRS concluded that such use was a nontaxable use of methane in the manufacture of motor fuel and therefore not subject to tax. The IRS reached this conclusion even though a chemical change occurred, there were intermediate steps from methane to methanol to MTBE and TAME to ultimate use in the production of finished gasoline, and it is unclear how many persons were involved in the various intermediate steps. Although Notice 89-61 and its definition of "use" was in effect at the time, the IRS did not cite the notice nor did it refer to the proposed and withdrawn regulations, perhaps indicating it considered this result obvious from the face of the statute.

Under these conflicting sources, an argument could be made that methane is not used "otherwise than as a fuel" when it is processed or "cracked" to produce hydrogen simply because the chemical composition has changed. Moreover, the IRS cannot rely on withdrawn regulations or superseded notices, and it has given no indication that it intends to adopt the same definition of "use" for the special rule in section 4662(b)(1). Arguably, one could conclude that the IRS's revocation of the definition of "use" in Notice 89-61 without a corresponding updated definition provides a negative inference that the old definition of "use" is no longer valid. Nevertheless, absent guidance from the IRS, uncertainty remains. Other questions arise in this context, as well. For example, how is methane from a single natural gas stream tracked between taxable uses and nontaxable uses? Does it matter if there are intermediate steps from the first use of the methane to the ultimate fuel production activity? Would having more than one person involved in the distribution chain affect the application of the special rule? What is required to substantiate a nontaxable use of methane under the special rule?

IRS guidance is sorely needed to clarify these points and to ensure that taxpayers are treated fairly and remain on an even playing field.

B. Butane

Butane is a taxable chemical under the Chemicals Superfund Tax, taxable at a rate of $9.74 per ton. Butane is subject to the same special rule as methane.[25] Therefore, any butane that is used as a fuel or to produce motor fuels is exempt from the Chemicals Superfund Tax.

Butane used otherwise than as a fuel—for example, for use in aerosol packaging—is subject to tax under the Chemicals Superfund Tax. Unlike the methane example discussed earlier, butane used in aerosol packaging is indisputably used otherwise than as a fuel. However, the question of when the butane becomes taxable in this scenario is germane to taxpayers throughout the supply chain. The industry must identify the "use otherwise than as a fuel" to determine which party to a transaction is the taxpayer for the taxable use of butane. Thus, the definition of "use" is critical in the butane context as well as the methane context.

In a 1992 technical advice memorandum (TAM), the IRS analyzed the application of the special rule for butane in the production of aerosol propellant.

> Tax is imposed on butane at the point *when the butane no longer can be used as a fuel*. Aerosol grade butane and aerosol propellant can be used as a fuel. Thus, the production of aerosol propellant is not a use of butane otherwise than as a fuel. The injection of the aerosol propellant containing butane into the spray can is a use of butane oth-

[24] PLR 9246016.

[25] I.R.C. § 4662(b)(1).

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> erwise than as a fuel. Until the aerosol propellant has been injected into a spray can, it cannot be determined that the butane is used otherwise than as a fuel. Once the propellant is in the can, the butane cannot be used as a fuel. The taxable event is the injection of the propellant into the aerosol can.[26]

In *Pittway*, the court held that a contract packager that inserted butane into aerosol cans for its customer was deemed the manufacturer of the butane and liable for the section 4661 tax under the special butane rule in section 4662(b)(2).[27] The sale of butane to the contract packager was not a taxable event. According to the court,

> The objective is to identify the entity that uses butane in a product for purposes other than fuel. Once found, the statute treats that entity as the chemical's manufacturer, and if it sells the product, it pays the tax.[28]

Today, the butane industry produces a variety of blends for use in consumer products. What remains unclear is where the point of taxation should be if the butane is blended with another product that curtails or completely prevents the butane's use as a fuel. Under the logic of the 1992 TAM, tax would not be imposed if a butane blend can still be used as a fuel. However, what if the blend could conceptually be used a fuel, but that is not the intent of creating the blend and the practical reality would require a dramatic reconfiguring of the combustion engine of the vehicle to make that possible? What if the butane blend could be used as a motor fuel, but would produce poisonous gas if so used? In these cases, is the butane used "otherwise than as a fuel"? Or in the alternative, does a use "otherwise than as a fuel" only occur when there is no conceivable way that the butane can be used as a fuel because it has, for example, been injected into an aerosol can. Clarification on this point is important because if the point of taxation changes, the taxpayer may also change.

Absent additional guidance from the IRS, the taxable use of butane remains an open question, and one likely to create headaches for taxpayers in the butane industry.

III. Conclusion

The oil and gas industry, the petrochemicals industry, and the chemicals industry may all be affected by the reinstated Superfund excise taxes. In many cases, there are special rules and exemptions that can mitigate tax exposure. As the discussion of the special rule for methane and butane illustrates, however, there is complexity in the rules that results in many unanswered questions. Going forward, companies should consider their potential liability for any of the Superfund excise taxes, as well as the potential application of exemptions. ■

[26] TAM 9243003 (emphasis added).
[27] *Pittway Corp. v. U.S.*, 102 F.3d 932 (7th Cir. 1996).
[28] *Id.* at 934.

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