Chapter VIII: Regulatory Flexibility Analysis

This chapter presents our Final Regulatory Flexibility Analysis (FRFA) which evaluates the impacts of the heavy-duty engine standards and diesel fuel sulfur standards on small businesses. Prior to issuing our proposal last June, we analyzed the potential impacts of our program on small businesses. As a part of this analysis, we convened a Small Business Advocacy Review (SBAR) Panel[a], as required under the Regulatory Flexibility Act as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA). Through the Panel process, we gathered advice and recommendations from small entity representatives (SERs) who would be affected by the proposed engine and fuel standards. After the proposal was published in the Federal Register, we held five public hearings around the country to gather feedback on it. The small business provisions of today's action reflect revisions to the proposed program based upon updated analyses as well as comments heard at the public hearings and those submitted in writing during the public comment period.

A. Regulatory Flexibility Analysis

EPA has decided to prepare a Final Regulatory Flexibility Analysisb (FRFA) for today's final rule. In accordance with section 603 of the RFA, EPA prepared an initial regulatory flexibility analysis (IRFA) for the proposed rule and convened a Small Business Advocacy Review Panel to obtain advice and recommendations of representatives of the regulated small entities in accordance with section 609(b) of the RFA (see 65 FR 35541, June 2, 2000). A detailed discussion of the Panel's advice and recommendations is found in the Panel Report contained in the docket for this rulemaking. A summary of the Panel's recommendations is presented at 65 FR 35541. The key elements of the FRFA include:

- the need for, and objectives of, the rule;

- the significant issues raised by public comments on the Initial RFA (IRFA), a summary of the Agency's assessment of those issues, and a statement of any changes made to the proposed rule as a result of those comments;

- the types and number of small entities to which the rule will apply;

[a] Including representatives from the Small Business Administration, White House Office of Management and Budget, and EPA.

- the reporting, recordkeeping, and other compliance requirements of the rule, including the classes of small entities that will be affected and the type of professional skills necessary to prepare the report or record;

- the steps taken to minimize the significant impact on small entities consistent with the stated objectives of the applicable statute, including a statement of the factual, policy and legal reasons why the Agency selected the alternatives we did, and why other significant alternatives to the rule which affect the impact on small entities were rejected.

The RFA was amended by SBREFA to ensure that concerns regarding small entities are adequately considered during the development of new regulations that affect them. Although we are not required by the CAA to provide special treatment to small businesses, the RFA requires us to carefully consider the economic impacts that our rules will have on small entities. Specifically, the RFA requires us to determine, to the extent feasible, our rule's economic impact on small entities, explore regulatory options for reducing any significant economic impact on a substantial number of such entities, and explain our ultimate choice of regulatory approach.

In developing this rule, 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 quantified 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 for the entire distribution system, including pipeline and tank wagon deliveries.

B. Need for and Objectives of the Rule

The preamble to this rule fully discusses the need for and objectives of this rule. As discussed in detail in Chapter II of this RIA, emissions from heavy-duty vehicles contribute greatly to a number of serious air pollution problems, and would have continued to do so into the future absent further controls to reduce these emissions. Although the air quality problems caused by diesel heavy-duty vehicles are challenging, we believe they can be resolved through the application of high-efficiency emissions control technologies. Based on the Clean Air Act requirements, we are setting stringent new emission standards that will result in the use of these diesel exhaust emission control devices. We are also finalizing changes to diesel fuel sulfur standards in order to enable these high-efficiency technologies. In consideration of the impacts that sulfur has on the efficiency, reliability, and fuel economy impact of diesel engine exhaust emission control devices, we believe that controlling the sulfur content of highway diesel fuel to the 15 ppm level is necessary, feasible and cost effective. The standards will result in substantial benefits to public health and welfare and the environment through significant reductions in emissions of nitrogen oxides, particulate matter, nonmethane hydrocarbons, carbon monoxide, sulfur oxides, and air toxics.

