# **Chapter VII: Regulatory Flexibility**

This chapter presents our Initial Regulatory Flexibility Analysis (IRFA) which evaluates the impacts of the proposed heavy-duty engine standards and diesel fuel sulfur standards on small businesses. This analysis has the following objectives: 1) to specify an appropriate definition for "small business" for entities subject to the final rule, 2) to characterize, if applicable, small businesses in the petroleum refining and heavy-duty engine and motor vehicle manufacturing industries, 3) to assess the impact of the proposed standards on these businesses, and 4) to evaluate the relief provided by potential regulatory alternatives.

## A. Requirements of the Regulatory Flexibility Act

When proposing and promulgating rules subject to notice and comment under the Clean Air Act, we are generally required under the Regulatory Flexibility Act (RFA) to conduct a regulatory flexibility analysis unless we certify that the requirements of a regulation will not cause a significant impact on a substantial number of small entities. For a proposed rule, this analysis is called an Initial Regulatory Flexibility Analysis (IRFA). The key elements of the IRFA include:

- the number of affected small entities;
- the projected reporting, record keeping, and other compliance requirements of the proposed rule, including the classes of small entities that would be affected and the type of professional skills necessary for preparation of the report or record;
- other federal rules that may duplicate, overlap, or conflict with the proposed rule; and,
- any significant alternatives to the proposed rule that accomplish the stated objectives of applicable statutes and which minimize significant economic impacts of the proposed rule on small entities.

The RFA was amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), to ensure that concerns regarding small entities are adequately considered during the development of new regulations that affect them. In developing this NPRM, we concluded that the proposed heavy-duty engine and diesel fuel sulfur standards would likely have a significant impact on a substantial number of small entities. As discussed in more detail below, we identified several categories of small entities associated with diesel fuel production or distribution. To our knowledge, no manufacturers of heavy-duty engines meet the Small Business Administration (SBA) definition of a small business.

To comply with the requirements of the RFA, we were required to quantify the economic

impacts on the identified small entities. Using the methodology discussed in Chapter V, we determined the refinery costs for average size refineries and small refiners to produce low sulfur diesel fuel. Chapter V also contains our estimation of diesel distribution costs, which, for the entire diesel system, including pipeline and tank wagon deliveries, we estimate will increase, at most, by 0.2 cents per gallon.

Based on the results of our economic analyses, we convened a Small Business Advocacy Review Panel (the Panel), as required by SBREFA. The Panel's purpose was to collect the advice and recommendations of small entity representatives (SERs) that would be affected by the proposed standards. The report of the Panel has been placed in the rulemaking record.

# **B.** Description of Affected Entities

Our proposed program would establish stringent heavy-duty engine standards and require reductions in diesel fuel sulfur content and would primarily affect manufacturers of heavy-duty engines and petroleum refiners that produce diesel. Most companies in these industries do not meet the small business definitions provided in the U.S. Small Business Administration (SBA) regulations (13 CFR Part 121). However, we have identified several business entities involved with diesel production, distribution, or marketing that do meet the applicable SBA small business definitions. These businesses may be directly affected by the diesel fuel sulfur standards. Table VII-1 below describes the affected industries, including the small business size standards SBA has established for each type of economic activity under the Standard Industrial Classification (SIC) and North American Industrial Classification (NAIC) systems. In this table, all the industry categories listed below the "Petroleum Refiner" category have some role in either distributing and/or marketing highway diesel fuel.

Table VII-1. Industries Containing Small Businesses Potentially Affected by Today's Proposed Rule

Industry	NAICS <sup>a</sup> Codes	SIC <sup>b</sup> Codes	Defined by SBA as a Small Business If: <sup>c</sup>
Petroleum Refiners	324110	2911	≤1500 employees
Refined Petroleum Pipelines	486910	4613	≤1500 employees
Petroleum Marketers and Distributors	422710 422720	5171 5172	≤100 employees
Other Terminals: Special Warehousing and Storage	493110 493190	4226	≤\$18.5 million
Fuel Oil Dealers	454311	5983	≤\$9 million
Petroleum Retailers	447110 447190	5541	≤6.5 million

#### 1. Small Refiners

We have identified several refiners that produce highway diesel fuel and meet the SBA definition for a small petroleum refiner (Standard Industrial Classification (SIC) 2911), that is, having 1500 or fewer employees. These refiners, 22 out of the 127 refineries which produce highway diesel (there are about 158 refineries in the U.S. today), have a combined total of 26 refineries, and produce roughly four percent of highway diesel fuel.

