

Small Entity Compliance Guide for "Control of Emissions from Nonroad Diesel Engines and Fuel"

(40 CFR Parts 9, 69, et al. June 29, 2004)

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Assessment and Standards Division Office of Transportation and Air Quality U.S. Environmental Protection Agency

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NOTICE

This guide was prepared pursuant to section 212 of the Small Business Regulatory Enforcement Fairness Act of 1996 ("SBREFA"), Public Law 104-121. The statements in this document are intended solely to aid regulated entities in complying with the published national regulation "Control of Emissions from Nonroad Diesel Engines and Fuel" (40 CFR Parts 9, 69, et al. June 29, 2004).

Final authority rests with the regulation and this guide is not intended to replace, and may not cover all parts of, the regulation. However, in any civil or administrative action against a small business, small government, or small non-profit organization for violation of any parts of the aforementioned regulation, the content of this guide may be considered as evidence of the reasonableness or appropriateness of proposed fines, penalties, or damages. EPA may decide to revise this guide without public notice to reflect changes in EPA's approach to implementing Control of Emissions from Nonroad Diesel Engines and Fuel requirements or to clarify and update text. To determine whether EPA has revised this guide and/or to obtain copies, contact EPA's Tia Sutton at (734) 214-4018, sutton.tia@epa.gov.

Acronyms used throughout this guide:

D&T	Designate and Track
LM	Locomotive and Marine
NAICS	North American Industry Classification System
NEMA; NE/MA	Northeast/Mid-Atlantic
NOx	Oxides of Nitrogen
NR	Nonroad
NRLM	Nonroad, Locomotive, and Marine
PADD	Petroleum Administration Districts for Defense
Panel	(see SBAR Panel)
РМ	Particulate Matter
ppm	Parts per million
PTD	Product transfer document
RFA	Regulatory Flexibility Act
SBA	Small Business Administration
SBAR Panel	Small Business Advocacy Review Panel
SBREFA	Small Business Regulatory Enforcement Fairness Act
SER	Small Entity Representative
SIC	Standard Industrial Classification
TCO	Temporary Compliance Option

1.0 Introduction

This document is published by the Environmental Protection Agency (EPA) as our official compliance guide for small entities, as required by the Small Business Regulatory Enforcement Fairness Act of 1996. Before you begin using the guide you should know that the information in this guide was compiled and published on June 29, 2004. EPA is continually improving and upgrading its rules, policies, compliance programs, and outreach efforts. You can determine whether EPA has revised or supplemented the information in this guide by checking either the Nonroad Diesel or main Clean Diesel web pages (http://www.epa.gov/cleandiesel, respectively) for the rule, any technical amendments, and related information.

Pollution emitted by nonroad diesel engines contributes greatly to our nation's continuing air quality problems, the Nonroad Diesel Rule is the latest in a series of Clean Diesel actions that are designed to reduce emissions from nearly every type of diesel vehicle and equipment to help mitigate those problems. The nonroad diesel program combines cleaner engine technologies with cleaner fuel -- similar to the onhighway diesel program -- with an end result of significant environmental and public health benefits. Nonroad diesel equipment currently accounts for 47 percent of diesel particulate matter (PM) and 25 percent of oxides of nitrogen (NOx) from mobile sources nationwide, and this program will cut emissions from nonroad diesel engines by over 90 percent. As part of this program, new engine emission standards will begin to take effect, based on engine horsepower, starting in model year 2008, and will apply to nonroad diesel highway engines and vehicles.

The sulfur levels of nonroad diesel fuel will be reduced by 99 percent from current levels (approximately 3,000 parts per million [ppm]) to 15 ppm in 2010. The lower sulfur fuel will provide immediate public health benefits by reducing PM from engines in existing nonroad equipment. It will also make it possible for engine manufacturers to use advanced clean technologies, similar to catalytic technologies used in passenger cars.

We have estimated that the added cost for low-sulfur fuel will average about 4 cents per gallon. Therefore, we are providing substantial flexibility, as detailed in this compliance guide, for small entities in the nonroad diesel fuel distribution system, namely small refiners.

If you are a small entity for this rule (you meet the small business size criteria and/or have been approved by the EPA as a "small refiner"), we encourage you to continue to contact EPA if you should have any further questions or concerns (see contact information in section 5, below).

1.1 Who should use this guide?

This guide is mainly for those refiners of nonroad, locomotive, and marine (NRLM) diesel fuel that qualify as small refiners under the small business size standards as stated in the rulemaking. If you are not sure whether or not you qualify as a small refiner, please refer to section 2 of this guide for the criteria. While much of the information in this guide pertains to small refiners, there is also information here for all small entities in the fuel production and distribution industry.

The Small Business Regulatory Enforcement Act (SBREFA) requires the EPA to prepare Small Entity Compliance Guides to help small businesses comply with the regulation. The regulation has hardship flexibility provisions specific to small entities in the fuel industry, and this guide should help to clarify those provisions.