C. Summary of Significant Public Comments on the IRFA

This FRFA addresses the issues raised by public comments on the IRFA, which was part of the proposal of this rule. EPA received many comments from small refiners and others pertaining to the options for hardship relief described in the NPRM. In general, many small refiners commented on the financial difficulty their refinery would face in complying with the proposed diesel sulfur program, and encouraged EPA to provide hardship relief. Many small refiners acknowledged that there was not one single hardship relief option to best suit the needs of all small refiners, and thus supported a menu of options. Section IV.C of the preamble discusses the three hardship relief options available to small refiners under today's program. These three options are based on concepts which were considered by the SBAR Panel and on which we requested and received comment in the proposal. A summary of the comments pertaining to regulatory alternatives for small refiners, and our response to them, is contained in the Response to Comments document contained in the docket.

D. Types and Number of Small Entities To Which The Rule Will Apply

Today's action will establish new heavy-duty engine standards and require low sulfur highway diesel fuel. It will primarily affect manufacturers of heavy-duty engines, petroleum refiners that produce diesel, and certain distributors of diesel fuel. As mentioned above, we are not aware of any heavy-duty engine manufacturers that would be defined as a small business under the SBA regulations (13 CFR Part 121). Although most refining companies are not considered small businesses, we have identified several refining companies that do appear to qualify under the applicable SBA definition. In addition, this rule may impact diesel fuel distributors and marketers–of which several thousand appear to be small businesses. Table VIII-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 Refiners" category have some role in either distributing and/or marketing highway diesel fuel.

Table VIII-1. Industries Containing Small Businesses Potentially Affected by the Low Sulfur Diesel Fuel Rule

Industry	*NAICS*[b] *Codes*	*SIC*[c] *Codes*	*Defined by SBA as a Small Business if:*[d]
Petroleum Refiners	324110	2911	≤1500 employees corporate-wide
Refined Petroleum Pipelines	486910	4613	≤1500 employees corporate-wide
Petroleum Marketers and Distributors	422710 422720	5171 5172	≤100 employees corporate-wide
Other Terminals: Special Warehousing and Storage	493110 493190	4226	≤$18.5 million for the parent corporation
Fuel Oil Dealers	454311	5983	≤$9 million for the parent corporation
Petroleum Retailers	447110 447190	5541	≤6.5 million for the parent corporation

The types and number of small entities to which the low sulfur diesel fuel rule will apply are described in Table VIII-2 below. Under this rule, the only small entities that may be significantly affected are small refiners, since they will have to invest in desulfurization technology to produce low sulfur highway diesel fuel. We estimate that small refiners produce approximately five percent of all highway diesel fuel in the U.S.

[b] North American Industry Classification System

[c] Standard Industrial Classification System

[d] 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.

Table VIII-2. Types and Number of Small Entities to Which the Diesel Sulfur Program Will Apply

Type of Small Entity	*Number of Companies Affected by the Low Sulfur Diesel Fuel Rule*
Small Refiners	Approximately 24
Small Diesel Marketers and Distributors	Several Thousand

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 corporate-wide. These refiners, approximately 24 out of the approximately 124 refineries which produce highway diesel (there are about 158 refineries in the U.S. today), operate 27 refineries (i.e., some small refiners own and operate more than one refinery).

Some small refiners indicated that they will 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, poorer economies of scale, or difficulty in raising capital to finance projects. Based on these discussions and analyses, the Panel and we agree that small refiners would likely experience a significant and disproportionate financial hardship in reaching the objectives of our diesel fuel sulfur program. However, the Panel also noted that the burden imposed upon the small refiners by our sulfur requirements varied from refiner to refiner and could not be alleviated with a single provision. In addition, the small refiners strongly supported a “menu” of compliance options. We agree with the Panel and are offering qualifying small refiners three options to choose from in moving toward compliance with the low sulfur diesel fuel requirements.

2. Small Distributors/Marketers of Highway Diesel Fuel

The low sulfur diesel fuel rule contains certain downstream compliance and enforcement provisions, for all parties in the diesel fuel distribution system downstream of the refinery gate, to prevent 1) contamination of highway diesel fuels with fuels containing higher levels of sulfur and 2) misfueling of motor vehicles with high sulfur fuels.