Under the proposed diesel sulfur control program, some small refiners could have greater difficulty than larger refiners in complying with the diesel sulfur standard due to such factors as limited operational flexibility, lack of access to alternate crude oil feedstocks, limited availability of new sulfur reduction equipment, or difficulty is raising capital to finance projects.

<sup>&</sup>lt;sup>a</sup>North American Industry Classification System

<sup>&</sup>lt;sup>b</sup>Standard Industrial Classification System

<sup>&</sup>lt;sup>c</sup>According to SBA's regulations (13 CFR 121), businesses with no more than the listed number of employees or dollars in annual receipts are considered "small entities" for purposes of a regulatory flexibility analysis.

## 2. Small Distributors/Marketers of Highway Diesel Fuel

Under the regulations as proposed, the distribution system would experience little impact, since a single fuel system, that is, a single grade of highway diesel fuel, is in use today. And, while we are seeking comment on an alternative that would allow certain small refiners to continue producing 500 ppm diesel fuel after mid-2006, we do not expect small diesel distributors or marketers to be significantly affected by this alternative because small refiners would be required to demonstrate assurance that the distribution system has the ability and commitment to effectively keep the high sulfur product segregated prior to obtaining approval from EPA to produce 500 ppm fuel.

In the proposed rule, we are also seeking comment on various alternatives for phasing in the fuel program. A phase-in approach to implementing the diesel sulfur rule would affect both small refiners and downstream parties. However, under a phase-in approach, it is possible that small refiners might not be subject to additional regulation except insofar as they would be required to meet an ultimate low sulfur fuel standard, once they chose to begin production of that fuel. Instead, all parties in the highway diesel distribution system would be faced with a decision of whether or not to carry both grades of highway diesel fuel, which could entail adding additional tankage or making other changes at their facilities. Further, depending on the program design, some retailers could be required to make low sulfur fuel available. Retailers also could be required to install a unique nozzles to inhibit misfueling of advanced technology diesel vehicles.

## C. Projected Costs of the Proposed Diesel Sulfur Standards

Our preliminary estimate of an "average" refinery cost associated with the production of low sulfur highway diesel fuel meeting a 15 ppm cap is 4.2 cents/gallon (including the need for any lubricity additives). For a typical small refiner, costs could be as much as 50 percent higher. Our methodology, including a comparison to recent industry estimates, is described in Chapter V.

# D. The Types and Number of Small Entities to Which the Proposed Rule Would Apply

The types and number of small entities to which the proposed rule would apply are described in Table VII-2 below. Under today's proposal, the only small entities likely to be significantly affected are small refiners, since they would have to make capital investments in desulfurization

<sup>&</sup>lt;sup>d</sup>This cost estimate does not include the costs associated with distribution, which we estimate as an additional 0.2 cents/gallon.

technology to meet the proposed sulfur standards for highway diesel fuel. Small refiners might also be subject to new sulfur reporting and record keeping requirements. However, because such new record keeping and reporting requirements would be fairly minimal, we expect that they would not represent a significant burden.

No new reporting requirements are proposed for small diesel marketers and distributors. However, new record keeping requirements are proposed for such parties. The main category of the new records that would need to be kept are product transfer records that document the party's transfers of diesel fuel. These records would be needed to demonstrate the segregation of low sulfur highway diesel fuel throughout the distribution system. Such transfer records are currently maintained by most parties for business and/or tax reasons. In addition, the proposed record keeping requirements for downstream parties are fairly consistent with those in place today under other EPA fuel programs, including the current highway diesel fuel program. Therefore, we expect that the proposed new record keeping requirements for downstream parties would not impose a significant burden.