1.2 How can I obtain a complete copy of the rule?

A complete copy of the rule can be found in the Federal Register, Vol. 69, No. 124, p. 38958 (published on June 29, 2004). The rule is also located on the Nonroad Diesel home page: http://www.epa.gov/nonroad-diesel/2004fr.htm.

1.3 How do I use this guide?

The guide is organized as follows:

- 1. Introduction and general information
- 2. Description of entities that are subject to the rule; criteria for qualifying as a small refiner
- 3. Overview of the regulatory requirements
- 4. Small entity-specific provisions and timeline for compliance with the regulation
- 5. Discussion of the designate and track concept
- 6. Recordkeeping and reporting requirements
- Contact information for further assistance

2.0 Entities Subject to the Rule

2.1 Entities subject to the nonroad diesel fuel regulations

Table 1, below, lists the NAICS and SIC codes of those entities subject to the rule:

Table 1. NAICS and SIC Codes					
Industry	NAICS ^a Codes	SIC ^b Codes			
Petroleum Refiners	324110	2911			
Diesel Fuel Marketers and Distributors	422710, 422720	5171, 5172			
Diesel Fuel Carriers 484220, 4212, 484230 4213					
a- NAICS = North American Industrial Classification System b- SIC = Standard Industrial Classification					

Petroleum refiners producing diesel for nonroad vehicles and certain carriers, marketers, and other distributors of diesel fuel will be affected by the nonroad diesel regulations. The following section discusses the small entities directly affected by the rulemaking (the parties which this guide will mainly apply to).

2.2 Criteria for qualification as a small entity

Although most refining companies are not considered small businesses, several refining companies were identified that do appear to qualify under the applicable Small Business Administration (SBA) definition of a small entity. In addition, this rule may impact diesel fuel carriers, distributors, and marketers - of which several thousand appear to be small businesses. Table 2 below lists the small business size standards SBA has established for each type of economic activity under the SIC and NAICS systems. In this table, the industry categories listed below the "Petroleum Refiners" category have some role in refining, distributing, and/or marketing nonroad diesel fuel and are directly affected by the Nonroad Diesel rulemaking.

Table 2. Small Business Size Standards						
Industry	NAICS Codes	SIC Codes	Defined by SBA as Small Business if:			
Petroleum Refiners	324110	2911	<u>< 1500 employees corporate-wide</u>			
Diesel Fuel Marketers and 422710, 5171, ≤ 100 employees corporate-wide 5171 5172						

Who is eligible?

Under this rule, the only small entities that may be *significantly* impacted by the rule are small refiners, since they will have to invest in desulfurization technology to produce low sulfur fuel. Carriers and distributors of nonroad diesel fuel- a vast universe of entities- may also be affected, but to a lesser degree. The criteria for consideration as a small business is listed in Table 2, above. In addition to the information in the table, entities eligible for nonroad diesel small refiner relief must demonstrate that they meet the following criteria:

- produced NRLM diesel from crude at the time the rule was promulgated
- have an average of no more than 1,500 employees corporate-wide, based on the average number of employees for all pay periods from January 1, 2002, to January 1, 2003 (application date- December 31, 2004)¹; and
- had a corporate crude oil capacity less than or equal to 155,000 barrels per calendar day (bpcd) for 2002 (application date- December 31, 2004)².

For refiners who acquired or reactivated a refinery that was shutdown or was non-operational between January 1, 2002 and January 1 2003. (80.551(c) (1) (ii) (application date- June 1, 2006)), eligibility will be judged under the employment and crude oil capacity criteria based on the most recent 12 consecutive months of data unless we conclude from the data provided by the refiner that another period of time is more appropriate.

Who is not eligible?

The following are **not** eligible for consideration as a small business under the rule:

¹ As with earlier fuel sulfur programs, the effective dates for the determination of employee count and for calculation of the crude capacity represent the most recent complete year prior to the issuing of the proposed rulemaking (2002, in this case).

² Ibid.

- entities that do not own or operate a refinery;
- entities that do not produce NRLM diesel fuel from crude;
- refiners of refineries built or started up after January 1, 2002;
- refiners who qualify as small refiners and who subsequently employ more than 1500 people as a result of merger³ with, or acquisition of, another entity, and;
- any refiner whose status changes will comply with the 15 ppm-sulfur standard beginning January 1 of the calendar year following the disqualifying event.

How do I determine the total number of employees/crude oil capacity?

In determining its total number of employees and crude oil capacity, a refiner must include the number of employees and crude oil capacity of any subsidiary companies, any parent company and subsidiaries of the parent company, and any joint venture partners. We define a subsidiary of a company to mean any subsidiary in which the company has a 50 percent or greater ownership interest.