Under this rule, distributors and retailers may choose to handle 500 ppm diesel fuel, 15 ppm diesel fuel, or both (as permitted under the temporary compliance option and small refiner hardship provisions described in the preamble). However, distributors and marketers will have to segregate low sulfur diesel fuel from other distillates just as they do today with 500 ppm diesel fuel. Retailers and wholesale purchaser-consumers will be responsible for ensuring that only low sulfur diesel fuel is sold for use in model year 2007 and later heavy-duty vehicles. Under the temporary compliance option and small refiner hardship provisions, where two grades of highway diesel fuel are allowed for the initial years of the program, some distributors and marketers may voluntarily decide (presumably based on economics) to add tankage or make additional modifications to accommodate two grades of highway diesel fuel. We have taken such costs into account in our diesel fuel cost analysis (described in more detail in Chapter V).

The low sulfur diesel fuel rule also includes a product downgrading restriction that is designed to discourage the intentional downgrading of 15 ppm diesel fuel to 500 ppm diesel fuel in the distribution system during the initial years of the program when the optional compliance provision is in effect. All parties in the distribution system downstream of the refinery gate are subject to this provision, except for those retailers that offer for sale and wholesale purchaser-consumers that use 15 ppm fuel either as the only grade of diesel or in addition to 500 ppm diesel (i.e., the only retailers and wholesale purchaser-consumers that are subject to this requirement are those that offer for sale or use only 500 ppm diesel but not 15 ppm diesel). Under this restriction, the volume of 15 ppm fuel that may be downgraded to 500 ppm highway diesel fuel at each point in the distribution system (downstream of the refinery gate) is limited to not more than 20 percent on an annual basis.[e] Each party in the distribution system subject to this provision will be required to meet this requirement separately, based on the amount of 15 ppm fuel it receives and transfers/sells to the next party (or end user, in the case of retailers and wholesale purchaser-consumers) on an annual basis.

However, this provision should have no meaningful burden on downstream entities. It is only intended to prevent abuse and not intended to constrain any normal business operations. Furthermore, it does not require the addition of any new recordkeeping or reporting requirements beyond those required of the rest of the program.

E. Projected Costs of the Diesel Sulfur Standards

The average costs for a small refiner to produce low sulfur highway diesel fuel are described below:

[e] The downgrading restriction applies only to 15 ppm downgraded to 500 ppm highway diesel fuel but not to 15 ppm downgraded to off-highway diesel fuel.

A. capital cost: $14 million
– operating cost: $500 thousand per year
– per-gallon cost (assuming a seven percent ROI before taxes): 5.0 cents/gallon

In comparison, the average non-small refineries capital cost is $52 million with operating costs of $9.6 million per year. The per-gallon cost of average non-small refineries is 4.2 cents per treated diesel volume. Our methodology, including a comparison to recent industry estimates, is described in Chapter V.

As discussed in more detail in Chapter V.C., above, we also analyzed the increase in distribution costs associated with the low sulfur diesel fuel program. We estimate that distribution costs will increase by 0.5 cents per gallon of highway diesel fuel supplied when the sulfur requirements are fully effective beginning in the year 2010. During the initial years of the program, we estimate that there will be an increase in distribution costs of roughly $1 billion for new storage tanks to handle two grades of highway diesel fuel (500 ppm and 15 ppm). The total distribution costs during the initial years of the low sulfur diesel fuel program equate to approximately 1.1 cents per gallon of the total volume of all highway diesel fuel supplied.

F. Projected Reporting, Recordkeeping, and Other Compliance Requirements of the Rule

The low sulfur diesel fuel program contains several hardship options to assist small refiners in producing low sulfur diesel fuel. Under these options, small refiners may be subject to new reporting and recordkeeping requirements to help ensure compliance with the options and the integrity of the low sulfur diesel fuel as it moves from the refinery gate to the retail outlet. However, we believe the benefits of the options will far outweigh any burdens imposed by their associated recordkeeping and reporting requirements.