Table VII-2. Types and Number of Small Entities to Which the Proposed Diesel Sulfur Standards

Type of Small Entity	Number of Companies Affected by Today's Proposed Rule
Small Refiners	Approximately 22
Small Diesel Marketers and Distributors	Several Thousand

# E. Projected Reporting, Recordkeeping, and Other Compliance Requirements of the Proposed Rule

The proposed rule would create a national, industry-wide 15 ppm per-gallon sulfur cap standard for highway diesel fuel. Mandatory sampling and testing of every batch of diesel fuel would not be required of any party. This is a different approach than that taken under the recently finalized regulation of gasoline sulfur, which does require refiners to test every batch of gasoline for sulfur content. Under the diesel proposal, if any party chooses to perform testing of the fuel (such as for quality assurance purposes), it would be required to maintain records of such test results. The benchmark sampling and sulfur test procedure proposed for such testing in the diesel fuel NPRM is fundamentally the same as that under the gasoline sulfur regulation. Refiners as well as diesel distributors and marketers would be required to keep records primarily consisting of product transfer documents (PTDs), which document the party's diesel fuel transfers. Such records are already maintained by most parties for business or tax purposes.

Retailers and wholesale purchaser-consumers who offer for sale nonroad fuel would be required to label each nonroad fuel pump, indicating that the pump contains high sulfur fuel not to be used in any highway motor vehicle, and noting that the use of such fuel in highway vehicles may damage emission controls, harm engine operations, or void the emissions warranty. The proposed regulation includes the specific language such labels would need to include.

We are proposing that any additives (e.g., kerosene) used in highway diesel fuel would be required to meet the same 15 ppm standard proposed for on highway diesel fuel. To help ensure this, we are proposing that kerosene or other additives meeting the 15 ppm standard, and distributed for use in motor vehicles would be required to be accompanied by PTDs accurately stating that the additive meets the 15 ppm standard. This issue, as well as alternative approaches to addressing additives, is discussed further in the preamble to the proposed rule.

As described in section G, below, there may be additional record keeping and reporting requirements for small refiners that choose to produce 500 ppm sulfur highway diesel after 2006, if that option is promulgated in the final rule. However, based on information received from the SERs, we do not believe that these additional record keeping and reporting requirements would be burdensome to small refiners.

# F. Other Relevant Federal Rules Which May Duplicate, Overlap, or Conflict with the Proposed Rule

The heavy duty engine and diesel sulfur standards that we are proposing are similar in many respects to existing regulations; in some cases, these regulations are replacing earlier requirements with more stringent requirements for refiners and engine manufacturers. However, EPA is not aware of any area where the new regulations would directly duplicate, overlap or conflict with existing federal, state, or local regulations.

Several small refiners commented that they will be making substantial investments to comply with our proposed gasoline sulfur control program. Several small refiners also noted that they have made substantial investments and operating changes to meet requirements for reformulated gasoline and 500 ppm highway diesel (or, in the case of California small refiners, 500 ppm highway and off-highway diesel fuel).

We also note that more stringent diesel sulfur standards would likely require many refiners to obtain permits from state and local air pollution control agencies under the Clean Air Act's New Source Review program prior to constructing the desulfurization equipment needed to meet the standards.

# G. Regulatory Alternatives

The Panel considered a wide range of options and regulatory alternatives for providing small businesses with flexibility in complying with potential diesel fuel sulfur standards. As part of the SBREFA process, the Panel requested and received comment on several compliance flexibilities that were suggested by the SERs and Panel members. Taking into consideration the comments received on these ideas as well as additional business and technical information gathered about the affected small entities, the Panel recommended that we seek comment on three of them (described in Sections G.1 through G.3 below). In addition, Sections G.4 through G.6 describe other potential options that might provide flexibility to small refiners in complying with the program.

## 1. Allow Small Refiners to Continue Selling 500 ppm Highway Diesel

The first option for small refiner flexibility on which we are seeking comment would allow small refiners to continue selling their current 500 ppm highway diesel, provided there are adequate safeguards to prevent contamination and misfueling. This option would effectively delay the ultralow sulfur compliance date for small refiners, and allow them to continue selling their current fuel to the highway diesel market. Under this approach, retailers would not have an availability requirement; rather, retailers would be free to choose to sell only 500 ppm fuel (from small refiners), only ultra-low sulfur fuel, or both.