However, refiners owned and controlled by an Alaska Regional or Village Corporation organized under the Alaska Native Claims Settlement Act (43 U.S.C. 1626), are also eligible for small refiner status, based only on the refiner's employees and crude oil capacity. This exclusion is also being incorporated into the small refiner provisions of the highway diesel and gasoline sulfur rules, which did not address this issue.

I believe that I meet the definition, however I am not already an approved small refiner with EPA; how do I apply?

A refiner that would like to apply for small refiner status must have applied to EPA by December 31, 2004. The detailed requirements are located in section V.F.2 of the preamble to the final rule and § 80.551(c) of the regulations. The criteria are summarized in Table 3, below.

NOTE: All refiners that believe that they may meet the criteria for small refiner status must submit an application for small refiner status, even if you have been approved as a small refiner for a previous fuel program. Fuel programs in the past have allowed a 'grandfather' provision, where refiners that qualified as a small entity for a previous program would not have to reapply for small refiner status for any subsequent fuel program. However, no such provision has been

³ However, small refiners that merge with another small refiner (and thus do not combine crude oil processing capacities or gain any financial advantage) may retain their status as a small refiner.

included in the nonroad diesel rule. <u>Therefore, all potential small refiners (whether approved under a previous fuel program or not) are required to submit applications.</u>

Table 3. Criteria for Small Refiner Applications				
For all small refiners	For all small refiners			
	The total corporate crude oil capacity- this must be a positive number - of each refinery as reported to the Energy Information Administration (EIA) of the U.S. Department of Energy (DOE) for the most recent 12 months of operation. We will presume that the information submitted to EIA is correct. (In cases where a company disagrees with this information, the company may petition EPA with appropriate data to correct the record when the company submits its application for small refiner status. EPA may accept such alternate data at its discretion.)			
	A letter signed by the president, chief operating officer, or chief executive officer of the company (or a designee) stating that the information contained in the application is true to the best of his/her knowledge			
	Contact information for a corporate contact person, including: Name Mailing address Phone and fax numbers E-mail address			
For NRLM diesel fuel s	mall refiners			
	 A listing of the name and address of each location where any employee worked during the 12 months preceding January 1, 2003 (In the case of a refiner who acquires or reactivates a refinery that was shutdown or non-operational between January 1, 2002, and January 1, 2003, this listing should state the where employees worked since the refiner acquired/reactivated the refinery) The average number of employees at each location based upon the number of employees for each pay period for the 12 months preceding January 1, 2003 (In the case of a refiner who acquires or reactivates a refinery that was shutdown or non-operational between January 1, 2002, and January 1, 2003, the average should be for each calendar year since the refiner acquired/reactivated the refinery) The type of business activities carried out at each location 			
	 An indication of the small refiner option(s) the refiner intends to use (for each refinery): The ability to delay compliance under § 80.554(a) or (b) The ability to generate NRLM diesel sulfur credits under § 80.535(b) or (d), pursuant to the provisions of § 80.554(c) An adjustment to its small refiner gasoline sulfur standards under § 80.240(a), pursuant to the provisions of § 80.554(d) 			
For motor vehicle diese	() ()			

Listing of the name and address of each location where any employee worked during the 12 months preceding January 1, 2000 (In the case of a refiner who acquires or reactivates a refinery that was shutdown or non-operational between January 1, 1999, and January 1, 2000, this listing should state the where employees worked since the refiner acquired/reactivated the refinery) Average number of employees at each location based upon the number of employees for each pay period for the 12 months preceding January 1, 2000 (In the case of a refiner who acquires or reactivates a refinery that was shutdown or non-operational between January 1, 1999, and January 1, 2000, the average number of employees at each location should be for each calendar year since the refiner acquired/reactivated the refinery) The type of business activities carried out at each location An indication of the small refiner option the refiner intends to use (for each refinery): The ability to produce motor vehicle diesel fuel subject to the 500 ppm sulfur standard under § 80.520(c) or generate credits under § 80.531, pursuant to the provisions of § 80.552(a) or (b); or, An extension of the duration of its small refiner gasoline sulfur standard under § 80.553, pursuant to the provisions of § 80.552(c) Additional 'special case' provisions For joint ventures: The total number of employees includes the combined employee count of all corporate entities in the venture For government-owned refiners: The total employee count includes all government employees NOTE: Applications for small refiner status must contain the information listed above for the company

Applications do not need to be in a specific format. They simply need to convey the information listed above in a clear and concise manner. Approval of NRLM small refiner status will be based on such information. EPA will notify refiners of approval or disapproval of small refiner status by letter. If a refiner is not approved for small refiner status, the refiner must comply with the general program sulfur standards.

seeking small refiner status, plus any subsidiary companies, any parent company and subsidiaries of the parent company in which the parent has 50 percent or greater ownership, and any joint venture partners.

Where do I send my application?