The low sulfur diesel fuel program does not impose any new reporting requirements for small diesel marketers or distributors. However, this program does impose new record keeping requirements for such parties, specifically product transfer documents that track transfers of diesel fuel. Such transfer records are currently maintained by most parties for business and/or tax reasons. In addition, the 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 new record keeping requirements for downstream parties will not impose a significant burden.

1. Registration Reports

Refiners that are either currently producing or supplying highway diesel fuel, or that expect to do so by June 1, 2006, must register with us. The specific information required in the registration is described in section VII of the preamble as well as the regulations.

In addition to the basic registration requirements above, a refiner seeking status as a small refiner needs to apply for this status as a part of their registration and provide the average number of employees for all pay periods from January 1, 1999 to January 1, 2000, for the company, all parent companies, and all subsidiaries or joint ventures. The application also must include which small refiner option the refiner expects to use at each of its refineries.

2. Pre-Compliance Reports

All refiners (including small refiners) and importers must report to us regarding their progress toward compliance with the highway diesel fuel sulfur standards adopted today. These pre-compliance reports are due each May 31 from 2003 through 2005. We will maintain the confidentiality of information submitted in pre-compliance reports. We will present generalized data from the reports on a PADD basis in annual reports following the receipt of each year's pre-compliance reports. The specific information required in the compliance reports is described in Section VII of the preamble as well as the regulations.

In addition to the information required for all refiners, small refiners must provide additional information in their pre-compliance reports. The information required varies according to which small refiner option the refiner will be using, as discussed in Section IV.C of the preamble.

3. Annual Compliance Reports

After the highway diesel sulfur requirements begin June 1, 2006, refiners and importers will be required to submit annual compliance reports that demonstrate compliance with the requirements of this final rule. The first annual compliance report will be due by the end of February 2007 (for the period of June 1, 2006 through December 31, 2006) and would be required annually through February 2011. The specific information required in a refiner's annual compliance report is described in section VII of the preamble as well as the regulations. As with pre-compliance reports, in their annual compliance reports, small refiners must also supply additional information related to the small refiner option they are using.

4. Product Transfer Documents (PTDs)

In the low sulfur diesel fuel program, refiners as well as diesel distributors and marketers will be required to keep records primarily consisting of product transfer documents (PTDs), which document a party's diesel fuel transfers. Such records are already maintained by most parties for business or tax purposes. We are adopting the proposed requirements that refiners, importers, distributors, and marketers provide information on commercial PTDs that identifies diesel fuel distributed for use in motor vehicles and states that the fuel is compliant with the 15 ppm sulfur standard. Since the low sulfur diesel fuel rule adopts provisions for the production and sale of 500 ppm sulfur diesel fuel for use in pre-2007 model year vehicles, the rule also adopts provisions which require PTDs to identify such fuel and state that its use in motor vehicles is restricted to pre-2007 motor vehicles.[f] We believe this additional information on commercial PTDs is necessary to 1) prevent the commingling of highway diesel fuel with high sulfur distillate products, 2) avoid contamination of 15 ppm highway diesel fuel with 500 ppm highway diesel fuel, and 3) prevent the misfueling of model year 2007 and later vehicles with any fuel having a sulfur content greater than 15 ppm. To discourage the intentional downgrading of 15 ppm diesel fuel to 500 ppm diesel fuel in the distribution system during the initial years of the program, PTDs must also include the volume of each fuel grade (15 ppm and 500 ppm) delivered.[g]

5. Recordkeeping Requirements

Refiners that produce (or importers that import) both 500 ppm highway diesel fuel and 15 ppm highway diesel fuel under the temporary compliance option or any hardship program (including small refiners), or that produce only 15 ppm sulfur content diesel fuel and that wish to generate credits (including early credits), must maintain records for each batch of highway diesel fuel produced, of the batch designations and the batch volumes. The refiner must maintain records regarding credit generation, use, transfer, purchase, or termination. The specific recordkeeping information required under the low sulfur diesel fuel program is described in section VII of the preamble as well as the regulations.