The Panel also recommended that we seek comment on an appropriate duration for this option. For example, the Panel recommended that we seek comment on the need for, and appropriateness of, an unlimited exemption, as well as whether such an exemption should be limited to a specific timeframe (e.g., two or four years). We note that by limiting this flexibility to two years, for example, during which time the new vehicle fleet would still be relatively small, the potential for additional misfueling would be bounded. We also question how long this flexibility option may remain viable, since many small refiners commented during the Panel process that they do not expect markets for the 500 ppm fuel to remain after larger refiners begin producing exclusively ultra-low sulfur fuel. Nevertheless, in the proposed rulemaking we will request comment on the need for, and potential impacts of, a longer exemption. A longer duration for this flexibility option would give participating refiners more time to stagger their diesel desulfurization investments. The potential vehicles affected by misfueling or contamination would still be fairly limited under this approach, since small refiners produce only approximately four percent of all the highway diesel fuel produced in the U.S. Moreover, the potential for misfueling would be further limited because most small refiners distribute highway diesel in a fairly local area. (Some small refiners, however, distribute a portion of their diesel fuel outside their local area via pipeline or barge. See further discussion below about the potential need to prohibit pipeline/barge shipments of 500 ppm highway diesel under this option). An unlimited exemption would allow the market to determine the duration of flexibility provided to small refiners. There would be diminishing returns to small refiners from such an option over time, as a growing portion of the vehicle miles traveled

would be from vehicles with emission control devices requiring ultra-low sulfur.

To ensure that this flexibility option would not compromise the expected environmental benefits of today's proposal, there would have to be certain safeguards with refiners as well as downstream parties to prevent contamination of the ultra-low sulfur fuel, and to prevent misfueling of new vehicles. The program would need to be structured with certain safeguards to prevent misfueling and contamination of the ultra-low sulfur fuel. For example, the following safeguards may be appropriate:

- -- Small refiners could make an initial demonstration to EPA of how they will ensure the fuel remains segregated through the distribution system to its end use.
- -- Small refiners could be prohibited from distributing 500 ppm highway diesel via pipeline or barge. As the fuel is piped or barged to locations further from the refinery, it would likely become more difficult to ensure proper segregation and labeling. We have learned through the Panel process that most small refiners distribute highway diesel in a fairly local area; it appears that only a few small refiners distribute highway diesel via pipeline or barge. All small refiners (even those that distribute highway diesel via pipeline or barge) also distribute fuel to the local area, which should provide adequate potential markets for the 500 ppm fuel.
- -- There could be some general requirements on any entities carrying the fuel downstream of the refiner, such as a condition to keep the fuel segregated and maintain records (e.g., product transfer documents).
- -- Retailers who choose to sell the 500 ppm fuel could be required to label pumps, clearly indicating that the fuel is higher sulfur and should not be used on new (e.g., 2007 model year or later) diesel vehicles.

We would also need to prevent small refiners from increasing the refinery's production capacity (selling 500 ppm highway diesel under such a program) without also increasing the refinery's desulfurization capacity. Specifically, we will explore whether it would be appropriate and necessary to limit the volume of 500 ppm highway fuel produced by a refinery owned by a small refiner to the lesser of: 1) 105 percent of the highway volume it produced on average in 1998 and 1999; or 2) the volume of highway diesel fuel produced from crude oil on average in the calendar year.

We believe that safeguards such as these would add minimal burden on small refiners or any party choosing to distribute or sell small refiner highway diesel, but would be critical to preventing misfueling and potential damage to new vehicles – and thus critical to preserving the environmental benefits of the program. These types of safeguards are typical of EPA fuel programs where more than one fuel is introduced into commerce.

We also would need to ensure that this type of flexibility would not result in lack of

availability of low sulfur highway diesel in markets served primarily by small refiners. We will explore whether there is a potential for lack of availability of the low sulfur fuel under this approach and, if so, how to prevent this.