Applications for small refiner status must be sent to one of the following addresses:

via certified mail (with return receipt)-

U.S. EPA

Attn: Diesel Small Refiner Status (6406J) 1200 Pennsylvania Avenue, NW.

Washington, DC 20460

via express mail (with return receipt)-

U.S. EPA

Attn: Diesel Small Refiner Status

Transportation and Regional Programs Division

1310 L Street, NW., 6th floor Washington, DC 20005

How does a small refiner apply for a diesel fuel volume baseline?

NOTE: To generate NRLM credits or use the small refiner provisions, a (small) refiner must apply for a NRLM baseline.

The NRLM diesel fuel volume baseline is calculated using the following equation:

$$B_{NRLM} = \frac{\sum_{i=1}^{n} (B_i)}{\frac{m}{12}}$$

Where:

 \mathbf{B}_{NRIM} = Volume baseline value

B; = Volume of NRLM diesel fuel batch i

Total number of batches of NRLM diesel fuel produced for U.S. use
 during January 1, 2003 through December 31, 2005

i = Individual batch of NRLM diesel fuel produced during January 1, 2003 through December 31, 2005

Number of months in the baseline period (this number is usually 24, except in the case of startup or reactivation)

Table 4 below lists all required information for baseline applications (which must be submitted for <u>each</u> refinery/import facility).

		le. 4 ry Baseline Applications				
	A listing of the names and addresses of all refineries or import facilities owned by the company for which the refiner or importer is applying for a baseline					
	 For purposes of a non-highway baseline volume used in determining compliance with the provisions of § 80.554 (a) (Small Refiner Delay option) or § 80.554 (d) (NRLM/Gasoline Compliance Date option), the baseline volume produced during the three calendar years beginning January 1, 2003 2004, and 2005, as calculated using the B_{NRLM} equation noted above For purposes of a non-highway baseline volume used in determining compliance with the provisions of § 80.554(b) (Credit option), the baseline volumes produced during the three calendar years beginning January 1, 2006, 2007, and 2008, as calculated under the equation above 					
	A letter signed by the president, chief operating officer, or his/her delegate stating that the information contained in the application is true to the best of his/her knowledge					
	 Name, address, phone and fax numbers, and e-mail address of a corporate contact person 					
	For each batch of diesel fuel produced:					
	Any other additional appropriate information as requested by EPA					
Baseline app	lications must be sent to one o	of the following addresses:				
via regular mail: U.S. EPA Attn: Nonroad Diesel Fuel Baseline Transportation and Regional Programs Division (6406J) 1200 Pennsylvania Avenue, NW Washington, DC 20460		via express mail: U.S. EPA Attn: Nonroad Diesel Fuel Baseline Transportation and Regional Programs Division (6406J) 1310 L Street, NW, 6 th floor Washington, DC 20005				

2.3 Loss of small refiner status

Refiners that no longer meet the criteria for small refiner status as described above may lose their status as a small refiner, and thus will be subject to the general program requirements.

These instances are:

Acquisitions

» Refinery owned by small refiner being purchased by 'large' refiner

A small refinery that is acquired by a 'non-small' refiner will cause the newly acquired refinery to lose its status as a small refinery. However, since the acquired refinery was most likely previously subject to the small refiner standards, we feel that it is necessary for there to be some additional time afforded to the purchasing refiner to bring the acquired refinery into compliance with the larger program standards. Therefore, we are allowing a period of 30 months⁴ from the purchase date for the purchasing refiner to bring the previously small refinery into compliance.

In the instance of any sort of technical hardship, we have also provided a provision in the rule for refiners to apply for up to six months of additional lead time. Such requests should be provided to EPA in a timely manner and will be considered on a case-by-case.

» Small refiner purchasing another refinery (owned by either a small or non-small) refiner

If such a transaction causes the refiner's total employee count and/or crude capacity to exceed the small refiner criteria, then the refiner will lose its small refiner status (and likewise, the newly acquired small refinery will also lose its status as a small).

However, a small refiner that exceeds the small refiner employee count or crude capacity by *normal business practice*, and not through merger or acquisition, may retain its small refiner status.

Mergers

» The merger of a small refiner with a non-small refiner

A small refiner merging with a non-small refiner is similar to the case of acquisition by a non-small refiner, and thus we are also affording the 30 months lead time in these situations, as the small refiner would lose its status as a small in this situation.

NOTE: In the case of a merger of two small refiners/refineries, status as a small refiner will remain in place for both parties. During discussions with small refiners, it was brought to our attention that the merging of two small refiners would not provide any financial benefit to either refiner, and the original compliance plans of both refiners would not be affected by the

The 30 months may not continue past June 1, 2010 for the 500 ppm NRLM standard and June 1, 2014 for the 15 ppm NRLM standard.

merger. Therefore, in the case of a merger of two small refiners, each refiner (and thus, their respective refineries) may retain its status as a small refiner.

