



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

FEB - 3 2016

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

**MEMORANDUM**

**SUBJECT:** Clean Air Act Mobile Source Fuels Civil Penalty Policy – 40 C.F.R. Part 80 Fuels Standards Requirements

**FROM:** Phillip A. Brooks, Director *PAB*  
Air Enforcement Division

**TO:** Mobile Source Enforcement Personnel

Attached is the final Clean Air Act Mobile Source Fuels Civil Penalty Policy. This policy is intended to be used by the United States Environmental Protection Agency in calculating the penalty that the EPA will seek in settlement of enforcement actions for violations of certain fuels regulations under Title II of the Act. It will be available to the public on the agency's website.

This policy establishes a framework the EPA expects to use in determining an appropriate settlement amount for violations of such cases. It is immediately effective, and supersedes the following policies: Volatility Civil Penalty Policy (Dec. 1, 1989), Volatility Civil Penalty Policy for Administrative Hearings (Jan. 14, 1993) and Interim Diesel Penalty Policy (Feb. 8, 1994).

This policy applies to all enforcement actions initiated after this date, and all pending actions in which the government has not yet transmitted a proposed settlement penalty amount. This policy may be applied in pending cases in which penalty negotiations have commenced, at the discretion of the litigation team.

If you have any questions, please contact Christopher Thompson in the Air Enforcement Division of the Office of Civil Enforcement at 303-312-7156.

Attachment

**Clean Air Act**

**Mobile Source Fuels Civil Penalty Policy**

**Title II of the Clean Air Act  
40 C.F.R. Part 80 Fuels Standards Requirements**

**U.S. Environmental Protection Agency**

February 2016

**CONTENTS**

**Page**

I. INTRODUCTION AND APPLICABILITY ..... 1

II. THE PRELIMINARY DETERRENCE AMOUNT - VIOLATIONS OF FUELS STANDARDS..... 3

    A. The Economic Benefit Component..... 3

        1. Benefit from Delayed Costs..... 4

        2. Benefit from Avoided Costs ..... 5

        3. Beyond BEN Benefit ..... 5

        4. Rule-of-Thumb Estimate of Economic Benefit – Avoided Management Costs..... 6

            a. Refinery and Importer Violations .....7

            b. Downstream Fuel Standards Violations.....7

            c. Example Rule-of-Thumb Calculations .....8

            d. Situations Where Use of the Rules-of-Thumb are Inappropriate ..11

    B. Gravity Component..... 11

        1. Background..... 11

            a. Actual or Potential Harm .....11

            b. Importance to the Regulatory Scheme .....12

            c. Business Size .....12

        2. Calculating the Unadjusted Gravity Component ..... 12

            a. Gasoline Annual Average Benzene Standards .....14

            b. Gasoline Benzene Credit Violations.....22

            c. Gasoline Annual Average and Per-Gallon Sulfur Standards .....23

            d. Gasoline Sulfur Credit Violations.....27

            e. Conventional Gasoline RVP Standards and RFG VOC Reduction Standards .....28

            f. Provision for “Misdelivery” of Conventional Gasoline in RFG Areas .....32

            g. Diesel Per-Gallon Sulfur Standard.....33

    C. Calculate Preliminary Deterrence Amount for All Fuels Standards Violations ... 34

III. THE PRELIMINARY DETERRENCE AMOUNT - PROGRAMMATIC VIOLATIONS ..... 34

    A. Economic Benefit..... 35

    B. Gravity ..... 36

        1. Classification as Minor, Moderate, or Major Violations ..... 36

        2. Calculations Where Violations Continue for a Period of Time ..... 38

        3. Accounting for Ancillary Violations in Penalty Calculations ..... 41

    C. Business Size Adjustment..... 42

    D. Calculate Preliminary Deterrence Amount for All Programmatic Violations..... 42

IV. THE INITIAL PENALTY TARGET FIGURE..... 42

    A. Degree of Willfulness or Negligence..... 43

    B. Degree of Cooperation ..... 43

    C. History of Noncompliance ..... 44

    D. Other Unique Factors ..... 45

    E. Settling Cases for Less Than the Economic Benefit of Noncompliance ..... 45

---

V.	ABILITY TO PAY.....	46
VI.	ADJUSTMENTS TO THE INITIAL PENALTY TARGET FIGURE AFTER NEGOTIATIONS HAVE BEGUN.....	46
APPENDIX 1. ANNUAL AVERAGE STANDARD CALCULATIONS		
A.	Gasoline Annual Average Benzene Standard.....	47
B.	Gasoline Maximum Annual Average Benzene Standard.....	47
C.	Gasoline Annual Average Sulfur Standard.....	47
D.	Gasoline Annual Average RFG VOC Standard.....	48

**LIST OF TABLES**

	<b>Page</b>
Table II-1. Penalty for Exceeding the 0.62 Volume Percent Benzene Standard .....	15
Table II-2. Penalty for Violations of the 1.30 Volume Percent Benzene Standard When in Compliance with 0.62 Volume Percent Benzene Standard .....	17
Table II-3. Penalty for Violating the 1.30 Volume Percent Benzene Standard and the 0.62 Volume Percent Standard .....	20
Table II-4. Penalty for Violation of the Annual Average Gasoline Sulfur Standard.....	24
Table II-5. Penalty for Violation of the Per-gallon Sulfur Standards .....	26
Table II-6. Penalty for Conventional Gasoline RVP Standard Violations .....	30
Table II-7. Penalty for Average RFG VOC Standard Violations .....	30
Table II-8. Penalty for Per-Gallon VOC Standard Violations .....	31
Table II-9. Penalty for Violations of the ULSD Standard .....	34
Table III-1. Penalties for Violations Other Than Gasoline or Diesel Fuel Standards .....	38
Table III-2. Penalty for Violations in Months Subsequent to 5 <sup>th</sup> Violation.....	39

**ACRONYMS/GLOSSARY**

ABT	Averaging, Banking and Trading
Act	Clean Air Act
BBB	Beyond BEN Benefit
BEN	Benefit Derived from Delayed or Avoided Costs
CG	Conventional Gasoline
DOJ	U.S. Department of Justice
EPA	U.S. Environmental Protection Agency
LM	Locomotive and Marine
MSAT2	Mobile Source Air Toxics Program
NRLM	Nonroad, Locomotive, and Marine
PM	Particulate Matter
ppm	Parts Per Million
PTD	Product Transfer Document
RFG	Reformulated Gasoline
RVP	Reid Vapor Pressure
SO <sub>x</sub>	Sulfur Oxides
ULSD	Ultra-Low Sulfur Diesel
VOC	Volatile Organic Compound

*(this page intentionally left blank)*

## I. INTRODUCTION AND APPLICABILITY

This document sets forth the United States Environmental Protection Agency (EPA) policy for assessing civil penalties for violations of certain Clean Air Act (Act) provisions concerning fuel standards for mobile sources (Fuels Penalty Policy or Policy). This Policy adheres to the EPA *Policy on Civil Penalties* (EPA General Enforcement Policy #GM-21, February 16, 1984, recodified as PT.1-1) and *A Framework for Statute-Specific Approaches to Penalty Assessments* (EPA General Enforcement Policy #GM-22, February 16, 1984, recodified as PT.1-2), collectively referred to in this Fuels Penalty Policy as the *Policy on Civil Penalties*. Accordingly, the purposes of this Policy are to deter potential violations, to ensure that the EPA assesses fair and equitable civil penalties, and to expedite the resolution of claims arising from certain categories of non-compliance with the Act.

This Fuels Penalty Policy applies to violations of certain fuels requirements of Title II of the Act, Section 211,<sup>1</sup> and the fuels regulations at 40 C.F.R. Part 80.<sup>2</sup> These regulations establish standards for the composition of gasoline and diesel fuel that are intended to reduce air pollution emissions from the fuels themselves, and from the vehicles and engines that use the fuels. These regulations also impose a number of sampling, testing, reporting, recordkeeping, and other requirements that are designed to facilitate the EPA's ability to monitor compliance with the standards and requirements of the program. This Policy applies to two categories of violations of the regulations at 40 C.F.R Part 80:

- Violations of standards relating to the composition of gasoline and diesel fuel (Standards Violations).
- Violations of sampling, testing, reporting, recordkeeping, and other requirements that are designed to facilitate the EPA's ability to monitor compliance with the fuels standards and other requirements of the program (Programmatic Violations).

In cases involving both Standards Violations and Programmatic Violations, assessment of penalties for both violations may be appropriate.

The maximum penalty for violations of the fuels requirements under Section 211(d)(1) of the Act is \$25,000 for every day the violation continues plus the amount of economic benefit or savings resulting from the violation.<sup>3</sup> The EPA increased these maximum penalty amounts from \$25,000 to \$32,500 for

---

<sup>1</sup> 42 U.S.C. § 7545.

<sup>2</sup> This Policy does not cover violations of the fuel standards covering distillate fuel used in Emission Control Areas; the Gasoline Detergent regulations at 40 C.F.R. Part 80, Subpart G; the Renewable Fuels Standards regulations at 40 C.F.R. Part 80, Subpart M; the standards set forth in the Additional Requirements for Gasoline-Ethanol Blends at 40 C.F.R. Part 80, Subpart N; the Regulation of Fuels and Fuel Additives regulations at 40 C.F.R. Part 79; or the Substantially Similar Requirements in Section 211(f) of the Act. The January 16, 2009, Clean Air Act Mobile Source Civil Penalty Policy – Vehicle and Engine Certification Requirements addresses violations of the mobile source regulations applicable to vehicles and engines (<http://www2.epa.gov/enforcement/policy-vehicle-and-engine-certification-requirements>).

<sup>3</sup> 42 U.S.C. § 7545(d)(1).



violations occurring after March 15, 2004, through January 12, 2009, and to \$37,500 for violations occurring thereafter.<sup>4,5</sup>

- Section 211(d) also specifies that civil penalties must be assessed in accordance with Sections 205(b) and (c) of the Act.<sup>6</sup> The factors that a court should take into account when determining the amount of any penalty in a judicial action under Title II of the Act are set forth in Section 205(b) of the Act.<sup>7</sup>

In determining the amount of any civil penalty to be assessed [in a civil judicial action] the court shall take into account the gravity of the violation, the economic benefit or savings (if any) resulting from the violation, the size of the violator's business, the violator's history of compliance with [Title II of the Act], action taken to remedy the violation, the effect of the penalty on the violator's ability to continue in business, and such other matters as justice may require.

- Section 205(c)(2) specifies that these same factors should be taken into account in an administrative penalty assessment for violation of requirements under Title II of the Act.
- Section 205(c)(1) of the Act specifies that, in lieu of referring a case to the United States Department of Justice (DOJ) to commence a civil action in district court, the EPA may enforce the violation through an administrative penalty assessment, provided the penalty amount is less than \$200,000, unless the EPA and the DOJ agree that a matter with a larger penalty is appropriate for administrative penalty assessment. This penalty cap on administrative actions was increased to \$320,000 under the November 6, 2013, Civil Monetary Penalty Inflation Adjustment Rule.

This Policy should be used to calculate proposed penalties and settlement amounts for cases that are resolved through an administrative settlement. This Policy also should be used to calculate the appropriate penalty to assess under the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits.<sup>8</sup> This Policy, however, does not control the penalty amount requested in judicial actions. It is the EPA's policy, in judicial actions, to assert a claim for up to the maximum penalty allowable under the Act. Therefore, after a case has been referred to the DOJ, use of this Policy is limited to agreements reached with defendants through negotiated settlements.

The procedures set forth in this document are intended solely for the guidance of government personnel. They are not intended, and cannot be relied upon, to create rights, substantive or procedural, that would be enforceable by any party in litigation with the United States. The EPA reserves the right to act at

---

<sup>4</sup> Civil Monetary Penalty Inflation Adjustment Rules, 69 Fed. Reg. 7121 (Feb. 13, 2004); 73 Fed. Reg. 75,340 (Dec. 11, 2008); 78 Fed. Reg. 66,643 (Nov. 6, 2013).

<sup>5</sup> For per-gallon violations, a separate day of violation exists for each day the fuel is in the distribution system. Most of the penalty sections of the regulations include an explicit presumption that violating fuel will remain in the distribution system for 25 days. The 25 day presumption is a conservative estimate based on typical periods that gasoline and diesel fuel remain in the distribution system as the fuel travels through pipelines, is stored in terminal tanks and retail outlet tanks, and is carried in motor vehicles' propulsion tanks. Accordingly, this presumption will apply to all per-gallon violations for the purposes of calculating penalties under this Policy. Violations of standards based on a multiday averaging period constitute a separate day of violation for each day in the averaging period.

<sup>6</sup> 42 U.S.C. § 7524(b)-(c).

<sup>7</sup> 42 U.S.C. § 7524(b).

<sup>8</sup> 40 C.F.R. Part 22.

variance with this Policy and to change it at any time without public notice. This Fuels Penalty Policy is effective immediately with respect to all cases in which the first penalty offer has not yet been transmitted to the opposing party.

This Policy first describes how to calculate the *preliminary deterrence amount for Standards Violations* and then describes how to calculate the *preliminary deterrence amount for Programmatic Violations*. For both of these categories of violations, the preliminary deterrence amount is calculated by adding the **economic benefit penalty component** and the **gravity penalty component**. This Policy then discusses adjustment factors that are applied to the gravity component or to the preliminary deterrence amount to arrive at an **initial penalty target figure**, which is the penalty amount that may be used at the beginning of negotiations with a violator. Finally, the Policy describes the process for any further adjustments to the initial penalty target figure during negotiations with the violator, which results in the penalty amount that is appropriate for resolving the case, called the **adjusted target figure**.

## II. THE PRELIMINARY DETERRENCE AMOUNT - VIOLATIONS OF FUELS STANDARDS

The regulations at 40 C.F.R. Part 80 establish standards for the composition of gasoline and diesel fuel that are intended to reduce air pollution emissions caused by the fuels, and by the vehicles and engines that use the fuels. The regulations include requirements that apply to refiners and importers of fuel, as well as to persons throughout the fuel distribution system.

This Policy addresses violations of the following fuels standards:

- Annual Average Benzene Standards.<sup>9</sup>
- Annual Average and Per-gallon Gasoline Sulfur Standards.<sup>10</sup>
- Summer Volatility Standards.<sup>11</sup>
- Motor Vehicle Nonroad, Locomotive, and Marine (NRLM) Diesel Sulfur Standards.<sup>12</sup>
- Improper Generation, Transfer, and Use of Credits under the Gasoline Benzene and Gasoline Sulfur Programs named above.

This section describes the methodology for calculating the preliminary deterrence amount by first determining the economic benefit component and the gravity component.

### A. The Economic Benefit Component

Reliable and consistent economic benefit calculation methods ensure that penalties obtained in settlement recover any economic benefit of noncompliance. This section sets out guidelines for

---

<sup>9</sup> Mobile Source Air Toxics Program (MSAT2), 40 C.F.R. § 80.1230(a)-(b).