Small refiners approved for temporary hardship relief due to extreme unforseen circumstances or extreme financial hardship must include certain information in their application for relief. The required information, and the factors we will consider in determining what relief, if any, is appropriate, are discussed in Section IV.B.3 of the preamble. Such refiners will also

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[f] Such fuel can also be used in nonroad vehicles, whose fuel is currently unregulated.

[g] As discussed in Section VII of the preamble, we are restricting the volume of 15 ppm fuel that can be downgraded to 500 ppm highway diesel fuel at each point in the distribution system to not more than 20 percent on an annual basis.

have reasonable recordkeeping and reporting requirements, which will be determined on a case-by-case basis.

6. Diesel Fuel Pump Labeling

The low sulfur diesel fuel rule also adopts pump labeling requirements for retailers and wholesale purchaser-consumers similar to the requirements that we proposed, but with modifications to account for the availability of diesel fuel subject to the 500 ppm sulfur standard for use in pre-2007 motor vehicles. For any multiple-fuel program, like the low sulfur diesel fuel program with its compliance flexibility option and hardship provisions, clearly labeling diesel fuel pumps is vital for end users to distinguish between the two grades of fuel. We received comments on the proposal that concurred with our assessment that pump labels, in conjunction with vehicle labels, would help to prevent misfueling of motor vehicles with high sulfur diesel fuel. The text of the labels appears in Section VII of the preamble; the specific requirements for label size and appearance are found in the regulatory language for this rule.

G. Regulatory Alternatives

For today's action, we have structured a selection of temporary flexibilities for qualifying small refiners, both domestic and foreign, based on the factors described below. Generally, we structured these provisions to address small refiner hardship while expeditiously achieving air quality benefits and ensuring that the low sulfur diesel fuel coincides with the introduction of 2007 model year diesel vehicles. First, the compliance deadlines in the program, combined with flexibility for small refiners, will quickly achieve the air quality benefits of the program, while helping to ensure that small refiners will have adequate time to raise capital for new or revamped equipment. Second, we believe that allowing time for refinery sulfur-reduction technologies to be proven out by larger refiners before small refiners have to put them in place will likely allow for lower costs of these improvements in desulfurization technology (e.g., better catalyst technology or lower-pressure hydrotreater technology). Third, providing small refiners more time to comply will increase the availability of engineering and construction resources. Since most large and small refiners must install additional processing equipment to meet the sulfur requirements, there will be a tremendous amount of competition for technology services, engineering manpower, and construction management and labor. Finally, because the gasoline and diesel sulfur requirements will occur in approximately the same time frame, small refiners that produce both fuels will have a greater difficulty than most other refiners in securing the necessary financing. Hence, any effort that increases small refiners' ability to stagger investments for low sulfur gasoline and diesel will facilitate compliance with the two programs. These factors are discussed further in Section IV.C of the preamble.

Providing these options to assist small refiners experiencing hardship circumstances enables us to go forward with the 15 ppm sulfur standard beginning in 2006. Without this flexibility, the benefits of the 15 ppm standard would possibly not be achieved as quickly. By providing temporary relief to those refiners that need additional time, we are able to adopt a program that expeditiously reduces diesel sulfur levels in a feasible manner for the industry as a whole. In addition, we believe the volume of diesel that will be affected by this hardship provision is marginal. We estimate that small refiners contribute approximately five percent of all domestic highway diesel fuel production.

All refiners producing highway diesel fuel are able to take advantage of the temporary compliance option discussed in Section IV.A of the preamble. Refiners that seek and are granted small refiner status may choose from the following three options under the diesel sulfur program. These three options have evolved from concepts on which we requested and received comment in the proposal. In most cases, we believe that small refiners will find these options preferable to either the broader diesel fuel temporary compliance option or the Geographic Phase-in Area (GPA) provisions (as applicable) discussed in the preamble.