 Approved gasoline sulfur/highway diesel small refiners that grew through normal business practices and now exceed the NRLM small refiner criteria

In a few instances, some refiners that were considered small under either the gasoline sulfur or highway diesel fuel programs grew, through normal business practices, and now they exceed the small refiner criteria as defined in the nonroad diesel rule. These refiners are *not* automatically being considered small refiners under the nonroad rule (but will still retain the status as a small refiner for the rule under which it applied).

Under the final nonroad program, such refiners would face the challenge of having to produce 500 ppm NRLM in 2007 and both 15 ppm highway and NRLM diesel fuel in 2010. We have provided some relief to those refiners in the final nonroad rule. For these refiners, they may opt to skip the 500 ppm NRLM standard and meet the 15 ppm standard for both highway and NR diesel in 2010 (and LM diesel fuel in 2012).

3.0 What Does the Regulation Require?

3.1 Requirements for refiners

3.1.1 General refiner requirements

The rule specifies that beginning June 1, 2007, refiners must begin producing NRLM diesel fuel that meets a maximum sulfur standard of 500 parts per million (ppm). All 2007 and later model year diesel-fueled nonroad vehicles must be refueled with this lower sulfur fuel. Beginning June 1, 2010, refiners must begin producing nonroad (NR) diesel fuel that meets a maximum sulfur standard of 15 ppm; and all 2010 and later model year vehicles must be fueled with this fuel. Locomotive and marine (LM) diesel fuel must then meet the 15 ppm sulfur standard beginning June 1, 2012. Any 500 ppm and 15 ppm fuel produced after its applicable date may only be used in pre-2008 and pre-2011 nonroad equipment, respectively.

Based on discussions with various parties throughout the fuel refining and distribution system, we decided to adopt a designate and track (D&T) provision in the rule. In essence, the D&T provision requires refiners and importers to designate the volumes of diesel fuel they produce and/or import.

Refiners/importers will designate the type of diesel fuel (highway or NRLM) and the applicable sulfur level. They may then mix and ship highway and NRLM diesel fuels that meet the same sulfur specification together, without dyeing their NRLM diesel fuel at the refinery gate. The designations will follow the fuel through the distribution system, with some limits placed on the ability of downstream parties to change the designation of the fuel. The bulk of the designate and track provisions end May 31, 2010 when all highway diesel fuel must meet the 15 ppm sulfur standard.

3.1.2 Small refiner-specific requirements

There are specific provisions for small refiners. These were developed due to the fact that during the SBREFA process and throughout the development of the rule, some small refiners indicated that they will have greater difficulty than larger refiners in complying with the nonroad diesel fuel sulfur standard. The small refiners that participated in the SBREFA process as Small Entity Representatives (SERs) noted certain factors and unique circumstances that small refiners generally face with regard to compliance with environmental programs. It was noted that small refiners generally lack the resources that are available to larger refining companies, including those large companies that own small-capacity refineries, to raise capital for investing in desulfurization equipment, such as shifting of internal funds, securing of financing, or selling of assets. Small refiners are also likely to have more difficulty in competing for engineering and construction resources needed for the installation of the desulfurization

equipment which will likely be required to meet the standards finalized in this action.

Based on the above discussions and analyses, the SBAR Panel and we agreed that small refiners would likely experience a significant and disproportionate financial hardship in reaching the objectives of our NRLM diesel fuel sulfur program. However, the Panel also noted that the burden imposed upon the small refiners by the sulfur requirements varied from refiner to refiner and could not be alleviated with a single provision. In addition, the small refiners strongly supported having multiple compliance options. Therefore, three regulatory flexibility options were offered to decrease the burden on small refiners in complying with the rule, these options are discussed in detail in Section 4 of this guide.

3.2 Requirements for downstream parties

The nonroad diesel fuel rule contains certain downstream compliance and enforcement provisions for all entities in the diesel fuel distribution system downstream of the refinery gate. The delayed compliance dates for downstream parties affords additional time to these parties to turnover their NRLM tanks to lower sulfur fuel. In general, the compliance dates for terminals are two months after the applicable dates of the standard for refiners and importers; similarly, the compliance dates for wholesale purchaser-consumer facilities/retail stations begin two months following the applicable dates for terminals.

Under the rule, both 500 ppm and 15 ppm nonroad diesel fuel will be in the distribution system. We are requiring that at the start of the program, on June 1, 2007, all NRLM diesel fuel must be marked, or 'designated' as a certain type of fuel and must then be 'tracked' throughout the distribution system to ensure that it continues to comply with the standard that it is designated to meet on its product transfer document (PTD), pump label, and/or any other documentation.

What are the specific compliance dates for downstream parties?