<sup>10</sup> 40 C.F.R. §§ 80.195, 80.210.

<sup>11</sup> This Fuels Penalty Policy generally refers to the volatility standards at 40 C.F.R. § 80.27 as the conventional gasoline (CG) volatility standards because these standards are generally not as stringent as the reformulated gasoline (RFG) complex model per-gallon volatile organic compound (VOC) emissions reduction standards. 40 C.F.R. §§ 80.27, 80.40(c), 80.41(e)-(f), 80.65.

<sup>12</sup> 40 C.F.R. §§ 80.510, 80.511, 80.513, 80.520.

computing the economic benefit component by discussing three potential categories of economic benefit: delayed costs, avoided costs, and the benefit from competitive advantage gained as a result of the violation. The benefit derived from delayed or avoided costs is sometimes referred to as **BEN**. The benefit from competitive advantage gained is referred to as **beyond BEN benefit** or **BBB**. This section also describes a “rule-of-thumb” method for calculating the economic benefit resulting from the most common violations of the gasoline and diesel fuel standards. Separate rule-of-thumb methods may apply for violations that occur when the fuel is produced at a refinery or is imported (refinery-level violations),<sup>13</sup> and for violations that occur at downstream locations.<sup>14</sup> This Policy also includes a discussion of situations in which the economic benefit rule-of-thumb method may be inappropriate. The litigation team should consider the appropriate method for determining the economic benefit on a case-by-case basis.

### 1. *Benefit from Delayed Costs*

In some instances, an economic advantage is derived from noncompliance by delaying expenditures necessary to achieve compliance. Delayed costs fall into two categories: **capital expenses** and **one-time non-depreciable costs** necessary to achieve compliance with the relevant environmental requirement. Capital expenses are expenses for items such as equipment that wears out and needs replacement.<sup>15</sup> One-time non-depreciable expenses do not involve things that wear out and are thus nonrecurring.<sup>16</sup> A company would achieve an economic benefit by deferring either of these costs until it either decides on its own to comply or until the EPA takes an enforcement action.

Examples of violations that may result in savings from deferred capital expenses include the following:

- Failure of a refiner to install refinery equipment (such as hydrotreaters) necessary to produce fuel that meets the applicable standards.
- Failure of a terminal operator or retailer to install storage tanks and route pipes in a way that is designed to prevent inappropriate mixing of fuels, such as contaminating ultra-low sulfur diesel (ULSD) with higher sulfur diesel fuel.

An example of a violation that may result in savings from deferred one-time non-depreciable expenses includes a failure to timely incur the costs associated with fuel registration.

---

<sup>13</sup> The fuels regulations define a “refinery” to mean any facility, including but not limited to, a plant, tanker truck, or vessel where gasoline is produced, including any facility at which blendstocks are combined to produce gasoline, or at which blendstock is added to gasoline. 40 C.F.R. § 80.2(h). A “refiner” is any person who owns, leases, operates, controls, or supervises a refinery. 40 C.F.R. § 80.2(i). Because the integrity of the fuels program requires all refiners to comply with the applicable regulations, this penalty policy generally does not distinguish between different types of refiners.

<sup>14</sup> Downstream locations are the transportation and storage facilities for gasoline and diesel fuel after it leaves the refinery or import terminal. This includes pipelines, terminals, barges, transport trucks, retail storage tanks, fleet fueling facilities, and, in some situations, vehicle fuel tanks.

<sup>15</sup> The distinction between these categories of delayed costs is appropriate because of the different tax treatment they receive, and, as a consequence, the potential benefit gained by a violator.

<sup>16</sup> In addition, if one-time non-depreciable expenses are tax deductible, then the tax benefit from that expense is enjoyed in the year the company makes that expenditure. In contrast, a firm with the depreciable expenditure may deduct only a portion of that piece of equipment’s cost every year until the deduction is complete.

In many circumstances, fuels violations may not implicate any substantial economic benefit from delayed costs. To the extent economic benefit from delayed costs are present in mobile source fuels cases, these costs should be computed using the EPA's BEN model.<sup>17</sup>

## 2. *Benefit from Avoided Costs*

Some types of violations enable a violator to avoid certain costs associated with compliance. Avoided costs can include costs directly related to the production of noncompliant fuel and costs related to avoided management oversight and quality assurance measures.<sup>18</sup> Examples of benefits from avoided costs in mobile source fuels cases include:

- Failure to purchase the refinery feedstock or blending components necessary to produce fuel that meets the mobile source fuels requirements.
- Cost savings from operation and maintenance of equipment that was not installed or was not operating.
- Failure to operate a refinery so that standards are met or, in the alternative, to purchase valid credits to meet standards.
- Failure to conduct management oversight and associated activities at a refinery necessary to ensure fuel is produced to meet applicable per-gallon and average standards.
- Failure to conduct management oversight and quality assurance measures at a distributor necessary to assure the properties of mobile source fuel are not degraded through contamination as the fuel moves through the distribution system.

The economic benefit from avoided costs should be computed as avoided annually recurring costs in the EPA's BEN model for each year of non-compliance.

## 3. *Beyond BEN Benefit*

The **beyond BEN benefit** or **BBB** reflects the benefits to the violator from business transactions that would not occur but for the illegal conduct, or the competitive advantage the violator obtained in the marketplace as compared to companies that complied with the fuels laws and regulations, or both.

---

<sup>17</sup> EPA has five models for dealing with economic benefit in the context of civil enforcement actions:

- BEN – Calculates a violator's economic benefit from delayed or avoided costs and can address both one-time and annually recurring costs.
- INDIPAY – Evaluates an individual's ability to afford penalties and compliance costs.
- ABEL – Evaluates a corporation's or partnership's ability to afford penalties and compliance costs.
- PROJECT – Calculates the actual cost of supplemental environmental projects to violators.
- MUNIPAY – Evaluates a municipality's ability to afford penalties and compliance costs.

Information about these models is available at: <http://www2.epa.gov/enforcement/penalty-and-financial-models>.

<sup>18</sup> The litigation team may rely on case-specific information or industry-wide cost estimates to evaluate the avoided costs directly related to the production of compliant fuel. An example of case specific information includes the avoided cost of buying "clean" blendstocks at the time and place of the violation. Examples of industry-wide cost estimates include industry studies on the cost of producing compliant gasoline, information from Regulatory Impact Analysis, published studies regarding the cost of reducing Reid Vapor Pressure (RVP), sulfur or benzene levels, and the EPA's historic practice of assessing economic benefit RVP violations of 1 to 4 cents per gallon, depending on the magnitude of the violations. See, e.g., the EPA's 1993 Civil Penalty Policy for Administrative Hearings.

Selling a product that is not registered and would not be marketable but for the illegal nature of the product is an example of a BBB for a fuels case.

To adequately remove the economic incentive for violations that include BBB, normally it is appropriate to base the economic benefit penalty component on the illegal profits made from the improper transactions.<sup>19</sup>

The BEN methodology is not designed to calculate the economic benefit resulting from BBB. Where this category of benefit is present, the litigation team should use a case-specific method of calculating the economic benefit, which should be described in the case documents. For assistance in developing a case-specific method, the litigation team may contact the Financial Issues Helpline at (888) 326-6778.

#### **4. *Rule-of-Thumb Estimate of Economic Benefit – Avoided Management Costs***

In its enforcement of the fuels requirements of the Act, the EPA has developed substantial experience determining the economic benefit that results from producing, selling or distributing non-compliant fuels. The EPA believes that in most cases involving violations of the regulations there are substantial cost savings from the failure to produce or distribute compliant fuel.

The EPA has determined that most mobile source fuels violations are preventable through robust oversight and quality assurance measures by the regulated party. This Fuels Penalty Policy adopts a simple rule-of-thumb method to determine the economic benefit arising from the avoided cost of adequate management oversight necessary to have prevented the violation for both refiners and downstream parties. The rule-of-thumb methods that apply to refiners and to downstream parties differ slightly, but both estimate avoided management oversight costs that may play a role in causing the violation to occur. These methods are discussed separately for refiners and importers and for downstream parties. The litigation team should describe the method selected and the calculation in the case documents.

To calculate economic benefit relating to management oversight practices, the litigation team should only apply the rule-of-thumb calculation once for each facility, for each year there is a violation or multiple violations, even if there are both Programmatic and Standards Violations.

The EPA reserves the right to use an alternative approach to calculating the economic benefit arising from the avoided cost of adequate management oversight and to calculate additional economic benefit where appropriate. When the rule-of-thumb method is not appropriate, or where additional economic benefits exist, the economic benefit of avoided costs should be computed using the BEN methodology. In some cases, the rule-of-thumb method may be appropriate and other actual benefits may also be calculated. For example, if a refinery generates or sells invalid sulfur credits, it may be possible to determine the market price for credits during the relevant time period. In such cases, profits from the sale of the invalid credits should be used in addition to the rule-of-thumb method for avoided management oversight costs.

There may be instances where neither the rule-of-thumb method nor the BEN methodology is appropriate for calculating the actual economic benefit of noncompliance. In those instances, the

---

<sup>19</sup> While the illegal profit would be the normal measure of economic benefit in these situations, the agency reserves the right to calculate the economic benefit resulting from BBB using any other measure that is appropriate to the situation.

litigation team should develop and use a case-specific method of calculating economic benefit, which should be described in the case documents.

**a. Refinery and Importer Violations**

The rule-of-thumb method for determining the economic benefit of noncompliance resulting from a refinery-level gasoline or diesel Standard Violation is based on the avoided cost of adequate management oversight necessary to have prevented the violation. This approach is appropriate for Standards Violations because most mobile source fuels violations are preventable through robust oversight and quality assurance measures by the regulated party. The rule-of-thumb estimate for this benefit is \$73,000 per year in 2013 dollars. This estimate includes \$46,000 per year for the annual half-time wages and benefits for one petroleum worker,<sup>20</sup> plus \$27,000 per year for the cost of computer and other systems necessary to track gasoline quality. This benefit amount should normally be added for each year in which refinery-level gasoline Standards Violations are committed at a given facility, regardless of the number of violations during the year. The litigation team has the discretion to apply this benefit amount on a company-wide basis if a refiner or importer has similar types of violations that occur at a number of different facilities and applying the benefit amount for each facility would result in excessive penalties.

**b. Downstream Fuel Standards Violations**

The EPA's fuels regulations impose presumptive liability on the operator of any facility where noncompliant fuel is located and on any distributor that stored or transported the gasoline that was supplied to that downstream facility. In the case of violations found at facilities where the brand name of a refiner is displayed, the EPA's regulations provide that the branded refiner is also presumptively liable.

Most downstream violations occur, at least in part, because the company (or companies) that caused the violation used inadequate quality assurance measures. For example, gasoline truck loading terminals are required to transition from "winter" to "summer" gasoline by May 1<sup>st</sup> each year. Violations that occur because the terminal failed to complete this transition would be preventable if the terminal operator invested the resources needed to monitor the transition from winter to summer gasoline. This cost could simply involve management oversight, but in some cases making the seasonal transition on time could require expenditures to physically affect tank inventory. This discussion only deals with the management oversight cost.

The rule-of-thumb method for calculating economic benefit for downstream parties is similar to the rule-of-thumb method for refinery level parties; it is based on avoided management oversight costs.

The rule-of-thumb method for downstream parties assumes a lesser avoided cost of \$23,500 per year in 2013 dollars. This estimate includes \$18,500 per year for roughly 20 percent of the annual wages and benefits of one petroleum industry worker, plus \$5,000 per year for an adequate sampling, testing and oversight program.

---

<sup>20</sup> The annual mean wages and benefits for refinery operators (SOC 51-8093) was about \$92,000 in May of 2013. This was determined by multiplying the annual refinery operator wages of \$61,350 (reported by the United States Department of Labor, U.S. Bureau of Labor Statistics, Office of Employment and Unemployment Statistics in May of 2013) times 1.5 to account for typical overhead costs. The litigation team should use the most current data on mean wages from the Department of Labor for the time period of the violations.

If actual economic benefit is known, for example based on cost or price data available at the time of the violation, the litigation team may consider whether this data should be used to estimate that portion of the economic benefit in addition to the avoided management costs.

Note that if a facility that would normally be considered a downstream facility conducts refining operations (e.g., a truck loading terminal produces gasoline, thus making itself subject to requirements that apply to refiners), the facility is subject to the refinery-level rule-of-thumb method for avoided management costs for any violations involving refining operations as discussed in Section II.A.4.a. This management oversight benefit normally only applies to distributors<sup>21</sup> and not to retailers or wholesale purchaser-consumers that are smaller businesses.<sup>22</sup> The litigation team has the discretion, however, to apply the rule-of-thumb method to violations at retail facilities or wholesale purchaser-consumers that are owned or operated by larger companies.

### c. Example Rule-of-Thumb Calculations

This section contains several examples for calculating economic benefit using the rule-of-thumb methods discussed above. Each example includes a discussion of potential economic benefit that the litigation team may consider in addition to the rule-of-thumb economic benefit associated with avoided management oversight costs.

#### **Example #1: Gasoline Sulfur Invalid Credit Economic Benefit Calculation**

##### **Scenario:**

A refinery reports that it generated 1 billion gasoline sulfur credits (1 billion parts per million (ppm)-gallons). The credits are found to be invalid.

##### **Calculation:**

- **Calculate avoided management oversight cost at the refinery:** Reference the rule of thumb for avoided management oversight costs.

Avoided management oversight cost = \$73,000 (2013 dollars).

- **Calculate the economic benefit of selling invalid credits:** Multiply the number of invalid credits by the market price for sulfur credits during the relevant time period (generally stated in dollars per million credits). Assume the price during the relevant time period is \$30 per million credits (2013 dollars). Thus, the amount is: \$30,000 [(1 billion/1 million) \* \$30].
- **Calculate total economic benefit component:** \$73,000 + \$30,000 = \$103,000.

<sup>21</sup> A distributor is a regulated party that stores or transports gasoline or diesel fuel between the refinery and a retail outlet. 40 C.F.R. § 80.2(l).

<sup>22</sup> A wholesale purchaser-consumer is a regulated party that operates a fleet fueling facility. 40 C.F.R. § 80.2(o).

**Example #2: Ultra-Low Sulfur Diesel (ULSD) Rule-of-Thumb Economic Benefit Calculation****Scenario:**

A refiner releases 1,000,000 gallons of ULSD-designated diesel fuel to a proprietary pipeline and the fuel is shipped 50 miles downstream to a truck loading terminal owned by the refiner. The fuel is tested and is determined to have a sulfur content of 32 ppm, in excess of the 15 ppm ULSD standard.

The EPA determined that if the refiner had conducted timely testing at the terminal, it could have learned of the problem in time to have the product hauled back to the refinery for re-processing or to sell it at a loss as heating oil. Instead, most of the product was sold prior to the testing.