Finally if such a flexibility option is promulgated under the final rule, EPA would envision considering a refiner as a small refiner if both of the following criteria are met:

- -- No more than 1500 employees corporate-wide, based on the average number of employees for all pay periods from January 1, 1999 to January 1, 2000.
- -- A corporate crude capacity less than or equal to 155,000 barrels per calendar day (bpcd) for 1999.

This is the definition of small refiner recently promulgated under the Tier 2/gasoline sulfur program.

### 2. Temporary Waivers Based on Extreme Hardship Circumstances

Second, the Panel recommended that we seek comment on an option that would provide a process for all domestic and foreign refiners, including small refiners, to seek case-by-case approval of applications for temporary waivers to the diesel sulfur standards, based on a demonstration of extreme hardship circumstances. This option is similar to the general hardship provision in the recently promulgated gasoline sulfur program. Under this option, any refiner may request additional regulatory flexibility based on a showing of unusual circumstances that result in extreme hardship and significantly affect the refiner's ability to comply by the applicable date, despite its best efforts. This option could be implemented in addition to or in place of the first option described above.

In our evaluation of hardship applications, we would consider a variety of factors, including but not limited to the following:

- total crude capacity of the refinery and its parent corporation,
- refinery configuration
  - unique or atypical,
  - the volume of highway diesel that is produced using an FCC unit
  - hydrotreating capacity relative to total crude capacity
  - highway diesel production relative to other refinery products
- severe economic limitations (demonstrated inability to raise the capital necessary to make desulfurization investments by the compliance date, which could be shown by an unfavorable bond rating, inadequate resources of the refiner and its parent and/or subsidiaries, or other relevant factors)
- where the highway diesel would be sold

• any other factors that prevent compliance in the lead time provided,

In the NPRM, we are seeking comment on whether these factors are appropriate and if there are other factors that we should consider. Under this option, we envision that refiners would need to apply for a waiver within approximately nine months after promulgation of the final rule. In addition, applicants would need to submit a plan demonstrating how the standards would be achieved as expeditiously as possible. The plan would need to include a timetable for obtaining the necessary capital, contracting for engineering and construction resources, and obtaining permits. Once all applications were received, we would consider the appropriate process to follow in reviewing and acting on applications, including whether to conduct a notice and comment decision-making process. We would review and act on applications, and, if a waiver is granted, would specify a time period for the waiver.

The Panel also recommended that we seek comment on how such a hardship provision could be administered in a manner that provides the most certainty to small refiners regarding any potential hardship relief, well in advance of the compliance deadline. Specifically, the Panel recommended that we request comment on an appropriate timeframe within which the Agency should respond to hardship applications (for example, one year from the date of receipt). During the Panel process, small refiners commented that they need certainty as to their regulatory requirements, and any flexibilities, well in advance of compliance dates so that they can seek financing.

We would administer any hardship provision in a manner that continues to ensure the environmental benefits of the regulation because of the significant environmental benefits of lowering sulfur in highway diesel fuel. To limit the potential environmental impact of this hardship provision, we would reserve the discretion to deny applications where we find that granting a waiver would result in an unacceptable environmental impact. While any hardship determination would be made on a case-by-case basis, we would not anticipate granting waivers that apply to more than a minimal amount of the total national pool of highway diesel fuel, or to more than a minimal percentage of the highway diesel supply in an area with significant air quality problems. The level of this minimal amount of fuel would be considered in light of any additional flexibility options provided for small refiners.

As a condition of any waiver granted, we would likely impose other reasonable requirements, such as anti-backsliding requirements to ensure no deterioration in the sulfur level of highway diesel fuel produced, or limitations on the volume of highway diesel fuel produced under the waiver (e.g., at or near current production levels). This latter measure would prevent refiners from increasing the refinery's production capacity without also increasing the desulfurization capacity. We also would explore whether it would be necessary to limit the volume of highway diesel produced by a refinery covered by a hardship waiver to the lesser of: 1) 105 percent of the highway volume it produced on average in 1998 and 1999; or 2) the volume of highway diesel fuel produced from crude oil on average in 1998 and 1999.