Downstream facilities must meet the following standards by the applicable dates noted below:

- June 1, 2007 May 31, 2010
 Most NRLM fuel produced or imported will begin meeting the 500 ppm sulfur standard by June 1, 2007; 500 ppm sulfur diesel fuel and high sulfur (above 500 ppm) diesel fuel may still be produced, distributed, and sold for use in NRLM diesel engines.
 - » Terminals/fuel distributors All NRLM diesel fuel must meet, at the very least, the 500 ppm sulfur standard by August 1, 2010.
 - » Retailers and wholesale purchaser-consumers

All NRLM diesel fuel must meet the 500 ppm standard by October 1, 2010 at wholesale purchaser-consumer facilities and retail stations; NRLM diesel fuel with a sulfur level higher than 500 ppm cannot legally exist in the fuel distribution system after this date.

June 1, 2010 - May 31, 2014

Most NRLM fuel produced or imported will begin meeting the 15 ppm sulfur standard by June 1, 2010; and all NRLM diesel fuel produced or imported will be required to meet the 500 ppm sulfur standard. Both 15 ppm and 500 ppm sulfur fuels may still be produced, distributed, and sold for use in NRLM diesel engines.

- » Terminals/fuel distributors At the terminal level, all NRLM diesel fuel must meet the 15 ppm sulfur standard by August 1, 2014.
- » Retailers and wholesale purchaser-consumers All NRLM diesel fuel must meet the 15 ppm standard by October 1, 2014 at wholesale purchaser-consumer facilities and retail stations; NRLM diesel fuel with a 500 ppm sulfur level cannot legally exist in the fuel distribution system after this date.

• June 1, 2014 and beyond

By June 1, 2014, only 15 ppm sulfur fuel may be produced/imported by refiners and importers. However, downstream-generated 500 ppm sulfur diesel fuel may only be used in nonroad engines until December 1, 2014.

- » Terminals/fuel distributors 500 ppm sulfur diesel fuel that is produced from product downgrade and transmix in the distribution system can be distributed and sold for use in locomotive and marine diesel engines only. Distributors will still be required to comply with the applicable fuel designation, as both 15 ppm and 500 ppm LM fuel may still exist in the distribution system.
- » Retailers and wholesale purchaser-consumers After June 1, 2014, 500 ppm sulfur fuel may only be sold into the LM and heating oil markets. We did not set an end date for the downstream distribution of 500 ppm sulfur LM fuel, however we plan to conduct an evaluation of this flexibility in 2011, following the implementation of the 15 ppm sulfur NR fuel standard.

Table 5. Nonroad Diesel Rule Deadlines and Compliance Dates						
	Refiners, Importers	Credit, Small refiner	Terminals	Retail outlets, wholesale purchaser- consumers, bulk plants	Other locations	
500 ppm NRLM	6/1/2007	6/1/2010	8/1/2010	10/1/2010	12/1/2010	
15 ppm NRLM	6/1/2010	6/1/2014	8/1/2014	10/1/2014	12/1/2014	
15 ppm LM	6/1/2012	6/1/2014				

Are any provisions being provided for off-spec/interface/transmix fuel?

While the rule has set more stringent standards for fuel at the refinery gate, the rule does provide outlets for off-specification products generated in the distribution system downstream of the refinery gate. 15 ppm fuel that is contaminated (which thus becomes 500 ppm fuel) by coming into contact with a higher sulfur fuel and 500 ppm fuel produced by transmix processors from contaminated fuel, can be marketed as 500 ppm NRLM fuel until June 1, 2014; and 500 ppm LM fuel after that date. And, as stated before, an end date for the downstream distribution this fuel has not been set, but an evaluation of a potential end date will take place in 2011.

4.0 Provisions for Small Entities

4.1 Small refiner-specific provisions

What are the regulatory options that are available to small refiners?

Refiners that seek and are granted small refiner status may choose from the following three options under the nonroad diesel program.

• **NRLM Delay Option**. A small refiner may delay meeting the 500 ppm and 15 ppm sulfur standards for up to 3 and 4 years, respectively.

The NRLM Delay Option is available for any refiner that qualifies as a small refiner, and would allow such refiners to continue to produce and sell diesel fuel at the current uncontrolled sulfur levels standard for three additional yearsthrough May 31, 2010. Similarly, for the 15 ppm standard that takes effect on June 1, 2010, small refiners choosing this option will be allowed to continue the production (and sale of) 500 ppm fuel until June 1, 2014.