**Calculation:**

- **Calculate avoided management oversight cost at the refinery:** Reference the rule-of-thumb for avoided management costs.

Avoided management oversight cost = \$73,000 (2013 dollars).

- **Calculate, if possible, either the avoided cost of returning fuel to the refinery, or in the alternative, the avoided cost of selling the fuel as heating oil:** Assuming that the cost of returning fuel to a refinery by truck costs about \$300 per truck load (2013 dollars), where the distance to the refinery is less than 100 miles, and each truck carries about 8,500 gallons of fuel, the avoided cost would be about \$0.035 per gallon.

Avoided Cost = \$0.035/gallon \* 1,000,000 gallons = \$35,000.

- **Calculate total economic benefit component:** \$73,000 + \$35,000 = \$108,000.



**Example #3: Distribution/Sale of Conventional Gasoline (CG) in a Reformulated Gasoline (RFG) Area Economic Benefit Calculation****Scenario:**

Product transfer documents (PTDs) establish that a distributor delivered a total of 9,000 gallons of CG to a retail outlet located in an RFG area. (Under the RFG regulations, both the distributor and the retailer are considered presumptively liable for the violation.)

Although the PTDs indicated that the gasoline was CG, the retailer did not adequately check the PTDs before accepting delivery and did not lock out its pump prior to offering the gasoline for sale.

The distributor charged the retailer in the RFG area the price for CG, not RFG.

The retailer sold the CG to customers at the price of RFG.

**Calculation:**

Based on these facts, both the distributor and the retailer are liable for the violation. The economic benefit for each is different:

*Distributor:*

- **Calculate avoided management oversight cost at the distributor:** Adequate oversight and management would have prevented the mis-delivery of CG in an RFG area.

Avoided management oversight cost = \$23,500 (2013 dollars).

- The distributor only charged the retailer for the price of CG and not the price for RFG so there is no additional benefit for the difference in price between compliant product and the non-compliant product.

*Retailer:*

- The retailer's economic benefit is the difference in the price between the amount paid for CG and sold as RFG.

Economic benefit = \$0.05/ gallon \* 9,000 gallons = \$450 (2013 dollars).

- The litigation team may apply the rule-of-thumb method for determining the retailer's economic benefit related to management oversight depending on the circumstances surrounding the violation.

#### **d. Situations Where Use of the Rules-of-Thumb are Inappropriate**

The rule-of-thumb methods described in this Policy may not adequately recover the economic benefit of noncompliance. For this reason, use of these rules-of-thumb is not appropriate in situations where the actual costs are readily accessible, or where a detailed analysis of the economic benefit of noncompliance is needed for a particular case. In particular, these rule-of-thumb methods generally should not be used:

- If the amount of the economic benefit is a matter in dispute.
- If there are unique factors in the case that vary from the assumptions underlying the use of a particular rule-of-thumb estimate.
- If the litigation team has reason to believe the rule-of-thumb will produce a substantially inaccurate estimate.

### **B. Gravity Component**

#### **1. Background**

The *Policy on Civil Penalties* specifies that for a penalty to achieve deterrence it should, in addition to recovering any economic benefit of noncompliance, recover an additional amount to reflect the seriousness of the violation. Similarly, Sections 205(b) and (c)(2) of the Act specify that penalties for violations of Title II of the Act must take into account the gravity of the violations.<sup>23</sup> This section of this Fuels Penalty Policy establishes a method that quantifies the gravity component of the penalty for violations of the fuels standards under 40 C.F.R. Part 80.

The factors used in the gravity portion of the Policy are designed to measure the seriousness of the violation and reflect the considerations described in the *Policy on Civil Penalties*. The seriousness of the violation is based on the potential excess emissions that may result from the violation and the toxicity or other harm that may result from those emissions. The factors that are considered in determining the seriousness or gravity of a violation are: 1) actual or potential harm; 2) the importance of the violated provision to the regulatory scheme; and 3) business size. These factors are used to calculate the “unadjusted” gravity penalty and, along with economic benefit, the “preliminary deterrence amount.” This unadjusted penalty figure may then be adjusted by factors that are specific to the individual violator, such as history of compliance and cooperation.

#### **a. Actual or Potential Harm**

The penalty calculation approach for actual or potential harm is similar for violations of each of the standards covered by this Policy, but calculated penalties may differ depending on the degree of actual or potential harm based on the following environmental factors:

---

<sup>23</sup> The Act provides that “[i]n determining the amount of any civil penalty assessed under this subsection, the Administrator shall take into account the gravity of the violation, the economic benefit or savings (if any) resulting from the violation, the size of the violator’s business, the violator’s history of compliance with this subchapter, action taken to remedy the violation, the effect of the penalty on the violator’s ability to continue in business, and such other factors as justice may require.” 42 U.S.C. § 7524.

- Volume of fuel in violation.<sup>24</sup>
- Extent of deviation from the applicable standard.
- Toxicity or other harmful effects associated with the emissions.
- Potential to increase emissions in the near term and into the future (e.g., by damaging or decreasing the efficiency of emissions control devices).

### **b. Importance to the Regulatory Scheme**

Even in the absence of actual or potential environmental harm from the sale or distribution of noncompliant fuel, the seriousness of the violation is reflected by its harm to the regulatory program. Any Standards Violation, regardless of volume or extent, is harmful to the regulatory program. For example, the emissions consequences of a violation that pertains to a very small volume of fuel may be small, but hundreds of thousands of businesses are involved in fuel production and distribution; therefore, it is important to deter smaller volume violations because the cumulative effect of many small violations could be substantial. Moreover, even small volumes of noncompliant fuel can potentially result in substantial harm. For instance, vehicle emission controls may be damaged through a single use of non-compliant fuel. Therefore, deterrence is important regardless of the extent of the violation or the business size of the violator.

### **c. Business Size**

Under the *Policy on Civil Penalties*, the first goal of penalty assessment is deterrence. The size of the violator's business is relevant to determining whether the penalty will have a sufficient deterrent effect, and is one of the considerations that Section 205(b) of the Act specifies should be considered when calculating a civil penalty. This Fuels Penalty Policy considers business size for certain minimum penalties that apply to violations of per gallon standards, which typically involve smaller volumes of fuel. Because violations of standards that apply on an annual average basis typically involve large volumes of fuel and larger businesses, a business size factor is not required.

## **2. Calculating the Unadjusted Gravity Component**

This Fuels Penalty Policy considers the following items in calculating the unadjusted gravity penalty component:

- Deviation from the applicable standard.
- Volume of fuel in violation.
- Business size, for violations of per gallon standards.

Compliance with per-gallon standards is important to protect the integrity of the fuels programs throughout the distribution system and to avoid localized areas of higher emissions, even though the volumes involved are smaller than for annual average violations. Compliance with annual average and seasonal average standards is vital to achievement of the overall emissions reductions goals of the fuels programs. Thus, the EPA considers all violations of the fuels standards to be serious.

---

<sup>24</sup> The volume of fuel in violation is a direct indicator of the seriousness of the violation when considered with the deviation from a standard and, for purposes of calculating an initial target figure for settlement, is used by this Policy rather than the duration of the violation. The EPA reserves the right, however, to also consider the duration of the violation in the assessment of penalties.

The following steps are used to calculate the unadjusted gravity penalty for gasoline and diesel per-gallon and annual average Standards Violations:

1. Determine the gravity penalty that applies to each gallon in violation based on the deviation from the standard.
2. Multiply the gravity penalty that applies to each gallon in violation by the number of gallons in violation.
3. Compare the calculated penalty to any applicable Minimum Penalties. If the minimum penalty exceeds the calculated penalty, the minimum penalty must be used.

Minimum penalties for violations of per-gallon standards are lower for small businesses than for large businesses. For purposes of this Policy, small businesses are businesses having gross annual revenues under \$100,000,000. The \$100,000,000 threshold is sufficient to assure that most truck distributors and small independent retailers will be treated as small businesses whose minimum penalties will be smaller than large refiners or other large businesses.<sup>25</sup>

It would generally be inappropriate to reduce the penalty below the minimum penalty applicable to small businesses. The minimum penalties for certain very small volume violations, however, may be determined to be excessive in some cases and a lesser penalty amount may be applied. Where there are many repeated violations of a per-gallon standard involving relatively small batches of fuel, the sum of the minimum penalties that apply to each batch may be so disproportionate to the calculated penalty as to be inappropriate. In these cases the litigation team may also make a downward adjustment to the minimum penalty sum.

Refiner and importer compliance with annual averaging standards is very important to achieve the emissions reductions goals of the fuels programs. Therefore, the gravity penalty tables discussed below include minimum penalties to assure adequate deterrence even for violations involving smaller volumes of fuel. Because average standards apply only to refiners and importers, the business size of the violator is also generally large. Therefore, the minimum penalties for average violations are based on large businesses. In the event that a business with gross annual revenues under \$100,000,000 violates an annual average standard and the volume in violation is very small (e.g., where a truck importer imports only 10 truckloads of gasoline in a year), the litigation team may reduce the gravity penalty below the minimum provided in the tables below.

This section explains how to calculate the gravity component of penalties for the types of Standards Violations listed below:

- Gasoline annual average benzene
- Gasoline benzene credits
- Gasoline annual average sulfur
- Gasoline sulfur credits
- Gasoline per-gallon sulfur

---

<sup>25</sup> This threshold is solely for determining applicable penalties under the Mobile Source Fuels Civil Penalty Policy. This amount does not impair or alter any rights or obligations under the Small Business Regulatory Enforcement Fairness Act or any other applicable law.

- Reid Vapor Pressure (RVP)<sup>26</sup>
- RFG VOC Reduction
- Provision for “Mis-delivery” of CG in RFG Areas
- Diesel per-gallon sulfur

A given volume of gasoline may violate more than one standard. In these cases, penalties should be calculated for each violation and added together to arrive at the unadjusted gravity penalty.

**a. Gasoline Annual Average Benzene Standards**

*Background*

Refiners and importers of gasoline are subject to two separate annual average benzene standards under the Mobile Source Air Toxics program (MSAT2).<sup>27</sup> First, for all gasoline produced or imported, each refinery or importer must meet an annual average benzene content standard of 0.62 volume percent, after application of valid credits and after allowance for a deficit carry forward.<sup>28</sup> Second, each refinery or importer must meet a maximum annual average benzene standard of 1.30 volume percent prior to the application of credits. The deficit carry forward does not apply to the 1.30 volume percent maximum annual average standard.<sup>29</sup> As more fully set forth below, refiners and importers may be in violation of one or both of these standards.

The MSAT2 regulations<sup>30</sup> replaced the RFG and Anti-dumping annual average toxics standards and the 2001 Mobile Source Air Toxics standards with controls on benzene alone.<sup>31</sup> This is because benzene, a carcinogen, is the dominant toxic substance in gasoline and the dominant toxic pollutant in both evaporative emissions and tailpipe emissions. The gravity penalties in this Policy reflect the seriousness of excess benzene in gasoline.

As discussed above, the parties subject to the benzene standards are generally large businesses that produce or import large volumes of fuel; thus, there are no separate minimums for small businesses. The benzene content values in the tables below are actual benzene levels and not the range of deviation from the standard.

*Violation of the 0.62 Volume Percent Annual Average Benzene Standard*

Penalties for violation of the benzene 0.62 volume percent annual average standard are calculated by multiplying the total number of gallons produced or imported during an averaging period by one of the gravity values in Table II-1, which are based on the severity of the violation. The gravity value for each of the violation categories is based on a range of deviation from the standard. For example, the first category starts at 0.620 volume percent and ends at 0.631 volume percent. As explained above,

---

<sup>26</sup> The RVP standards apply to both CG and RFG. Because the RFG VOC reduction standards are more stringent than the RVP standards, the EPA will generally enforce the RFG VOC reduction standards in RFG areas and the RVP standards in CG areas. For this reason, this Fuels Penalty Policy generally refers to the RVP standards as applying to CG.

<sup>27</sup> The benzene standards apply separately for each refinery, and separately for any importer (even if the import business is owned or operated by the same company that owns or operates a refinery). For any given refinery or importer, the benzene standards apply to all gasoline refined or imported—including both RFG and CG.

<sup>28</sup> 40 C.F.R. § 80.1230(a), (c).

<sup>29</sup> 40 C.F.R. § 80.1230(b).

<sup>30</sup> 40 C.F.R. Part 80, Subpart L.

<sup>31</sup> 40 C.F.R. §§ 80.41(e)-(f), 80.101(c), 80.815(d)(1)(ii).

minimum penalty amounts apply to each category to assure adequate deterrence for smaller volumes; the minimum penalty applies if it is larger than the calculated penalty.

The MSAT2 regulations allow refiners and importers who do not meet the 0.62 volume percent benzene standard to carry a deficit forward, but the refiner or importer must make up the deficit in the following year.<sup>32</sup> If a refiner or importer carries a deficit forward and fails to make up the deficit in the following year, the penalty will be calculated based on the total volume of gasoline produced or imported during the two year period and the calculated average benzene concentration ( $B_{avg,BC}$ ) of the gasoline produced or imported during the second year, after accounting for any credit use and deficits. The second year  $B_{avg,BC}$  is used because it will reflect deficits and credits over the two year period. Additional information regarding the calculation of benzene levels to apply to Table II-1 is provided in Appendix 1.

**Table II-1. Penalty for Exceeding the 0.62 Volume Percent Benzene Standard**

Benzene Level <sup>a</sup> (Volume Percent)		Penalty Multiplier (\$/Gallon)	Minimum Penalty (\$/Year)
Minimum Increment	Maximum Increment		
>0.620	<=0.631	0.00375	200,000
>0.631	<=0.643	0.00525	280,000
>0.643	<=0.654	0.00675	360,000
>0.654	<=0.676	0.00825	440,000
>0.676	<=0.733	0.00975	520,000
>0.733		0.00975 + 0.0015 for every additional 0.056 volume % or fraction thereof	680,000

a – For the purpose of determining the appropriate increment, rounding does not apply to the calculated benzene level.

Beginning at a benzene concentration level greater than 0.733 volume percent, increase the gravity penalty by \$0.0015/gallon for every 0.056 percent over the standard (e.g., the penalty is \$0.01125/gallon from 0.7331 volume percent to 0.7890 volume percent, \$0.01275/gallon from 0.7891 volume percent to 0.8450 volume percent).

The following examples demonstrate how to apply the penalties in Table II-1 to violations of the 0.62 volume percent benzene standard.

<sup>32</sup> 40 C.F.R. § 80.1230(c).

**Example #4: Violation of 0.62 Volume Percent Benzene Standard****Scenario:**

A refinery is in violation of the standard over a two-year period.

**Calculation:**

Assume that the average benzene content over the two years is 0.64 volume percent (after application of valid credits), and the total volume over the two-year period is 1,000,000,000 gallons. Because the benzene level falls in the 0.631% - 0.643% range, the penalty would be calculated by multiplying the total volume in violation by \$0.00525/gallon, and the calculated penalty would then be compared to the minimum penalty of \$280,000/year.