500 ppm Option. A small refiner may continue to produce and sell diesel fuel meeting the current 500 ppm sulfur standard for four additional years, through May 31, 2010, provided that it reasonably assures the existence of sufficient volumes of 15 ppm fuel in the marketing area(s) that it serves.

Small Refiner Credit Option. A small refiner that chooses to produce 15 ppm fuel prior to 2010 may generate and sell credits to other refiners under the broader diesel temporary compliance option. Since a small refiner has no requirement to produce 15 ppm fuel under this option, any volume of fuel it produced at or below 15 ppm sulfur will qualify for generating credits.

Diesel/Gasoline Compliance Date Option. For small refiners that are also subject to the Tier 2/Gasoline sulfur program (40 CFR Part 80), the refiner may choose to extend by three years the duration of its applicable interim gasoline standards, provided that it also produces all its highway diesel fuel at 15 ppm sulfur beginning June 1, 2006.

1. 500 ppm Option

The 500 ppm Option is available for any refiner that qualifies as a small refiner. Under this option, small refiners could continue selling highway diesel fuel with sulfur levels meeting the current 500 ppm standard for four additional years, provided that they supply information showing that sufficient alternate sources of 15 ppm diesel fuel in their market area will exist for fueling new heavy-duty highway vehicles. Under this option, small refiners could supply current 500 ppm highway diesel fuel to any markets for use only in vehicles with older (pre-2007) technology through May 31, 2010. In other words, small refiners that choose this option may delay production of highway diesel fuel meeting the 15 ppm standard for four years.

This 500 ppm option for small refiners is similar to the option provided to all refiners in the temporary compliance option described in Section IV.A of the preamble in that it allows a refiner to continue to produce and sell current 500 ppm fuel for a period of time. However, this option differs from the broader temporary compliance option in that small refiners could produce and sell 100 percent of their highway fuel at 500 ppm without needing to buy credits. By way of contrast, under the broader program, refiners would need to buy credits in order to produce any volume of 500 ppm fuel over 20 percent of their total highway diesel production.

2. Small Refiner Credit Option

We believe that the relative difficulty for small refiners to comply with today's program warrants compliance flexibility for these refiners. At the same time, we want to encourage all refiners to produce 15 ppm sulfur as early and in as many geographic areas as possible. As an incentive for small refiners to invest in desulfurization capacity, those that choose to produce 15 ppm fuel earlier than they would need to under the 500 ppm option–before 2010–could generate credits for each gallon of diesel fuel produced as meeting the 15 ppm standard. They could then sell these credits to other refiners for use in the broader diesel fuel program described above in Section IV.A, helping to offset some of the cost of producing the cleaner fuel.

Under this option, credits could be generated based on the volume of any diesel fuel meeting the 15 ppm standard. The refiner could sell its remaining highway diesel fuel under the 500 ppm option above.

3. Diesel/Gasoline Compliance Date Option

The Tier 2/Gasoline Sulfur program included a special provision that applies for refiners that qualify as small refiners (40 CFR Part 80, Subpart H). Under that program, each small refiner is assigned an interim gasoline sulfur standard for each of its refineries. This interim standard for each refinery is established based on the baseline sulfur level of that refinery. The standards are designed to require each small refiner to either make a partial reduction in their gasoline sulfur levels or, if they already produce low sulfur fuel, to maintain their current levels. The gasoline interim program lasts for four years, 2004 through 2007, and the refiner can apply for an extension of up to two years. After the interim program expires, small refiners need to produce the same low sulfur gasoline as other refiners.

Today's diesel sulfur program takes effect in the same time frame as the small refiner interim program for gasoline sulfur. To avoid the need for simultaneous investments in both gasoline and diesel fuel desulfurization, several small refiners subject to both programs raised the concept of allowing those investments to be staggered in time. Because of the relative difficulty small refiners will face in financing desulfurization projects, especially for both diesel and gasoline desulfurization in the same time frame, we agree that this concept has merit and have adopted it for this rule. Under this concept, small refiners could extend the duration of their gasoline sulfur interim standards and, thus, potentially postpone some or all of their gasoline desulfurization investments while they work to achieve the diesel sulfur standards "on time" in 2006. To the extent that small refiners choose this Diesel/Gasoline Compliance Date option, this provision will benefit the overall diesel program because it will increase the availability of 15 ppm diesel fuel in the small refiner's market area.