To ensure that the program achieves the potential environmental benefits of the program,

recognizing the constraints it places on any flexibility, we currently believe that it would be necessary to segregate the fuel pool for any highway diesel fuel sold under an approved hardship waiver. Consequently, any additional compliance flexibilities would carry with them certain safeguards for preventing contamination and misfueling. More detail on the possible compliance measures can be found in the discussion of the first option, above.

### 3. 50 ppm Sulfur Cap for Small Refiners

Finally, the Panel recommended that we request comment on a 50 ppm cap for small refiners, as well as any underlying data and analyses that would be relevant to a final decision about this approach. However, as described in other Chapters of this RIA, EPA has serious concerns about the environmental impacts and catastrophic engine damage associated with the introduction of diesel fuel that would meet a 50 ppm cap requirement. During the Panel process, small refiners expressed strong concern about their ability to meet a sulfur cap in the range proposed. Several small refiners commented that capital, operating, and maintenance costs of meeting a 50 ppm cap are significantly less than the costs of meeting more stringent standards. Because small refiners produce relatively smaller volumes, their capital (and other fixed) costs per barrel produced are significantly higher than their larger competitors. They also cannot take advantage of the significant economies of scale that exist in the refining industry.

One small refiner commented during the Panel process that small refiners produce such a small percentage of total highway diesel in the country (approximately four percent) that it could be blended with the remaining 96 percent of ultra-low sulfur diesel with no impact on the diesel aftertreatment technologies. However, we seriously doubt whether small refiners' 50 ppm fuel could simply be "blended away" with ultra-low sulfur fuel in the distribution system downstream of the refiner. Information submitted by small refiners indicates that most sell highway diesel fuel directly via the refinery rack, for distribution to local truck stops, service stations, and fleet customers. Only a few small refiners distribute highway diesel via pipelines. Therefore, small refiners' highway diesel fuel indeed does go directly into vehicles, and commonly would not be "blended" to a significant extent with other refiners' fuel after it left the refiner's control. Based on the high sulfur sensitivity of the diesel aftertreatment devices, as described above, we doubt whether this approach would accomplish the environmental objectives of the program as well as prevent catastrophic engine damage related to the higher sulfur fuel. We are proposing that the aftertreatment technology necessary to achieve the proposed standards require no greater than 15 ppm sulfur diesel fuel. If after receiving public comment on the proposal, we find that a different sulfur standard is required, we may change the standard for the final rule. Nevertheless, we plan to seek comment in the proposed rule on a 50 ppm cap for small refiners, and on any underlying data and analyses that would be relevant to a decision in the final rule on whether to incorporate a 50 ppm cap for small refiners.

## 4. Refiner Compliance Flexibility

In the NPRM, we are seeking comment on a voluntary compliance flexibility that would allow refiners to continue producing fuel at the 500 ppm level for a fraction of their total highway diesel fuel volume in the first few years of the program. The fraction of 500 ppm fuel allowed to be produced by refiners would phase-down over a period of several years. Specifically, we are requesting comment on the fraction of highway diesel fuel allowed to be produced as 500 ppm fuel beginning in 2006. In the NPRM, we illustrate several possible scenarios for the fraction of highway diesel allowed to be produced as 500 ppm in the first several years of the program. The level at which this flexibility begins would significantly affect its design. We are seeking comment on a range of production percentages for the 500 ppm fuel. We are particularly interested in the degree to which percentages of 500 ppm at the higher end of this range could pose greater challenges for ensuring sufficient availability of the low sulfur fuel and minimizing the potential for misfueling. In addition, we request comment on the extent to which different proportions of 500 ppm fuel will pose different challenges for the distribution system. Several issues and implications of setting the 500 ppm production limits at higher or lower levels are discussed in the NPRM.

We believe this compliance flexibility would be potentially beneficial for refiners. This flexibility could reduce operating costs, by not requiring the entire volume of highway fuel to meet the low sulfur standard. With averaging, banking and trading provisions as a component of this compliance flexibility (as discussed in the NPRM), some refineries may be able to delay desulfurization investments for several years. Even for refiners planning to desulfurize their entire highway fuel pool to low sulfur levels at the beginning of the program, there may be circumstances where the actual fuel produced is slightly off-spec (i.e., above the low sulfur standard). This flexibility would allow refiners to continue selling that fuel to the highway market (as 500 ppm fuel), rather than to other distillate markets. Refiners would also have more flexibility to continue producing highway diesel (as 500 ppm fuel) during unit downtime (e.g., turnarounds and upsets).