Calculated penalty amount = 1,000,000,000 gallons \* \$0.00525/gallon = \$5,250,000.

The minimum is \$280,000/year. Because the calculated value is greater than the minimum penalty, assess the calculated value of \$5,250,000.

**Example #5: Violation of 0.62 Volume Percent Benzene Standard (Smaller Volume)****Scenario:**

A blender refinery is in violation of the standard over a two-year period with an average benzene content of 0.70 volume percent (after application of valid credits).

**Calculation:**

Assume the volume produced during this period is 10,000,000 gallons.

Calculated gravity penalty = 10,000,000 gallons \* \$0.00975/gallon = \$97,500.

The minimum is \$520,000/year. Because the calculated penalty is smaller than the minimum penalty, assess the minimum penalty of \$520,000.

*Violation of the 1.30 Volume Percent Benzene Annual Maximum Average*

In addition to the 0.62 average volume percent benzene content standard, the rule prohibits any refiner from producing gasoline that exceeds 1.30 volume percent annual maximum average, prior to the application of credits. Refiners and importers must meet the 1.30 volume percent standard each compliance year. The deficit carry forward provisions do not apply to this standard.

The 1.30 volume percent standard is designed to minimize regional variations in gasoline benzene levels, and provide a degree of geographic uniformity of gasoline benzene levels across all parts of the nation. Violations of the 1.30 volume percent maximum annual average benzene content standard should be rare. If they do occur, they will be treated as very serious because the violating gasoline may cause disproportionate localized environmental harm.

*Violations Only of the 1.30 Annual Average Benzene Standards*

Refiners or importers who violate the 1.30 maximum annual average volume percent benzene standard may or may not also be in violation of the 0.62 average volume percent benzene standard. If a party produces or imports gasoline during any calendar year that exceeds the 1.30 volume percent annual maximum average, but acquires sufficient credits to meet the 0.62 volume percent standard or is able to avoid a violation of the 0.62 volume percent standard by carrying a deficit forward, they would be in violation of the 1.30 volume percent benzene standard, but be in compliance with the 0.62 volume percent standard.

Table II-2 includes penalties for violation of the benzene 1.30 volume percent standard that should be applied when the refiner has complied with the 0.62 volume percent annual average standard by either using credits or the deficit carry forward provisions. To calculate the gravity penalty, the total number of gallons produced or imported during an averaging period is multiplied by the gravity values in Table II-2, which are based on the extent of the violation. As explained above, minimum penalty amounts apply to each category to assure adequate deterrence for smaller volumes; the minimum penalty applies if it is larger than the calculated penalty. Additional information regarding the calculation of the annual average benzene level to apply in Table II-2 is provided in Appendix 1.

**Table II-2. Penalty for Violations of the 1.30 Volume Percent Benzene Standard When in Compliance with 0.62 Volume Percent Benzene Standard**

<b>Benzene Level<sup>a</sup> (Volume Percent)</b>	<b>Penalty Multiplier (\$/Gallon)</b>	<b>Minimum Penalty if No Violation of the 0.62% Standard for the Same Volume (\$/Year)</b>
1.31 – 1.35	0.001	200,000
1.36 – 1.40	0.002	280,000
1.41 – 1.45	0.003	360,000
1.46 – 1.55	0.004	440,000
1.56 – 1.75	0.006	520,000
>1.75	0.006 + 0.002 for every additional 0.20 volume % or fraction thereof	600,000

a – The rounding methods at 40 C.F.R. § 80.9 apply to determining the benzene level for the maximum annual average volume percent benzene standard.

Beginning at a benzene concentration of 1.76 volume percent, increase the gravity penalty by \$0.002/gallon for every 0.20 percent over the volume percent (e.g., the penalty is \$0.008/gallon from 1.76 volume percent to 1.96 volume percent, \$0.010/gallon from 1.96 volume percent to 2.15 volume percent).



**Example #6: Violation of 1.30 Volume Percent Benzene Standards, Compliance with 0.62 Volume Percent Standard****Scenario:**

A refiner produced 350,000,000 gallons of gasoline during a calendar year with an actual average benzene content of 1.35 volume percent, but the refiner purchased sufficient valid credits to meet the 0.62 volume percent standard.

**Calculation:**

Because the refiner met the 0.62 volume percent standard by purchasing sufficient valid credits, there would be no penalty calculation under Table II-1. Because the refiner exceeded the 1.30 volume percent standard, the penalty would only be calculated under Table II-2.

Calculated penalty for the violation of the 1.30 volume percent standard = 350,000,000 gallons \* \$0.001/gallon = \$350,000.

Because the calculated penalty is larger than the minimum penalty of \$200,000/year, assess the calculated penalty of \$350,000.

**Example #7: Violation of 1.30 Volume Percent Benzene Standards, Compliance with 0.62 Volume Percent Standard (Smaller Volume)****Scenario:**

A blender refiner produces 5,000,000 gallons of gasoline with an actual average benzene content of 1.35 volume percent during one year, and 7,000,000 gallons of gasoline with an average benzene content of 1.38 volume percent in the following year. The refiner complied with the 0.62 volume percent standard by carrying a deficit forward from the first year to the second year, and then purchased sufficient valid credits to make up the deficit and meet the 0.62 volume percent standard during the second year.

**Calculation:**

Because the refiner met the 0.62 volume percent standard, there would be no penalty calculation under Table II-1. Because the refiner exceeded the 1.30 volume percent standard two separate years, the penalty would be calculated separately for each year under Table II-2.

Calculated penalty for the violation of the 1.30 volume percent standard during Year 1 =  
5,000,000 gallons \* \$0.001/gallon = \$5,000.

Because the calculated penalty is smaller than the minimum penalty of \$200,000/year, assess the minimum penalty of \$200,000 for Year 1.

Calculated penalty for the violation of the 1.30 volume percent standard during Year 2 =  
7,000,000 gallons \* \$0.002/gallon = \$14,000.

Because the calculated penalty is smaller than the minimum penalty of \$280,000/year, assess the minimum penalty of \$280,000 for Year 2.

The total penalty for the two violations is \$480,000 [\$200,000 + \$280,000].

*Violations of Both 0.62 and 1.30 Annual Average Benzene Standards*

When a refiner or importer violates both the 0.62 and 1.30 annual average benzene standards, the penalty is calculated using Table II-1 for the violation of the 0.62 volume percent violation and Table II-3 for the violation of the 1.30 volume percent standard. These penalties are then added together to calculate the total penalty for the violations of the benzene standards.

If the refiner or importer violated the 1.30 volume percent maximum annual average benzene standard and the 0.62 volume percent standard, a smaller minimum penalty will apply to the violation of the 1.30 volume percent maximum annual average benzene standard, because this minimum will be in addition to the penalty that applies to the violation of the 0.62 volume percent standard.

**Table II-3. Penalty for Violating the 1.30 Volume Percent Benzene Standard and the 0.62 Volume Percent Standard**

<b>Benzene Level<sup>a</sup> (Volume Percent)</b>	<b>Penalty Multiplier (\$/Gallon)</b>	<b>Additional Minimum Penalty if Violation of the 0.62% Standard for the Same Volume (\$/Year)</b>
1.31 – 1.35	0.001	50,000
1.36 – 1.40	0.002	70,000
1.41 – 1.45	0.003	90,000
1.46 – 1.55	0.004	110,000
1.56 – 1.75	0.006	130,000
>1.75	0.006 + 0.002 for every additional 0.20 volume % or fraction thereof	150,000

a – The rounding methods at 40 C.F.R. § 80.9 apply to determining the benzene level for maximum annual average volume percent benzene Standard Violations.

Beginning at a benzene concentration of 1.76 volume percent, increase the gravity penalty by \$0.002/gallon for every 0.20 percent over the volume percent (e.g., the penalty is \$0.008/gallon from 1.76 volume percent to 1.95 volume percent, \$0.010/gallon from 1.96 volume percent to 2.15 volume percent).

**Example #8: Violation of 0.62 Volume Percent And 1.30 Volume Percent Benzene Standards****Scenario:**

A refiner produces 500,000,000 gallons of gasoline per year for two consecutive years with an average benzene content of 1.35 volume percent each year. They purchase enough credits in Year 2 to bring their average benzene content down to 0.64 volume percent at the end of Year 2 but did not purchase enough to meet the 0.62 volume percent standard.

**Calculation:**

The refiner is in violation of the 1.30 volume percent standard for each year. Because the refiner did not purchase enough credits at the end of Year 2, they would also be in violation of the 0.62 volume percent standard. Because the refiner was able to carry a deficit forward to determine compliance with the 0.62 volume percent standard from Year 1 to Year 2, a penalty would be assessed for one violation of the 0.62 volume standard based on the total combined volume of gasoline produced during both years. Because the 1.30 volume percent standard applies on an annual basis without the ability to carry a deficit forward, the refiner would be assessed two separate penalties for violations of the 1.30 volume percent standard during two separate years.

Calculated penalty for the violation of the 0.62 volume percent standard = Total combined volume of 1,000,000,000 gallons \* \$0.00525/gallon = \$5,250,000 (from Table II-1).

Because the calculated penalty is larger than the minimum penalty of \$280,000/year, assess the calculated penalty of \$5,250,000.

Calculated penalty for each annual violation of the 1.30 volume percent standard = 500,000,000 gallons \* \$0.001/gallon = \$500,000 (Table II-3).

Because the calculated penalty is larger than the minimum penalty, assess the calculated penalty of \$500,000.

Because the refiner produced 500,000,000 gallons in two separate years, the total additional penalty for the 1.30 volume percent standard is \$1,000,000 [ $\$500,000/\text{year} * 2 \text{ years}$ ].

Thus, the total proposed penalty for all benzene violations is \$6,250,000 [ $\$5,250,000 + \$1,000,000$ ].

**Example #9: Violation of 0.62 Volume Percent And 1.30 Volume Percent Benzene Standards (Smaller Volume)****Scenario:**

A blender refiner produces 10,000,000 gallons of gasoline in Year 1 with an average benzene content of 1.40 volume percent, and 10,000,000 gallons of gasoline with an average benzene content of 1.20 volume percent in Year 2. The refiner did not purchase any credits to meet the 0.62 volume percent standard in Year 1, and carried a deficit forward into Year 2. The refiner failed to purchase any credits to make up the deficit in Year 2.

**Calculation:**

If the refiner failed to purchase sufficient credits in Year 2 to make up the deficit and meet the 0.62 volume percent standard, a penalty would be assessed for one violation of the 0.62 volume percent standard based on the total combined volume of 20,000,000 gallons with an average benzene content over the two year period of 1.30 volume percent.

Because the average benzene content of the gasoline that the refiner produced in Year 1 was above the 1.30 volume percent standard, and the average benzene content of the gasoline produced during Year 2 was below 1.30 volume percent, the refiner only exceeded the 1.30 volume percent standard for 10,000,000 gallons produced during Year 1.

Calculated penalty for the violation of the 0.62 volume percent standard = 20,000,000 gallons \* \$0.02625/gallon = \$525,000 (from Table II-1).

Because the calculated penalty is smaller than the minimum penalty of \$680,000/year, assess the minimum penalty of \$680,000 for the violation of the 0.62 volume percent standard.

Calculated penalty for the annual violation of the 1.30 volume percent standard = 10,000,000 gallons \* \$0.002/gallon = \$20,000 (Table II-3).

Because the calculated penalty is smaller than the minimum penalty of \$70,000/year, assess the minimum penalty of \$70,000.

Thus, the total proposed penalty is \$750,000 [\$680,000 + \$70,000].

**b. Gasoline Benzene Credit Violations**

The MSAT2 program includes a nationwide Averaging, Banking and Trading (ABT) program that was designed to provide refiners and importers with the flexibility to choose the most economical compliance strategy. Under the ABT program, refiners who produce gasoline with benzene levels below the 0.62 volume percent standard are able to generate benzene credits based on the margin of over compliance with the standard. Each gasoline benzene credit is expressed as a unit of one gallon benzene).<sup>33</sup> Thus, each credit represents one gallon of benzene reduction that is achieved by a refinery or importer where its annual average gasoline benzene content is less than 0.62 volume percent. These

<sup>33</sup> 40 C.F.R. § 80.1290.

credits may be banked or traded, and ultimately used by a refinery or importer to demonstrate compliance with the 0.62 volume percent benzene standard.<sup>34</sup>

To ensure that the EPA obtains the environmental benefits of the MSAT2 program, parties who take advantage of the ABT program must fully comply with all requirements relating to the generation, transfer, banking or use of benzene credits. The failure to comply with any requirement of the ABT program will have a negative impact on the integrity of the MSAT2 program, and could have a direct and significant environmental impact.

Refiners and importers who choose to use credits to meet the 0.62 volume percent benzene standard must assure that they are fully complying with all requirements relating to the use of these credits to demonstrate compliance. The EPA will consider any failure to properly report the use of credits to be a violation of the 0.62 volume percent benzene standard, regardless of whether the refiner or importer had sufficient credits available for use or could have acquired sufficient credits.

When a refiner or importer uses invalid credits, the refiner or importer must adjust its compliance calculations to remove the invalid credits.<sup>35</sup> The EPA will then determine if the refiner or importer met the 0.62 volume percent standard without the use of the invalid credits. If they failed to meet the standards, then the EPA will determine the penalty for failing to meet the 0.62 volume percent standard by applying Table II-1.

Because the improper generation of credits can result in the production of gasoline that exceeds the benzene standards, the EPA considers any violation relating to the improper generation of credits to be a serious violation. This policy considers violations relating to the improper generation of credits to be similar to violations of the gasoline benzene standards. Accordingly, the EPA will generally apply the penalty approach set forth in Table II-1 to violations relating to the improper generation of credits. The litigation team may, however, reduce the penalty if the person who improperly generated the credits can demonstrate that the credits accurately reflect real gasoline benzene reductions, even though they were not properly generated.

### **c. Gasoline Annual Average and Per-Gallon Sulfur Standards**

#### *Background*

Each refinery or importer of gasoline is subject to two separate gasoline sulfur standards:<sup>36</sup>

1. All gasoline produced or imported must meet an annual average sulfur content standard of 30 ppm, after application of valid credits.<sup>37</sup>

---

<sup>34</sup> 40 C.F.R. § 80.1230(a).

<sup>35</sup> The credit trading provisions of the fuels regulations provide that invalid credits cannot be used to achieve compliance with the gasoline benzene standards, regardless of the transferee's good-faith belief that the gasoline benzene credits were valid.

<sup>36</sup> On April 28, 2014, the EPA promulgated the Tier 3 regulations which will require more stringent vehicle emissions standards and reduce the allowable gasoline sulfur content. (79 Fed. Reg. 23,389, (Apr. 28, 2014)). Facilities must comply with the new regulations beginning in 2017. This Policy does not reflect the 2017 standards and will be amended to reflect Tier 3 regulations at that time, when they go into effect.