Specifically, this option provides that a small refiner can receive a three-year extension of a refinery's interim gasoline standard, until January 1, 2011, if it meets two criteria: 1) it produces both gasoline and diesel fuel at a refinery and chooses to comply with the 15 ppm diesel fuel sulfur standard by June 1, 2006 for all its highway diesel production at that same refinery, and 2) it produces a minimum volume of 15 ppm fuel at that refinery that is at least 85 percent of the average volume of highway diesel fuel that it produced at that refinery during calendar years 1998 and 1999. We believe that it is very important that the extension of a small refiner's interim low sulfur gasoline standard be linked to a substantial environmental benefit from the production of low sulfur diesel fuel in 2006. We have established a minimum volume requirement to prevent the Diesel/Gasoline Compliance Date option from applying in situations where a refiner changes its refinery product slate to produce very little highway diesel fuel–even though this production is at a 15 ppm sulfur level–and yet receives an extension of its interim gasoline sulfur standard. We believe the 85 percent level is sufficient to reflect a substantial investment in desulfurization technology. At the same time the 85 percent level should allow for any reasonable variation in production of highway diesel fuel that would be expected to occur in typical situations between now and 2006, particularly given the continued growth of the highway diesel market. Again, the three-year extension of the gasoline interim program is to allow small refiners to stretch out their capital investments while increasing the quantity of 15 ppm fuel being produced. We expect that small refiners using this option will make a substantive capital investment in diesel desulfurization and have thus set this minimum 15 ppm diesel volume limit.

The Tier 2/Gasoline Sulfur program includes a general hardship provision for which refiners may apply. (Today's program also includes a similar provision). Depending on the nature of its hardship, a small refiner that applies for this general hardship provision under the gasoline program could be granted a "tailor-made" interim gasoline sulfur program different from the "default" program established in the rule. If such a small refiner were then to be covered by today's diesel fuel requirements and chose this Diesel/Gasoline Compliance Date option, we would allow it an extension of its special interim program for gasoline (as established under the general hardship provision) for three years beyond the scheduled end date (although no later than December 31, 2010) so long as it met the 15 ppm diesel fuel standard in 2006.

4. Relationship of the Options to Each Other

By definition, since a small refiner must produce 100 percent of its highway diesel as 15 ppm under the Diesel/Gasoline Compliance Date option, that option is not compatible with either the 500 ppm option or the Small Refiner Credit option. Thus a refiner choosing the Diesel/Gasoline Compliance Date option may not choose either of the other two options. However, the 500 ppm option and the Small Refiner Credit option are compatible with each other, and so a refiner can choose either or both of these options.

H. Other Relevant Federal Rules Which May Duplicate, Overlap, or Conflict with the Low Sulfur Diesel Fuel Rule

The heavy-duty engine and diesel fuel sulfur standards that we are finalizing 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. We also note that more stringent diesel sulfur standards will likely require many refiners to obtain permits from state and local air pollution control agencies under the CAA's New Source Review program prior to constructing the desulfurization equipment needed to meet the standards. However, we are not aware of any area where the new regulations will directly duplicate or conflict with existing federal, state, or local regulations.

On the other hand, several small refiners commented that the low sulfur diesel fuel program overlaps with the low sulfur gasoline program. Specifically, they indicated that they will be making substantial investments to comply with the low sulfur gasoline program (which phases in from January 1, 2004 through December 31, 2007) while concurrently planning and investing to comply with the low sulfur diesel fuel program. One hardship option within the low sulfur diesel fuel program was specifically designed for those small refiners that produce both gasoline and highway diesel fuel. The intent of this option, which is described in more detail below, is to help small refiners spread out their gasoline and diesel fuel desulfurization investments.