To ensure this compliance flexibility would not compromise the expected environmental benefits of the proposed program, this approach would need appropriate safeguards to prevent contamination of the low sulfur fuel and to prevent misfueling. Thus, low sulfur highway diesel would have to remain a segregated product throughout its distribution. Further, any retail pumps carrying 500 ppm fuel would have to be prominently labeled to prevent misfueling of 2007 and later model year vehicles. In the NPRM, we are seeking comment on whether other measures to discourage misfueling might also be necessary (for example, unique refueling nozzle/vehicle nozzle interface).

In the NPRM, we are seeking comment on a number of aspects of and alternatives for the compliance flexibility design, which are fully discussed in the preamble.

## 5. Refiner Ensured Availability

An alternative concept suggested to the Agency to accomplish the objective of ensuring widespread availability of low sulfur diesel fuel while still allowing flexibility for producing less than all of the diesel fuel pool as low sulfur is to have the refiners ensure that it is widely available. The base program would still be a requirement that refiners produce only highway diesel fuel which meets the proposed sulfur standard. However, refiners could voluntarily choose to participate in a program where they would be allowed to sell a fraction of their highway diesel fuel as 500 ppm fuel, in exchange for ensuring that low sulfur diesel fuel is made widely available at the retail level.

This concept may entail a refinery contracting with, or purchasing credits from, retailers, who, in exchange for incentives from the refiner, agree to make low sulfur diesel fuel available. This could mean that the retailer decides to switch over entirely to selling low sulfur diesel fuel, or that they offer both low sulfur and high sulfur diesel fuel simultaneously. The retailer would have to make a showing that: 1) the low sulfur diesel was "meaningfully" available; 2) there was an assured supply chain for obtaining low sulfur diesel fuel; and 3) the diesel fuels were segregated and properly labeled at the pumps. "Meaningfully" available might mean having dedicated pumps and tankage for low sulfur diesel with a capacity in the thousands of gallons range, and operating all year long. To be clear, the contract/credits would be for making low sulfur diesel available for sale, not necessarily selling a given volume of low sulfur diesel.

The relief that refiners receive in exchange for providing for low sulfur availability could be calculated on the basis of the retailer's total diesel sales volume. For example, the refiner would be permitted to produce a certain volume of highway diesel fuel at the current 500 ppm cap in proportion to the total diesel sales volume of the retailers that the refiner contracts with (or purchases credits from). A ratio could be applied to the retailer's sales volume to ensure sufficient retail availability.

In the NPRM, we describe this concept in more detail, and ask for comments on several issues associated with its design.

## 6. Retailer Availability Requirement

One way of ensuring widespread availability of the low sulfur fuel under a phase-in approach would be to require retailers selling highway diesel to make available the low-sulfur diesel (i.e., a retailer availability requirement). Retailers would be free to sell the current 500 ppm sulfur fuel as well, but at a minimum would have to offer the low sulfur fuel. This approach could either be a stand-alone program design (i.e., with no refiner production requirement for a minimum amount of low sulfur diesel), or could be coupled with a refiner production requirement. Retailers would be responsible for getting low sulfur diesel from the distribution system. The premise of this approach is that the fuel distribution system would react to the market demands, and supply and distribute the second grade of fuel in all parts of the country. In the NPRM, we discuss and seek comment on a number of issues that would need to be addressed to turn this premise into a reality.

In the NPRM, we specifically request comment on the merits of limiting an availability requirement to the larger diesel retailers. Under such an approach, the larger diesel retailers would have to carry low sulfur diesel, but could also choose to carry the 500 ppm grade as well. Smaller retailers not subject to the availability requirement would have the flexibility to choose to carry only the low sulfur grade, only the 500 ppm grade, or both.

In the NPRM, we discuss several issues associated with an availability requirement, and seek comment on alternative ways of designing such an approach.