<sup>37</sup> 40 C.F.R. §§ 80.195, 80.310, 80.315.

2. All gasoline produced or imported must comply with a per-gallon cap sulfur content of 80 ppm, without the application of credits.<sup>38</sup>

In addition, downstream parties are subject to a per-gallon cap standard of 95 ppm.<sup>39</sup> Like benzene Standard Violations, violations of the gasoline sulfur standards are considered to be extremely serious. A violation of the gasoline sulfur standard causes sulfur to coat the surface of the catalytic converter and thus reduces the ability of the catalyst to reduce nitrogen oxide (NO<sub>x</sub>) and VOCs (including benzene). Any increase in the sulfur concentration may reduce the efficiency of the catalyst thereby increasing emissions. The gravity penalties under this Policy reflect these concerns.

#### *Gasoline Sulfur Penalty Tables*

The approach for gravity penalties for annual average sulfur Standard Violations is similar to that for annual average benzene violations. Table II-4 applies to annual average violations. Additional information regarding the calculation of the sulfur content to apply in Table II-4 is provided in Appendix 1.

**Table II-4. Penalty for Violation of the Annual Average Gasoline Sulfur Standard**

<b>Sulfur Content<sup>a</sup> (ppm)</b>	<b>Penalty Multiplier (\$/Gallon)</b>	<b>Minimum Penalty (\$/Year)</b>
30.01 – 30.50	0.00375	200,000
30.51 – 31.00	0.00525	280,000
31.01 – 31.50	0.00675	360,000
31.51 – 32.50	0.00825	440,000
32.51 – 35.00	0.00975	520,000
>35.00	0.00975 + 0.0015 for every additional 2.5 ppm or fraction thereof	600,000

a – The rounding methods at 40 C.F.R. § 80.9 apply to determining sulfur content for gasoline annual average sulfur content Standard Violations.

Beginning at a sulfur content of 35.01 ppm, increase the penalty by \$0.0015/gallon for every 2.5 ppm over the standard (e.g., the penalty is \$0.01125/gallon from 35.01 ppm to 37.50 ppm, \$0.01275/gallon from 37.51 ppm to 40.00 ppm).

<sup>38</sup> 40 C.F.R. § 80.195.

<sup>39</sup> 40 C.F.R. § 80.210.

**Example #10: Gasoline Sulfur Annual Average Standard Violation Calculation****Scenario:**

During a refinery audit, the EPA determined that a refinery exceeded the gasoline sulfur annual average standard for 500,000,000 gallons. The calculated annual average after the application of valid credits was determined to be 31.00 ppm.

**Calculation:**

Multiply the volume of gasoline by the per gallon gravity penalty from Table II-4:

Calculated Penalty: 500,000,000 gallons \* \$0.00525/gallon = \$2,625,000.

Because the calculated penalty is larger than the minimum penalty of \$280,000/year for a refiner that exceeds the annual average gasoline sulfur standard, assess the calculated gravity penalty of \$2,625,000.

**Example #11: Gasoline Sulfur Annual Average Standard Violation Calculation****Scenario:**

During a refinery audit review, the EPA determined that a blender refiner exceeded the gasoline sulfur annual average standard for 20,000,000 gallons. The calculated annual average after application of valid credits was determined to be 32.00 ppm.

**Calculation:**

Multiply the volume of gasoline by the per gallon penalty from Table II-4:

Calculated Penalty: 20,000,000 gallons \* \$0.00825/gallon = \$165,000.

Because the calculated penalty is smaller than the minimum penalty of \$440,000/year for a refiner that exceeds the gasoline sulfur annual average standard, assess the minimum penalty of \$440,000.

The approach for per-gallon violations is different in two ways: First, it takes into account that per-gallon violations may be committed by smaller businesses, including downstream parties, as well as by larger businesses. To assure that excessively large penalties will not be assessed against small businesses, the minimum unadjusted gravity penalty applicable to violations of the per-gallon standard is less for businesses with gross annual revenues under \$100,000,000 than for large businesses.

Second, the penalties for per-gallon Standard Violations are greater for each gallon in violation than penalties for annual average Standard Violations of the same magnitude (i.e., at the extent of deviation from the standard). This is because: (1) the regulations set the per-gallon caps at a level that is high compared to the average standard and, thus, there is greater concern about the sulfur levels involved even if the violation is only a few ppm above the cap standard; and (2) per-gallon violations generally involve much smaller volumes than annual average violations, therefore, the deterrent effect of the



penalty would be insufficient if the same per-gallon amounts were used as are used for the annual average violations.

Table II-5 applies to violations of the per-gallon standards (both the upstream 80 ppm and downstream 95 ppm standards). Minimum penalties based on minimum volumes and business size may apply. For purposes of Table II-5 a large business is one having gross annual revenues of at least \$100,000,000.

**Table II-5. Penalty for Violation of the Per-gallon Sulfur Standards**

Sulfur Content in Excess of the Applicable Standard <sup>a</sup> (ppm)		Penalty Multiplier (\$/Gallon)	Minimum Penalty for Small Business (\$/Batch)	Minimum Penalty for Large Business (\$/Batch)
Sulfur Content Range for Upstream Facilities	Sulfur Content Range for Downstream Facilities			
81 – 83	96 – 98	0.060	30,000	60,000
84 – 86	99 – 101	0.085	30,000	80,000
87 – 92	102 – 107	0.115	30,000	100,000
93 – 104	108 – 119	0.150	30,000	120,000
>104	>119	0.150 + 0.05 for every additional 12 ppm or fraction thereof	30,000	140,000

a – The rounding methods at 40 C.F.R. § 80.9 apply to determining sulfur content for gasoline per-gallon sulfur content Standard Violations.

Beginning at a sulfur content of 105 ppm for upstream facilities or 120 for downstream facilities, increase the penalty by \$0.05/gallon for every 12 ppm over the standard (e.g., for upstream facilities the penalty is \$0.155/gallon from 105 ppm to 116 ppm, \$0.160/gallon from 117 ppm to 128 ppm).

**Example #12: Gasoline Sulfur Per-Gallon Standard Violation Calculation**

**Scenario:**

A refinery reports that it produced one batch of gasoline containing 3,000,000 gallons with a sulfur content of 82 ppm.

**Calculation:**

Multiply the number of gallons per batch (3,000,000) by the penalty per gallon for upstream facilities that exceed the sulfur standard by 2 ppm from Table II-5, or \$0.060/gallon:

$$\text{Calculated Penalty: } 1 \text{ batch} * 3,000,000 \text{ gallons/batch} * \$0.060/\text{gallon} = \$180,000.$$

Because the calculated penalty is larger than the minimum penalty of \$60,000/year for a large business, assess the calculated penalty of \$180,000.

### Example #13: Gasoline Sulfur Per-Gallon Standard Violation Calculation

#### Scenario:

A refinery produced 5 batches of gasoline with each batch containing 3,000,000 gallons that exceeded the maximum per-gallon sulfur standard. The sulfur content is 82 ppm for 2 batches and 88 ppm for 3 batches.

#### Calculation:

Determine the volume of gasoline at each sulfur level and multiply each volume by the corresponding per gallon gravity penalty for upstream facilities from Table II-5:

Calculated Penalty (82 ppm):  $2 \text{ batches} * 3,000,000 \text{ gallons/batch} * \$0.06/\text{gallon} = \$360,000.$

Calculated Penalty (88 ppm):  $3 \text{ batches} * 3,000,000 \text{ gallons/batch} * \$0.115/\text{gallon} = \$1,035,000.$

Total Calculated Penalty:  $\$360,000 + \$1,035,000 = \$1,395,000.$

Because the calculated penalty for each batch that violated the standard is larger than the minimum penalties for large businesses of \$60,000 for each batch that exceeded the standard by 2 ppm, and \$100,000 for each batch that exceeded the standard by 8 ppm, assess the calculated penalties.

#### d. Gasoline Sulfur Credit Violations

The gasoline sulfur program includes a nationwide ABT program that was designed to provide refiners and importers with the flexibility to choose the most economical compliance strategy. Under the ABT program, refiners who produce gasoline with sulfur levels below the 30 ppm standard are able to generate sulfur credits based on the margin of over compliance with the standard. Each gasoline sulfur credit is expressed as a unit of one ppm-gallon.<sup>40</sup> In other words, one credit represents one gallon of gasoline having a sulfur content that has been reduced by 1 ppm from the 30 ppm annual average standard. These credits may be banked or traded, and are ultimately applied to a refinery's (or importer's) actual annual average sulfur content to meet the 30 ppm annual average sulfur content standard.<sup>41</sup>

To ensure that the EPA obtains the environmental benefits of the gasoline sulfur program, parties who take advantage of the ABT program must fully comply with all requirements relating to the generation, transfer, banking or use of gasoline sulfur credits. The failure to comply with any requirement of the ABT program will have a negative impact on the integrity of the gasoline sulfur program, and could have a direct and significant environmental impact.

Refiners and importers who choose to use credits to meet the annual average gasoline sulfur standard must assure that they are fully complying with all requirements relating to the use of these credits to demonstrate compliance. The EPA will consider any failure to properly report the use of credits to be a

<sup>40</sup> 40 C.F.R. § 80.310.

<sup>41</sup> 40 C.F.R. § 80.195.

violation of the annual average gasoline sulfur standard, regardless of whether the refiner or importer had sufficient credits available for use or could have acquired sufficient credits.

When a refiner or importer uses invalid credits, the refiner or importer must adjust its compliance calculations to remove the invalid credits.<sup>42</sup> The EPA will then determine if the refiner or importer met the 30 ppm annual average standard without the use of the invalid credits. If they failed to meet the standards, then the EPA will determine the penalty for failing to meet the standard by applying Table II-4.

Because the improper generation of credits can result in the production of gasoline that exceeds the sulfur standards, the EPA considers any violation relating to the improper generation of credits to be a serious violation. This policy considers violations relating to the improper generation of credits to be similar to violations of the annual average gasoline sulfur standards. Accordingly, the EPA will generally apply the penalty approach set forth in Table II-4 to violations relating to the improper generation of credits. The litigation team may, however, reduce the penalty if the person who improperly generated the credits can demonstrate that the credits accurately reflect real gasoline sulfur reductions, even though they were not properly generated.

**e. Conventional Gasoline RVP Standards and RFG VOC Reduction Standards**

*Background*

Both the CG RVP standards and the RFG VOC emissions performance reduction standards regulate gasoline volatility. The primary purpose of the RVP and VOC emissions performance reduction standards is to reduce both evaporative and tailpipe VOC emissions and ground level ozone. Violations of these standards increase emissions of multiple pollutants in addition to VOCs.

The CG RVP standards apply upstream of the retail level from May 1 through September 15. This is known as the “regulatory control period.”<sup>43</sup> The CG RVP standards apply at all locations in the fuel distribution system, including the retail level, from June 1 through September 15. This period is known as the “high ozone season.”<sup>44</sup> The CG volatility regulations set different RVP standards for different locations. The standards are either 7.8 or 9.0 pounds per square inch (psi).<sup>45</sup> CG containing 9 to 10 percent ethanol is generally subject to the RVP standards with a 1 psi allowance.<sup>46</sup>

The RFG VOC reduction standards are Phase II complex model standards.<sup>47</sup> Different VOC reduction standards apply in northern RFG areas (VOC2) and southern RFG areas (VOC1). In addition, “adjusted” VOC2 standards apply to summer RFG sold for use in the Chicago and Milwaukee RFG areas.<sup>48</sup>

---

<sup>42</sup> The credit trading provisions of the fuels regulations provide that invalid credits cannot be used to achieve compliance with the gasoline sulfur standards, regardless of the transferee's good-faith belief that the credits were valid.

<sup>43</sup> 40 C.F.R. § 80.27(a)(2).

<sup>44</sup> *Id.*

<sup>45</sup> *Id.* In some areas, federally approved State Implementation Plans impose more stringent standards.

<sup>46</sup> 40 C.F.R. § 80.27(d).

<sup>47</sup> 40 C.F.R. §§ 80.41(e)-(f), 80.40(c).

<sup>48</sup> 40 C.F.R. §§ 80.70, 80.40(c).

RFG refiners and importers may elect to comply with either a per-gallon VOC reduction standard or an average VOC reduction standard with a per-gallon minimum.<sup>49</sup> Facilities downstream of the refinery or importer are subject to the less stringent per-gallon minimum.<sup>50</sup>

In general, the RFG VOC reduction standards apply during the same time period as the RVP standards — May 1 through September 15 at facilities upstream of the retail level, and June 1 through September 15 at the retail level.<sup>51</sup> Refineries and importers who elect to comply with the average VOC reduction standards must meet the applicable standards for all RFG that they produced or imported and designated for average compliance with the VOC reduction standards during the period from January 1 through September 15 of each calendar year.<sup>52</sup>

The primary driver of the complex model RFG VOC reduction standard is RVP. Thus, for a failure to reduce RFG VOC by a certain percentage, it is possible to correlate that violation to an RVP increase. The penalty amounts in the per-gallon VOC reduction violation tables below are roughly correlated to RVP increases, providing equitable treatment of CG RVP violations and RFG VOC violations. Each one VOC reduction percentage that a violator fails to achieve is approximately equivalent to an RVP increase of 0.1 psi RVP. Increases associated with VOC reduction increments that are far below the standard are not as great. For example, a violator achieving a VOC percent reduction in the 12 to 16 percent range correlates to somewhat less than a RVP increase of 0.1 psi. Because violators should not be rewarded for violations of greater extent, this Policy uses the 0.1 psi per 1 percent VOC reduction increment correlation throughout the range of possible violations.

Because RFG VOC standards apply to ozone nonattainment areas, RFG VOC violations are more serious than CG RVP violations that occur in ozone attainment areas and the gravity penalty is greater on a per-gallon basis for the same magnitude of violation. Similarly, violations of CG RVP standards in ozone nonattainment areas are considered to be more serious than violation of the CG RVP standards in ozone attainment areas. Thus, the litigation team should increase the penalty amounts in Table II-6 by up to 20 percent for violations of the CG RVP standards that occur in ozone nonattainment areas.

### *Gasoline Volatility Penalty Tables*

Table II-6 provides the penalties for RVP per-gallon violations, Table II-7 provides the penalties for average VOC violations, and Table II-8 provides the penalties for per-gallon VOC violations.

As is the case for per-gallon sulfur violations, penalties for per-gallon VOC violations are greater for each gallon in violation than penalties for average violations to assure adequate deterrence for smaller volumes and because per-gallon violations are more likely to involve higher emissions levels. The minimum amount that applies to any per-gallon violation, regardless of volume, is set at a lower amount for small businesses (businesses with gross annual revenues below \$100,000,000) than for large businesses (businesses with gross annual revenues of at least \$100,000,000). There is no large business adjustment for VOC averaging violations because they almost always apply to larger refining and import businesses.