Small refiners producing higher sulfur fuel than the national program dictates (*i.e.* producing 1000 ppm sulfur fuel after June 1, 2007 when the national program goes to a 500 ppm sulfur limit) must limit their production to baseline volume levels. Any diesel fuel produced over the applicable baseline volume will be subject to the national program standard applying to non-small refiners:

- » June 1, 2007 May 31, 2010 Refiners may produce uncontrolled NRLM fuel up to the 2003-2005 non-highway baseline volumes. Fuel produced in excess of the baseline will be subject to the 500 ppm NRLM standard.
- » June 1, 2010 May 31, 2014 Refiners may produce 500 ppm NRLM fuel up to the 2006-2008 non-highway baseline volumes. Fuel produced in excess of this baseline will be subject to the 15 ppm NRLM standard.
 - → 500 ppm LM fuel produced during 2010 to 2012 would be counted towards meeting this baseline volume

With this option comes the need for marking heating oil to distinguish it from small refiner high sulfur NRLM fuel. As discussed further later in this guide (and in depth in the rule), certain areas in PADD 1 will incur a disproportionate financial burden in using a fuel marker. Therefore, to eliminate the need to mark heating oil in this area (the "exclusion area", which is defined and discussed later in this guide), small refiner and credit fuel are not to be used in the exclusion area to reduce the number of possible grades of fuel in the distribution system in this area.

Table 6. Small Refiner NRLM Diesel Fuel Sulfur Standards Compliance Dates (<i>in ppm</i>) ^a										
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Non-Small Refiners- NR fuel		500	500	500	15	15	15	15	15	15
Non-Small Refiners- LM fuel		500	500	500	500	500	15	15	15	15
Small Refiners- NR fuel					500	500	500	500	15	15
Small Refiners- LM					500	500	500	500	15	15
a- new standards will take effect June 1 of the applicable year										

 NRLM Credit Option. A small refiner that chooses to produce 500 ppm and/or 15 ppm fuel earlier than the small refiner deadlines may generate credits (and sell them to other refiners) through the broader sulfur credit banking and trading program.

During the SBREFA process some small refiners informed us of their desire to produce fuel meeting the NRLM standards earlier than is required for small refiners. Various reasons were stated, including a limit on the number of fuel grades that certain distribution systems can handle, producing 500 ppm or 15 ppm fuel on time will be more economically advantageous in a specific market area, desire to desulfurize NRLM along with the small refiner's highway diesel fuel, etc. For these refiners, the NRLM Delay Option would not prove to be a very useful flexibility option, however, the NRLM Credit Option would provide sufficient regulatory flexibility.

Under this option:

- → credits may be generated for any volume of 500 ppm NRLM diesel fuel produced from crude oil from June 1, 2006 through May 31, 2010; and,
- → credits may be generated for any volume of 15 ppm NRLM diesel fuel produced from crude oil from June 1, 2010 through December 31, 2013.

The NRLM Credit Option helps to encourage all refiners to produce 500 ppm and 15 ppm sulfur fuel as early as possible. Further, generating and selling credits could provide additional funds to help small refiners defray some of the costs of compliance with the rule.

 NRLM/Gasoline Compliance Date Option. A small refiner that chooses to produce 15 ppm sulfur fuel by June 1, 2006 and elects not to generate credits for early production will receive a relaxation in their small refiner interim gasoline sulfur standards.

This option is for small refiners that produce greater than 95 percent of their NRLM diesel fuel at the 15 ppm sulfur standard by June 1, 2006 and elect not to generate credits for early compliance with the standards. The NRLM/Gasoline Compliance Date Option allows small refiners to receive a 20 percent increase in its applicable small refiner annual average and per-gallon cap gasoline sulfur standards for the duration of the interim program (and the per-gallon gasoline cap cannot exceed 450 ppm). To receive the relaxation in its gasoline sulfur requirements, refiners must produce a 15 ppm NRLM volume of at least 85 percent of the annual average volume of nonroad diesel fuel it produced from 2003 to 2005.

If a small refiner choosing this option fails to meet either the NRLM 15 ppm sulfur standard by June 1, 2006 or the 85 percent minimum volume requirement, then the refiner's original small refiner interim gasoline sulfur standard will automatically apply retroactively. Furthermore, the refiner will be required to compensate for the higher gasoline sulfur levels by either purchasing credits or producing an equivalent volume of gasoline below the required levels.

Can any of the regulatory options be used in conjunction with another option?

Since a small refiner must produce 95 percent of its NRLM diesel fuel early as 15 ppm under the NRLM/Gasoline Compliance Date option without the use of credits, that option is not compatible with either the NRLM Delay option or the NRLM Credit option. So, a refiner that chooses the NRLM/Gasoline Compliance Date option may not choose either of the other two options. However, the NRLM Delay option and the NRLM Credit option are compatible with each other, so a small refiner can choose either, or both, of these options.

What happens if I am not able to comply with the standards, even if I utilize the small refiner options?

In the nonroad diesel rule, we have provided additional provisions for cases of extreme unforseen circumstances or hardships. These provisions allow a refiner or importer to seek temporary relief from the NRLM provisions in rare instances. Waivers due to extreme unforseen circumstances must be based on a refiner's inability to comply with the applicable standard due to circumstances out of the refiner's control (such as fire, tornadoes, floods, etc.). In such cases, the refiner must submit a hardship waiver application, and we will evaluate the applications- and the resulting relief- on a case-by-case basis.