---

<sup>49</sup> 40 C.F.R. §80.65(c).

<sup>50</sup> 40 C.F.R. § 80.78(a)(1)(v)(C).

<sup>51</sup> 40 C.F.R. § 80.78(a)(1)(v).

<sup>52</sup> 40 C.F.R. § 80.67(c).

The RVP and VOC values in Table II-6, Table II-7, and Table II-8 represent deviations from the applicable standard and do not represent the tested RVP or VOC levels. Additional information regarding the calculation of the VOC Reduction Deviation to apply for violations of the annual average VOC reduction standard in Table II-7 is provided in Appendix 1.

**Table II-6. Penalty for Conventional Gasoline RVP Standard Violations**

RVP Exceedance <sup>a</sup> (psi)	Penalty Multiplier (\$/Gallon)	Minimum Penalty for Small Businesses (\$/Batch)	Minimum Penalty for Large Businesses (\$/Batch)
0.1 – 0.3	0.050	25,000	50,000
0.4 – 0.6	0.075	25,000	70,000
0.7 – 1.0	0.100	25,000	90,000
1.1 – 1.5	0.125	25,000	110,000
1.6 – 2.5	0.150	25,000	130,000
>2.5	0.150 + 0.025 for every additional 1.0 psi or fraction thereof	25,000	150,000

a – The rounding methods at 40 C.F.R. § 80.9 apply to determining the RVP exceedance for CG per-gallon RVP Standard Violations.

Beginning at an RVP exceedance of 2.5 psi, the gravity penalty increases by \$0.025/gallon for every 1.0 increase in psi (e.g., the penalty is \$0.175/gallon from 2.6 psi to 3.5 psi, and \$0.200/gallon from 3.6 psi to 4.5 psi).

**Table II-7. Penalty for Average RFG VOC Standard Violations**

VOC Reduction Deviation <sup>a</sup> (Percent Reduction from the Standard)		Penalty Multiplier (\$/Gallon)	Minimum Penalty (\$/Year)
Minimum Increment	Maximum Increment		
>0	<=0.50	0.00375	200,000
>0.50	<=1.00	0.00525	280,000
>1.00	<=1.50	0.00675	360,000
>1.50	<=2.50	0.00825	440,000
>2.50	<=5.00	0.00975	520,000
>5.00		0.00975 + 0.0015 for every additional 2.50 volume % or fraction thereof	600,000

a – For the purpose of determining the appropriate increment, rounding does not apply to the calculated VOC reduction deviation.

In the event that the VOC reduction deviation exceeds 5.00 percent, the gravity penalty will be increased by \$0.0015/gallon for every 2.5 percent increase (e.g., the penalty is \$0.01125/gallon from 5.001 percent

to 7.500 percent increase in the deviation from the standard, \$0.01275/gallon from 7.501 percent to 10.000 percent increase in the deviation from the standard).

**Table II-8. Penalty for Per-Gallon VOC Standard Violations**

VOC Reduction Deviation <sup>a</sup> (Percent Reduction from the Standard)	Penalty Multiplier (\$/Gallon)	Minimum Penalty for Small Businesses (\$/Batch)	Minimum Penalty for Large Businesses (\$/Batch)
0.1 – 3.0	0.060	30,000	60,000
4.0 – 6.0	0.085	30,000	80,000
7.0 – 10.0	0.120	30,000	100,000
11.0 – 15.0	0.150	30,000	120,000
16.0 – 25.0	0.180	30,000	140,000
>25.0	0.180 + 0.03 for every additional 10% or fraction thereof	30,000	160,000

a – The rounding methods at 40 C.F.R. § 80.9 apply to determining the VOC reduction deviation for RFG per-gallon VOC Standard Violations.

Beginning at a VOC reduction of 25 percent, increase the gravity penalty by \$0.03/gallon for every 10 percent increase in the deviation (e.g., the penalty is \$0.210/gallon for a deviation of 25.1 percent to 35.0 percent from the standard, \$0.240/gallon for a deviation of 35.1 percent to 45.0 percent from the standard).

**Example #14: Gasoline RVP 7.8 psi Standard Violation Calculation**

**Scenario:**

A refinery violates the CG RVP standard of 7.8 psi for three batches of gasoline that were each 3,000,000 gallons. The gasoline was sold in an ozone nonattainment area, and the RVP was determined to be 9.0 psi.

**Calculation:**

Multiply the volume of gasoline in each batch by the per gallon penalty from Table II-6.

Calculated Penalty: 3,000,000 gallons/batch \* \$0.125/gallon = \$375,000/batch

Because the calculated penalty is larger than the minimum penalty of \$110,000/batch for large businesses with an RVP 1.2 psi over the standard, assess the calculated penalty of \$375,000 for each violation (i.e., each batch). Thus, \$375,000/batch \* 3 batches = \$1,125,000.

Because the violation occurred in an ozone nonattainment area, increase the total gravity component by 20 percent, resulting in a final gravity component of \$1,350,000 [\$1,125,000 \* 1.2].

**Example #15: Average VOC Violation****Scenario:**

A refinery who elects to comply with the RFG VOC reduction standards on average violates the refinery average VOC1 standard of 29.0 percent reduction. The actual VOC reduction based on testing and complex model calculations is 25.5 percent reduction. The refinery produced 100,000,000 gallons of RFG that was subject to the VOC1 standard.

**Calculation:**

The difference (or delta) from the standard is 3.5 percent (29.0 percent reduction – 25.5 percent reduction). From Table II-7, the appropriate per-gallon penalty multiplier is \$0.00975.

This gravity penalty is 100,000,000 gallons \* \$0.00975/gallon = \$975,000.

This is greater than the minimum penalty of \$520,000; therefore, the unadjusted gravity penalty is \$975,000.

**Example #16: Per-gallon VOC Violations****Scenario:**

A large refiner violates the per-gallon VOC2 limit of 23.4 percent reduction for refiners who opt for average compliance for one batch of RFG having a volume of 500,000 gallons. The actual VOC percent reduction based on testing and complex model calculations is 23.0 percent.

**Calculation:**

The difference (or delta) from the standard is 0.4 percent (23.4 percent reduction – 23.0 percent reduction). From Table II-8, the appropriate per-gallon multiplier is \$0.060/gallon.

The gravity penalty is \$0.060/gallon \* 500,000 gallons = \$30,000.

Because this is less than the applicable minimum for a large business, apply the \$60,000 minimum as the unadjusted gravity value.

**f. Provision for “Misdelivery” of Conventional Gasoline in RFG Areas**

Any person is prohibited from selling or delivering CG for use in an RFG covered area.<sup>53</sup> “Misdelivery” violations normally are documented through business records showing gasoline deliveries. For example, gasoline delivery PTDs may show that CG was delivered to a retail station in an RFG covered area. In this case, the EPA may not have an opportunity to collect a sample of the gasoline in question. The volume of gasoline that was misdelivered normally could be established through business records. This

<sup>53</sup> 40 C.F.R. § 80.78(a).

Policy establishes a rule-of-thumb per-gallon gravity penalty for RFG misdelivery violations. For violations that occur during the time period when the VOC reduction standards apply, the gravity penalty is \$0.30 per gallon. The rule-of-thumb penalty for other time periods is \$0.10 per gallon. This value is based on harm to the program and level playing field considerations. Note that there is also an economic benefit rule-of-thumb method that covers misdelivery of CG to RFG areas. In addition, if an actual VOC emissions reduction violation is measured, an additional penalty should be calculated using the RVP/VOC violation approach above. The two penalties should then be added together to arrive at the unadjusted gravity penalty.

#### **g. Diesel Per-Gallon Sulfur Standard**

##### *Background*

This section provides gravity penalty calculation instructions for violations of the ULSD 15 ppm sulfur content standard applicable to motor vehicle and nonroad locomotive and marine (NRLM) diesel fuels at both the refinery level and at downstream locations.

All motor vehicle diesel fuel is subject to the 15 ppm ULSD sulfur standard at the refinery/importer level.<sup>54</sup> NRLM diesel fuel is also subject to the ULSD standard except that transmix processors are allowed to continue to produce locomotive and marine (LM) fuel that meets the 500 ppm sulfur standard, if certain conditions are met.<sup>55</sup> Facilities downstream of the refinery or importer are not considered to be in violation of the ULSD standard unless the sulfur content exceeds 17 ppm.<sup>56</sup>

The sulfur reductions required by this rule provide important health and welfare benefits associated with the reduced generation of sulfate, particulate matter (PM), and sulfur oxide (SO<sub>x</sub>). ULSD also enables the emission control technology to reduce emissions to ensure in-use vehicles and engines meet standards. Sulfur levels above the ULSD standard are detrimental to the effectiveness of the emissions controls. Therefore, the per-gallon penalties for violations of the ULSD standard reflect the seriousness of the violation.

##### *Violation of the ULSD Standard*

Unadjusted gravity penalties for violations of the diesel sulfur 15 ppm ULSD per-gallon standard (17 ppm for facilities downstream of the refinery/importer) are based on a per-gallon amount for each violation category as shown in Table II-9. The values in the table are deviations from the standard, or from the standard with the 2 ppm downstream adjustment, as applicable. The per-gallon penalty is then multiplied by the number of gallons in violation. The EPA does not expect that there will be many violations where the deviation from the standards are substantially higher than the deviations identified in Table II-9. In the event that there is a violation where the sulfur levels are substantially higher than the deviations in Table II-9, (e.g., heating oil or diesel fuel subject to the 500 ppm sulfur standard is sold as ULSD), the litigation team may make appropriate adjustments to the gravity penalty. This Fuels Penalty Policy also provides for minimum penalties to assure adequate deterrence for violations. To account for the business size of violators, this Policy provides a lower minimum for small businesses (gross annual revenues under \$100,000,000) than large businesses (gross annual revenues greater than \$100,000,000).

---

<sup>54</sup> 40 C.F.R. § 80.520.

<sup>55</sup> 40 C.F.R. §§ 80.510, 80.511, 80.513.

<sup>56</sup> 40 C.F.R. § 80.580(d)(1).



**Table II-9. Penalty for Violations of the ULSD Standard**

<b>Sulfur Content Deviation from the Standard<sup>a</sup> (ppm)</b>	<b>Penalty Multiplier (\$/Gallon)</b>	<b>Minimum Penalty for Small Businesses (\$/Batch)</b>	<b>Minimum Penalty for Large Businesses (\$/Batch)</b>
1 – 3	0.060	\$30,000	\$60,000
4 – 6	0.085	\$30,000	\$80,000
7 – 12	0.115	\$30,000	\$100,000
13 – 24	0.150	\$30,000	\$120,000
> 24	0.150 + 0.05 for every additional 12 ppm or fraction thereof	\$30,000	\$140,000

a – The rounding methods at 40 C.F.R. § 80.9 apply to determining sulfur content for diesel per-gallon sulfur content Standard Violations.

Beginning at a sulfur content deviation of 25 ppm, increase the gravity penalty by \$0.05/gallon for every 12 ppm increase (e.g., the penalty is \$0.155 per gallon from 25 ppm to 36 ppm, \$0.160/gallon from 37 ppm to 48 ppm).

#### *Violation of the 500 ppm Per-Gallon Diesel Sulfur Standard*

The regulations provide for limited production of 500 ppm sulfur content diesel fuel for LM use. Only transmix processors are allowed to produce 500 ppm LM diesel and production and distribution is subject to a number of conditions. Transmix processors and other parties handling 500 ppm LM are required to meet a number of PTD, recordkeeping, and reporting requirements to ensure that the 500 ppm fuel is segregated from other diesel fuel and is used only in LM engines without sulfur sensitive equipment. In light of the limited number of parties eligible to use this option, this Policy does not include specific gravity penalties for violation of the 500 ppm sulfur standard. Nevertheless, the EPA considers compliance with these requirements to be critical and will evaluate appropriate penalties on a case-by-case basis.

### **C. Calculate Preliminary Deterrence Amount for All Fuels Standards Violations**

Under this Policy, the preliminary deterrence amount is the sum of the economic benefit and the gravity component, calculated as described above. To calculate the preliminary deterrence amount for all fuel Standards Violations, add the economic benefit of all fuel Standards Violations to the gravity component of all fuel Standards Violations.

## **III. THE PRELIMINARY DETERRENCE AMOUNT - PROGRAMMATIC VIOLATIONS**

Fuel content standards are the primary requirements of the mobile source gasoline and diesel fuel programs. Each fuels program also includes additional programmatic requirements and prohibitions to ensure the fuel standards are met, and, for certain fuels, that the fuel is used in the proper location, at the proper time, and in the proper type of vehicle. The failure of a regulated party to complete any of these

programmatic requirements constitutes a violation of the regulation, with the same potential Clean Air Act statutory penalties as violations of the fuel content standards.

For example, most gasoline and diesel programs include requirements for the fuel to be sampled and tested for the relevant parameters when it is produced at a refinery or is imported using prescribed test methods, and for refiners and importers to keep records of this testing and to submit periodic reports to the EPA demonstrating compliance with the applicable standards. In the case of fuels programs that include credits and credit trading, regulated parties are required to submit reports to the EPA on the creation, transfer, and use of credits. Some gasoline programs also include requirements for the geographic locations or time periods for the use of certain fuels categories. When regulated parties violate programmatic requirements of the fuels regulations, such as the sampling, testing, PTDs, recordkeeping, and reporting requirements, it makes it difficult or impossible to verify compliance with fuel standards. Thus, Programmatic Violations are considered serious violations.

### A. Economic Benefit

The economic benefit associated with Programmatic Violations can vary greatly, and should be evaluated on a case-by-case basis. In cases involving significant noncompliance, the litigation team should consider delayed costs, avoided costs, and the potential benefit from competitive advantage gained as a result of the violation. Delayed and avoided costs may include the costs of equipment and labor relating to sampling, testing, and management oversight.

#### **Example #17: Refinery PTD, Sampling and Testing Violations Economic Benefit Calculation**

##### **Scenario:**

During a refinery audit, the EPA determined that a refinery failed to properly sample the gasoline it produced and failed to properly apply the correction equation at 40 C.F.R. § 80.46(c) to its RVP test results. The refinery also failed to include required information in its PTDs. These violations occurred over a two-year period.

##### **Calculation:**

- **Calculate avoided management oversight cost at the refinery:** Reference the rule-of-thumb method for avoided management oversight costs.

Avoided management oversight cost = \$146,000 [ $\$73,000/\text{year} * 2 \text{ years of violations}$ ]  
(2013 dollars).

Most mobile source fuels violations are preventable through robust oversight and quality assurance measures by the regulated party. Section II.A.4 of this Policy sets forth a rule-of-thumb method for determining the economic benefit associated with violations of the fuels standards. The litigation team should generally apply this rule-of-thumb method for determining the economic benefit derived from the avoided cost resulting from inadequate management oversight necessary to prevent Programmatic Violations. The rule-of-thumb method should be used in cases when there are multiple Programmatic Violations by refiners and importers, and when there are multiple Programmatic Violations that arise at terminals and distributors of gasoline and motor vehicle or NRLM diesel fuel (*i.e.*, those “upstream” of retailers and wholesale consumer-purchasers). The litigation team may increase or reduce this figure

depending on an assessment of the extent that management practices and systems were insufficient. This benefit amount would be added for each year in which violations are committed, regardless of the number of violations during the year.

## **B. Gravity**

### **1. Classification as Minor, Moderate, or Major Violations**

Under this Policy, violations of programmatic requirements are classified as Minor, Moderate, or Major violations based on the following factors:

- The impact of the violation on the EPA's ability to determine whether the fuel met an applicable standard.
- The likelihood the violation will result in the fuel being used in an inappropriate location, time period, or vehicle type, with increased emissions as a consequence.
- The overall impact of the violation on the program.

Major violations are characterized as violations that create a large potential for increased emissions or a large overall impact on the program. Examples of violations that should be classified as Major violations include the following:

- Failure of a refiner or importer to sample and test a batch of gasoline or diesel fuel to determine compliance with an applicable standard when the fuel is produced or imported.<sup>57</sup>
- Testing gasoline or diesel fuel by a refiner or importer using a test method that is not allowed under the applicable regulation or failure to follow prescribed procedures for an approved test method, where the test method used, or the incorrect procedure, results in uncertainty whether the fuel at issue met an applicable standard, or where the determination that the fuel met the applicable standards required substantial government resources.<sup>58</sup>
- Failure of a refiner or importer to make the arrangements necessary for an independent laboratory to carry out any of the independent analysis requirements for a batch of gasoline under the RFG program.<sup>59</sup>
- Failure of a regulated party to follow core attest procedures prescribed by the applicable regulation.<sup>60</sup>
- Failure to maintain records for the required time-period or to deliver the records to the EPA on request, where the records include substantive information necessary for the EPA to determine compliance with an applicable standard.<sup>61</sup>

---

<sup>57</sup> E.g., 40 C.F.R. § 80.65(e)(1) (RFG); 40 C.F.R. § 80.330(a) (gasoline sulfur); 40 C.F.R. § 80.581(a)-(b) (ULSD).

<sup>58</sup> E.g., 40 C.F.R. § 80.46 (RFG); 40 C.F.R. § 80.580 (ULSD).

<sup>59</sup> 40 C.F.R. § 80.65(f).

<sup>60</sup> 40 C.F.R. § 80.65(h) (RFG); 40 C.F.R. § 80.415 (gasoline sulfur); 40 C.F.R. § 80.1035 (gasoline toxics).

<sup>61</sup> E.g., 40 C.F.R. §§ 80.74, 80.104 (RFG); 40 C.F.R. § 80.365 (gasoline sulfur); 40 C.F.R. § 80.592 (ULSD).

- Failure to submit required reports to the EPA, or submitting required reports more than thirty days late.<sup>62</sup>
- Failure to comply with the PTD requirements, where a consequence of the violations could be use of the fuel in an inappropriate location, time period, or type of vehicle, with consequential increased emissions.<sup>63</sup>

Moderate violations are characterized as violations that: do not compromise the EPA's ability to know whether the fuel at issue met an applicable standard; do not result in a large potential for increased emissions as a result of fuel being used in an inappropriate location, time, or vehicle type; and do not have a large overall impact on the program. As a result, significant recordkeeping violations that do not rise to the magnitude of the violations described as Major violations in the examples above should be classified as Moderate violations, except those violations that fall into the Minor violation category as described below. Examples of Moderate violations include:

- Testing gasoline or diesel fuel by a refiner or importer using the proper test method but without following that method's prescribed procedures, where use of the improper procedure creates little uncertainty of the test result. Certain sampling and testing violations may fall into either the Major category or Moderate category depending on whether the accuracy of the test results, and the absence of any Standards Violations, can be determined by the EPA with confidence and without use of substantial resources.
- Failure to follow requirements for independent sampling and testing or attest engagements, where, because of the nature of the requirement not followed or the extent of the violation, there only is a small likelihood of causing, or failing to discover, a fuel Standard Violation and the failure has only a modest impact on the program.
- Submitting required reports after the due date but no later than thirty days after the due date.
- Failure to comply with the product transfer requirements, where the violation is unlikely to result in use of the fuel in an inappropriate location, time period, or vehicle type.

Minor violations are generally ministerial in nature and generally involve a minor error in just one aspect of reporting or recordkeeping. In some cases, the litigation team will have to exercise discretion to determine whether to classify a violation as Minor or Moderate. Examples of Minor violations include failure to state the address of the transferee on a PTD; a single transcription error that results in the wrong value being reported for one parameter on one batch report where that one error clearly has no effect on meeting standards; or the volume of product set forth on a PTD is incorrect by a *de minimis* amount.

The litigation team should classify each Programmatic Violation as either Major, Moderate, or Minor using these principles and examples, and assign the appropriate penalties under Table III-1.

---

<sup>62</sup> E.g., 40 C.F.R. §§ 80.75, 80.105 (RFG); 40 C.F.R. § 80.370 (gasoline sulfur); 40 C.F.R. § 80.593 (ULSD); 40 C.F.R. § 80.1354 (gasoline benzene).

<sup>63</sup> For example, 40 C.F.R. § 80.77 (RFG); 40 C.F.R. §§ 80.590, 80.591 (ULSD).

**Table III-1. Penalties for Violations Other Than Gasoline or Diesel Fuel Standards**

Violation Level	Penalty (\$/Violation <sup>a</sup> )
Major	\$15,000
Moderate	\$7,500
Minor	\$2,500

<sup>a</sup> Use this penalty amount for the first five violations arising from the same factual circumstances.

## 2. *Calculations Where Violations Continue for a Period of Time*

The same Programmatic Violations may continue for an extended period of time. This is common in fuels cases because some refiners produce batches of fuel nearly every day. Similarly, distributors may transport multiple loads of fuel per day. If a regulated party makes an error it is not unusual for that error to be repeated a number of times before it is discovered and corrected. For example, a refiner that uses an incorrect test method may use that same incorrect method hundreds of times in a year. Similarly, a distributor that fails to include certain required information in its PTDs may commit this violation hundreds or thousands of times per year. In these examples, the regulated party has committed a separate violation each time the incorrect test method is used or each time fuel is transferred without PTDs. Penalties for these violations could become very large if a separate penalty is included for each violation, and in some cases, while we may know the violations result in harm to the program, there may be no harm to the environment.

As a result, in a case that includes multiple violations of the same programmatic requirement over time, the litigation team may apply a penalty calculation based on the length of time the violations continue. This penalty is in addition to the penalty calculated for the first five violations using the penalties in Table III-1, and begins with the calendar month after the first five violations occur.

This method should only be applied after a consideration of the actual or potential serious or widespread harm caused by the violations and the culpability of the violator. This penalty approach should not be used in cases involving highly culpable violators or violations that caused actual serious or widespread harm to human health or the environment. In cases involving violations that present *potential* serious or widespread harm to human health or the environment, the EPA should decide whether application of the continuing violations penalty calculation is appropriate based on the circumstances of the individual case. The method generally will be appropriate for Moderate and Minor violations and may be appropriate for those Major violations where the defendant has demonstrated that any fuel that is the subject of the recordkeeping at issue met the applicable standards and was used in the appropriate location, time period, or vehicle type.

In no case is this continuing penalty calculation method mandated and the EPA maintains its statutory right to assess penalties up to the statutory maximum for each violation, when appropriate. For highly culpable parties, the penalty may be calculated at the full value for all violations. Moreover, even when the continuing violations penalty approach is used, the litigation team may exercise flexibility to increase or decrease the penalty amount based on the number of individual violations of a particular provision that arise from common facts or are based on the egregiousness of the violations.<sup>64</sup> After

<sup>64</sup> For instance, if more than five Programmatic Violations occur during one month and the violations do not continue into subsequent months, the litigation team may exercise flexibility to reduce the penalty to an amount that is less than the sum of each separate penalty, but more than the penalty calculated under the continuing penalty calculation method.

considering the factors described above and determining that the continuing violation penalty method is appropriate, the EPA may calculate the penalty in accordance with Table III-2 below and then adjust the penalty as just described.

**Table III-2. Penalty for Violations in Months Subsequent to 5<sup>th</sup> Violation**

Category of Continuing Violations	Penalty per Additional Month
Major	\$10,000
Moderate	\$5,000
Minor	\$1,500

For example, five repeated Major violations of the same type and arising from the same factual circumstances would result in a penalty of  $\$15,000 * 5 = \$75,000$  (Table III-1). If the violations continue, the additional monthly penalty assessment would be triggered. For each month after the initial five violations occur, an additional penalty of \$10,000 would be added to the initial assessment of \$75,000 (Table III-2). The \$10,000 per month penalty could be increased if there are many violations per month or if the violations are egregious.

In summary, penalties for continuing violations should generally be calculated separately for each type of violation. Use the following steps to calculate penalties using this penalty method:

1. Determine if the violation is a Major, Minor, or Moderate violation.
2. Apply the appropriate penalty from Table III-1 for each of the first five violations arising from a common set of facts.
3. Calculate the continuing penalty assessment separately for each violation that continues, by using the appropriate figure from Table III-2, as adjusted, for each month the violation continues.

**Example #18: Programmatic Violations Using Continuing Violations Approach****Scenario:**

A refiner failed to use the regulatory test method to test a particular parameter for forty batches of gasoline over a three-month period. Assume the first five violations all take place in the first month.

**Calculation:**

Because the refiner's failure to use the regulatory test method reduces the EPA's ability to know whether the fuel at issue met the applicable standards, the violation would qualify as a **Major** violation.

The EPA would then consider the circumstances of the individual case to evaluate the culpability of the refiner and whether the refiner's failure to use the regulatory test method may have resulted in actual or potential serious or widespread harm. If the case specific circumstances demonstrate a low level of culpability and that the fuel at issue met the applicable standards and was used in the appropriate location, time period, or vehicle type, the EPA may apply this Policy as follows:

$$\text{Violations 1-5: } 5 * \$15,000 = \$75,000.$$

Violations of the same provision arising from the same factual circumstances for each month after the first month: \$10,000 per month, which may be adjusted upward due to the egregiousness of the violation (and the resources required to determine that no environmental harm resulted from the violations).

$$\text{Total: } \$75,000 + (\$10,000/\text{month} * 2 \text{ months}) = \$95,000.$$

The application of the continuing violations penalty approach may not be appropriate for all cases, and should not be used when it would fail to provide a sufficient deterrent. As discussed above, this approach should not be applied to cases involving highly culpable violators or to violations that caused an actual serious or widespread harm to human health or the environment. The graduated penalty approach also may not be appropriate for violations that present *potential* serious or widespread harm to human health or the environment. The EPA should evaluate these violations on a case-by-case basis to determine if it would be appropriate to apply the continuing violations penalty approach.

Examples of cases where it would generally not be appropriate to apply the continuing violations penalty approach include, but are not limited to: (1) refiners, importers, or other large companies whose violations arise from a gross failure to adequately invest in compliance assurance measures; (2) regulated parties that fail to file their attest engagement reports or annual reports; and (3) regulated parties with a substantial pattern and history of similar violations.

**Example #19: Programmatic Violations Using Continuing Violation Approach****Scenario:**

A refiner uses the proper test method, but without following that method's prescribed procedures. Assume that the use of the improper procedures creates little uncertainty of the test result. The refiner produced 150 batches of gasoline over a period of six months and failed to follow proper test procedures.

**Calculation:**

The refiner would be subject to penalties for 150 violations for each of its batches. If the EPA determined that the fuel at issue met the applicable standards, this would be a **Moderate** violation. If the EPA further determined that the case specific circumstances demonstrate a low level of culpability, the agency may apply the continuing violations penalty approach to this violation.

Violations 1-5:  $5 * \$7,500 = \$37,500$ .

Violations in months 2-6:  $5 * \$5,000 = \$25,000$ .

Total:  $\$37,500 + \$25,000 = \$62,500$  if there is no adjustment.

**3. Accounting for Ancillary Violations in Penalty Calculations**

The EPA anticipates that certain activities in violation of fuels regulations will constitute violations of several different requirements. In these cases, often one requirement that has been violated is more central to the environmental goals of the fuels program at issue than the other requirements. The violation that is more central can be considered the core violation, and the other violations are ancillary to the core violation.

Consider, for example, a refiner that reports to the EPA that the average benzene content of its gasoline meets the gasoline benzene standard when, in fact, the average benzene content of this gasoline exceeds the standard. This refiner would have violated the gasoline benzene standard. In addition, the refiner would have violated the reporting provision of the regulations which requires accurate reporting, and also may have violated the recordkeeping requirements. In this example, the violation of the gasoline benzene standard would be the core violation, and the reporting and recordkeeping violations would be ancillary.

The presumption in each case is that penalties for all violations will be included when calculating penalties. A penalty that includes separate amounts for each of the ancillary violations, however, could be larger than is necessary to recapture economic benefit and deter future violations. Therefore, in a case involving ancillary violations, and to the extent penalties for the core violation or violations are adequate to recapture economic benefit and provide for an appropriate gravity component, the litigation team should consider adjusting the penalty for the case by excluding or reducing the penalty for some or all of the ancillary violations when calculating the penalty. Any significant adjustments must be approved by management of the Air Enforcement Division and should be documented in the case file.



### C. Business Size Adjustment

Under the *Policy on Civil Penalties*, the first goal of penalty assessment is deterrence. The size of the violator's business is relevant to determining whether the penalty will have a sufficient deterrent effect, and is one of the considerations that Section 205(b) of the Act specifies should be taken into account when calculating a civil penalty. Under this Policy, the gravity component for Programmatic Violations should be reduced by up to 25 percent if the violator is a business with gross annual revenues under \$100,000,000.

### D. Calculate Preliminary Deterrence Amount for All Programmatic Violations

Under this Fuels Penalty Policy, the preliminary deterrence amount is the sum of the economic benefit and the gravity component, calculated as described above. To calculate the preliminary deterrence amount for all Programmatic Violations, add the economic benefit of all Programmatic Violations to the gravity component for all Programmatic Violations.

## IV. THE INITIAL PENALTY TARGET FIGURE

As discussed above, the *Policy on Civil Penalties* provides that the preliminary deterrence amount is the sum of the economic benefit penalty component and the gravity penalty component for any fuel Standard Violation plus the sum of the economic benefit penalty component and the gravity penalty component for any Programmatic Violation, each calculated as described in this Policy.

In addition to deterrence, however, another goal of the *Policy on Civil Penalties* is the equitable treatment of the regulated community. Penalty policies must have enough flexibility to account for the unique facts of each case and, at the same time, produce results that are consistent for similar violations. This is accomplished by identifying many of the legitimate differences between cases and providing guidelines for adjusting either the gravity component or the economic benefit. Applying these adjustments prior to commencement of negotiation yields the initial penalty target figure. During the course of negotiations, the litigation team may further adjust this figure to yield the adjusted penalty target figure.

Consistent with the *Policy on Civil Penalties*, this section of the Fuels Penalty Policy discusses the application of adjustment factors to promote flexibility that will promote consistency. These factors are: degree of willfulness or negligence, degree of cooperation or non-cooperation, and the violator's history of noncompliance.<sup>65</sup> These adjustment factors apply only to the gravity component and not to the economic benefit component. Violators bear the burden of justifying mitigation adjustments they propose based on these factors. Adjustments to the economic benefit component of the penalty are discussed in Section IV.E.

This Policy specifies the maximum percentage by which the penalty can be adjusted for each factor. The litigation team has discretion to select the adjustment percentage for each factor, within the specified ranges, based on the facts unique to each case. In some cases, the litigation team may determine it is not appropriate to adjust the gravity component of the penalty for any or all of these factors. The rationale for the application of these factors should be described in the case documents.

---

<sup>65</sup> In addition, the violator's ability to pay, litigation risk or other unique case-specific factors may also bear upon the final penalty. These factors are discussed in Sections V and VI.

Adjustments that are greater than the maximum percentages are possible in the case of unusual circumstances and must be approved by the Director of the Office of Civil Enforcement.

#### **A. Degree of Willfulness or Negligence**

The Clean Air Act is a strict liability statute for civil actions, so willfulness, or lack thereof, is irrelevant to the determination of liability. Nevertheless, a violator's willfulness or negligence should be considered in the evaluation of the gravity-based portion of the penalty. Because the Act is a strict liability statute, a violator's willfulness or negligence can only result in an increase, not a decrease, in the gravity component of a penalty.

In assessing the degree of willfulness or negligence, all the following factors should be considered:

- The degree of control the violator had over the events constituting the violation.
- The foreseeability of the events constituting the violation.
- The level of sophistication within the industry in dealing with compliance issues (e.g., most refiners would be considered sophisticated; sole proprietors of retail outlets may not be sophisticated).
- The extent to which the violator knew of the legal requirement that was violated.

Lack of knowledge of the legal requirement should never be used as a basis to reduce the gravity-based portion of the penalty. To do so would encourage ignorance of the law. Rather, knowledge of the law should serve only to enhance the penalty.

Under this Policy, the litigation team has the discretion to increase the gravity-based portion of the penalty by up to 20 percent to reflect degree of willfulness or negligence. The basis for the level of this adjustment should be described in the case documents.

#### **B. Degree of Cooperation**

The *Policy on Civil Penalties* provides that penalties should reflect the degree of cooperation or non-cooperation of the violator in remedying the violation. Specifically, the extent to which a violator remedies the violation should be considered in determining the adjusted gravity component of a penalty, particularly where the environmental problem is corrected immediately upon discovery of the violation by the regulated entity. Adjustments are based on both the goals of equitable treatment and swift resolution of environmental problems.

In general, penalties should be smaller for violators that take effective steps to promptly remedy any violation upon discovery of the noncompliance. In the context of violations of the mobile source fuels requirements, the resulting excess emissions often depend on whether, and how much of, the noncompliant fuel is dispensed into vehicles. Examples of actions that show cooperation or steps to remedy a violation include, but are not limited to:

1. Implementing remedial measures that prevent or limit the distribution of noncompliant fuel before it is completely dispensed (e.g., by locking pumps at a retail outlet preventing further sale of the fuel).

2. Implementing remedial measures to remove noncompliant gasoline from retail outlets and vehicles where possible (or to re-blend the gasoline so that it meets standards), and taking actions to assure that no further noncompliant fuel is distributed.
3. Taking steps to correct the conditions that gave rise to the violation and steps to prevent future violations.

The gravity penalty component may be mitigated in instances where appropriate, effective remedial actions are taken promptly, including actions to stop on-going violations and to prevent future violations. Overall, the gravity portion of the penalty may be reduced by up to 20 percent if the violations were not willful, prompt remedial action was taken (including removing noncompliant gasoline from the distribution system, where possible), strong efforts to prevent future violations were made, and where the violator is fully cooperative.

The gravity component may be mitigated if a violator promptly reports its noncompliance to the EPA where there is no legal obligation to promptly report. Normally this factor is considered under the terms of the EPA Audit Policy.<sup>66</sup> In cases where the audit policy does not apply, self-reporting can still be considered under this policy.

The gravity penalty may be increased due to aggravating factors such as failure to take appropriate action after the violation is discovered or failure to negotiate in good faith. The litigation team may increase the gravity component by up to 20 percent when appropriate remedial action is not taken or if the remedial action is ineffective.

### C. History of Noncompliance

This factor may be used only to increase a penalty. Evidence that a party has previously violated requirements under Title II of the Act indicates that the party was not sufficiently deterred by the previous government enforcement response. This is particularly true if the previous violation was recent and if the previous violation was of a similar or related requirement. In determining the size of the adjustment, the litigation team should consider the following points:

- Similarity of the violation in question to the prior violation.
- Time elapsed since the prior violation.
- The number of prior violations.
- Violator's response to the prior violation in taking steps to correct the previous violations and taking steps to prevent future violations.

In the case of violations of the fuels regulations, a "similar" violation is one that involves any violation of the fuels requirements under Title II of the Act or the regulations implementing those requirements.

For purposes of this section, a "prior violation" includes any act or omission resulting in an enforcement response from the EPA (e.g., notice of violation, warning letter, administrative order, field citation, complaint, consent decree, consent agreement, or judicial order or judgment) unless subsequently

---

<sup>66</sup> The EPA policy "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations," allows for a reduction in the gravity component of a civil penalty if the violator meets specific requirements for self-disclosure. 65 Fed. Reg. 19,618 (Apr. 11, 2000) (Audit Policy).

dismissed or withdrawn on the grounds that the party was not liable.<sup>67</sup> It also includes any act or omission for which the violator has previously been given written notification, however informal, that the agency believes a violation existed. In cases where several similar violations have occurred but there has been no previous enforcement response, the litigation team would not normally increase the penalty for prior violations, but would assign the appropriate penalty to each of the violations. The litigation team may consider that the presence of multiple similar violations may indicate willfulness or negligence.

In the case of a large business with many divisions, subsidiaries, or affiliates, it is sometimes difficult to determine whether a previous instance of noncompliance should trigger the adjustment for previous violations. In general, the litigation team should begin with the assumption that if the same parent entity controlled both the organization with the prior violation and the organization with the current violation, the adjustment for history of noncompliance should apply, unless the violator can demonstrate there was no control or oversight of the organization in question. Under this Policy, the litigation team has discretion to increase the gravity-based portion of the penalty up to 35 percent for one prior violation, and up to 70 percent for more than one prior violation. The litigation team should evaluate the considerations discussed above, such as how similar the prior violation was and how long ago it occurred, when determining the percentage that is appropriate in any particular case. The basis for this adjustment should be described in the case documents.

#### **D. Other Unique Factors**

A case may present other factors that the litigation team believes justify a further increase or decrease of the gravity component of a penalty. For example, a case may have particular strengths or weaknesses that the litigation team believes have not been adequately captured in other areas of this Policy. For example, if the facts of the case or the nature of the particular regulatory requirement at issue reduce the strength of the agency's case, this could justify an additional penalty reduction. Under this Penalty Policy, the litigation team has discretion to increase or decrease the gravity component of the penalty by up to 10 percent to reflect litigation risk or other unique factors.

The basis for the level of this adjustment should be described in the case documents. Adjustments greater than 10 percent are possible based upon considerations such as those discussed above, but larger adjustments must be approved by the Director of the Office of Civil Enforcement.

There may be other circumstances in which the facts of a particular case warrants consideration of other factors not specifically identified or discussed in this Policy, or the adjustment based on listed factors at a percentage or in a manner different than described in this Policy.

#### **E. Settling Cases for Less Than the Economic Benefit of Noncompliance**

Resolving a case for an amount that does not remove the economic benefit of noncompliance can encourage noncompliance. For this reason, it is general agency policy not to settle for less than this amount. In the rare situation where settling for less than economic benefit may be appropriate, the litigation team must detail those reasons in the case file and in any memoranda accompanying a proposed settlement. Any proposed penalty that would not recover the economic benefit of noncompliance from a violator must be approved by the OECA Assistant Administrator.

---

<sup>67</sup> "Prior violations" also include self-disclosures, regardless of whether the EPA initiates any enforcement response.

## V. ABILITY TO PAY

This Fuels Penalty Policy incorporates the EPA's policies and models regarding ability to pay and ability to continue in business.<sup>68</sup> The EPA's policies and procedures regarding the evaluation of an ability to pay claim are set forth in the *Policy on Civil Penalties* and are expanded upon in PT.2-1: Guidance on Determining a Violator's Ability to Pay a Civil Penalty (December 16, 1986) (Previously codified as GM 56), and *Guidance on Evaluating a Violator's Ability to Pay a Civil Penalty in an Administrative Enforcement Action* (June 29, 2015) (collectively, the Ability to Pay Policies). The case team should consult the Ability to Pay Policies early in the case development process to identify and evaluate any potential ability to pay issues.

When it is determined that a violator cannot afford the penalty, the following options may be considered:

- **Delayed Payment Schedule:** A violator may not have the financial resources necessary to pay the full penalty amount as a one-time payment, but would be able to pay this amount over a period of months or years. Administration of time-payments is a burden on the agency, so this option should be considered only if the agency is convinced it is not possible for the violator to obtain the funds necessary to pay the full penalty through borrowing money or the sale of assets. If time-payments are used, the violator should pay the largest possible amount of the penalty at the time the case is resolved to reduce the amount of the delayed payments, and the duration of the time-payments should be no longer than is necessary. In any case where time-payments are used, the amount of any delayed payments should be increased to include interest on the delayed payments.
- **Penalty Reductions:** This approach should only be considered as a last resort. The reasons for the litigation team's conclusions as to the size of the necessary reduction should be included in the case file.

## VI. ADJUSTMENTS TO THE INITIAL PENALTY TARGET FIGURE AFTER NEGOTIATIONS HAVE BEGUN

During the course of settlement negotiations, the litigation team can learn information that will cause the team to reevaluate the facts used to calculate the initial penalty target figure for the case. If this occurs, the penalty should be recalculated to reflect this new information. This new information could affect the following areas: ability to pay, adjustments used in calculating the initial penalty target figure, and preliminary deterrence amount to reflect continued periods of noncompliance not reflected in the original calculation. The initial penalty target figure, when further adjusted during negotiations based on this new information, yields the adjusted penalty target figure.

---

<sup>68</sup> The EPA models for determination of ability to pay can be found at: <http://www2.epa.gov/enforcement/penalty-and-financial-models>.

## APPENDIX 1. ANNUAL AVERAGE STANDARD CALCULATIONS

This appendix provides guidance for calculating the values to apply to the Penalty Policy tables relating to violations of annual average standards.

### A. Gasoline Annual Average Benzene Standard

Equation 1 is used to determine the adjusted annual average benzene concentration ( $B_{\text{avg,BC}}$ ) to apply in Table II-1. Because compliance with 0.62 volume percent annual average benzene standard is determined by using the equation in 40 C.F.R. § 80.1240 to compare the actual compliance benzene value for the averaging period to the allowable benzene value for the compliance period, rounding does not apply to the calculated benzene level used in Table II-1.

$$\text{Equation 1} \quad B_{\text{avg,BC}} = \frac{\text{CBV}_y}{V_y} \times 100$$

Where:

$B_{\text{avg,BC}}$  = Adjusted annual average benzene concentration (volume percent) after benzene credit application<sup>1</sup>

$\text{CBV}_y$  = Compliance benzene value for Averaging Period  $y$  (gallons benzene) (40 C.F.R. § 80.1240(a)(1)(i))

$V_y$  = Total gasoline volume produced at the refinery or imported during Averaging Period  $y$  (gallons) (40 C.F.R. § 80.1235)

### B. Gasoline Maximum Annual Average Benzene Standard

The equation at 40 C.F.R. § 80.1238(a) is used to calculate the annual average benzene concentration ( $B_{\text{avg}}$ ) to apply in Table II-2. Because compliance with the maximum annual average benzene standard is determined by comparing  $B_{\text{avg}}$  to the maximum standard of 1.30 volume percent, the rounding methods at 40 C.F.R. § 80.9 should be applied.

### C. Gasoline Annual Average Sulfur Standard

Equation 2 is used to determine the adjusted annual average sulfur level ( $S_{\text{avg,UC}}$ ) to apply in Table II-4. Because compliance with this standard is based on comparing the adjusted annual average sulfur level with the 30 ppm annual average standard at 40 C.F.R. § 80.195(a)(1), the rounding methods at 40 C.F.R. § 80.9 should be applied.

---

<sup>1</sup> See discussion in Section II.B.2.a. for treatment of consecutive year deficits.

$$\text{Equation 2} \quad S_{\text{avgUC}} = S_{\text{avg}} - \frac{SC_{\text{used}}}{V_y}$$

Where:

- $S_{\text{avg,UC}}$  = Adjusted annual average sulfur level the for Averaging Period y after application of used credits (ppm)
- $S_{\text{avg}}$  = Annual average sulfur level the for Averaging Period y before application of credits (40 C.F.R. § 80.205(a))
- $SC_{\text{used}}$  = Number of credits used by the refiner for Averaging Period y to adjust their annual average sulfur level to meet the 30 ppm annual average standard (40 C.F.R. §§ 80.195(b)(3) and 80.415(f))
- $V_y$  = Total gasoline volume produced at the refinery or imported during Averaging Period y (gallons) (40 C.F.R. § 80.200)

#### D. Gasoline Annual Average RFG VOC Standard

Equation 3 is used to determine the difference (or delta) between the annual average VOC performance standard and the actual annual average VOC performance ( $VOC_{\text{delta}}$ ) to apply in Table II-7. Because compliance is determined using the equation at 40 C.F.R. § 80.67(g)(3), rounding does not apply to the calculated VOC delta used in Table II-7.

$$\text{Equation 3} \quad VOC_{\text{delta}} = \frac{VOC_{\text{comp}} - VOC_{\text{Act}}}{V_y}$$

Where:

- $VOC_{\text{delta}}$  = Difference between the annual average VOC performance standard and the actual annual average VOC emissions reduction (percent reduction)
- $VOC_{\text{Comp}}$  = Compliance VOC emissions reduction performance required for the averaging period (percent reduction gallons) (40 C.F.R. § 80.67(g)(1)(i)(A))
- $VOC_{\text{Act}}$  = Actual VOC emissions reduction performance for the averaging period (percent reduction gallons) (40 C.F.R. § 80.67(g)(1)(i)(C))
- $V_y$  = Total RFG or reformulated blendstock for oxygenate blending (RBOB) volume (gallons) produced at the refinery or imported during Averaging Period y (40 C.F.R. § 80.67)