Refiners seeking a hardship waiver are required to show that they:

- were not able to avoid the noncompliance;
- will make up the air quality detriment associated with the waiver;
- will make up the economic benefit from the waiver, and;
- will meet the nonroad diesel sulfur standards as expeditiously as possible.

Applicants must apply by June 1, 2005. Further, the application must include the information detailed below, or else the application may be deemed incomplete and void:

- crude oil refining capacity of all diesel fuel products produced at all of the refiner's refineries
- fuel sulfur level(s) of all diesel fuel products produced at all of the refiner's refineries
- technical plan for capital equipment and operating changes to meet the NRLM diesel fuel sulfur standards
- anticipated timing for the overall project, and key milestones to ultimately produce 100 percent 15 ppm NRLM
- the capital requirements for each step of the proposed projects
- detailed plans for financing the project, including
 - » financial statements demonstrating the nature and degree of financial hardship (and how the requested relief would relieve the hardship)
 - » description of the overall financial situation of the company
 - » plans to secure financing
- plan demonstrating how the refiner would achieve the standards, including a timetable for
 - » obtaining the necessary capital
 - » contracting for engineering and construction resources
 - » obtaining necessary permits
 - » beginning/completing construction
- description of the market area for the refiner's diesel fuel projects
- (*optional*) could also include a compliance plan stating how fuel will be segregated through to the end-user, and who those end-users are

4.2 Provisions for other entities

During the SBREFA process, representatives of the fuel distribution and marketing sectors of the industry commented that the addition of a fuel marker would impose a substantial burden on those small entities (heating oil marker requirements would force small terminal operators to install expensive injection equipment and they would not be able to recoup these costs). Therefore, we finalized a provision to decrease the burden on these small operators- we are not requiring the addition of a fuel marker to heating oil for fuel produced and sold in the Northeast/Mid-Atlantic (NEMA) exclusion area. Any fuel produced in the NEMA area for sale outside of the area must have the fuel marker present. Also, fuel produced outside of the area (regardless of whether all or only a portion of the fuel will be sold for use in the exclusion area) must include the fuel marker.

While this provision was discussed during the SBREFA process mainly to mitigate the burden on small entities, the omission of the marker in the NEMA exclusion area applies to non-small entities as well. A map of the exclusion area, as well as a listing of the counties in the area, can be found in Appendix B of this guide.

5.0 Designate and Track requirements

These limits are designed to restrict the inappropriate sale of 500 ppm sulfur NRLM diesel fuel into the highway market, the inappropriate sale of heating oil into the NRLM market, the inappropriate sale of 500 ppm sulfur LM into the nonroad market, and to implement the downgrading restrictions that apply to designate and track approach includes record keeping and reporting requirements for all parties in the fuel distribution system, associated with tracking designated fuel volumes through each custodian in the distribution chain until the fuel exits the terminal. The program also includes enforcement and compliance assurance provisions to enable the Agency to rapidly and accurately review for discrepancies the large volume of data collected on fuel volume hand-offs. As stated before, the bulk of the designate and track provisions end May 31, 2010 when all highway diesel fuel must meet the 15 ppm sulfur standard. However, as discussed below, scaled back designate and track provisions continue beyond 2010 for purposes of enforcing against heating oil being used in the NRLM market and to enforce against 500 ppm LM diesel fuel being used in the nonroad market.

Designation requirements:

- Refiners/importers must designate the volume and type of each batch of fuel that is transferred to another entity; acceptable designations are shown in Table 7. below.
- Fuel distributors must clearly designate each batch of fuel that is transferred to another party; they must also specify the sulfur content of each batch while it is in their custody between receipt and delivery. Table 8, below states designation requirements for fuel distributors.

In order to properly track transfers of diesel fuel between facilities, each entity (regardless of size) in the fuel distribution system, up through and including the point where fuel is loaded onto trucks for distribution to retailers or wholesale purchaser-consumers, must register each of its facilities with EPA by December 31, 2005, or six months prior to handling fuels subject to the designation requirements of today's rule.

An entity's registration must include the following information:

- Corporate name and address
- Contact name, telephone number, and e-mail address
- For each facility operated by the entity:
- Type of facility (e.g. refinery, import facility, pipeline, terminal)
- Facility name
- Physical location
- Contact name, telephone number, and e-mail address

Table 7. Designation Requirements for Refiners and Importers

Acceptable designations

Highway, nonroad, or locomotive and marine (MVNRLM) diesel fuel

From June 1, 2006 - May 31, 2010

Designate as #1 or #2:

- MV diesel fuel (15 ppm, 500 ppm, or high sulfur)
 - if red dye is visible, must be designated as NRLM (unless further designated as tax exempt)
 - NRLM diesel fuel (15 ppm, 500 ppm, or high sulfur)
 - if marked, must be designated as heating oil

June 1, 2010 - May 21, 2012

Designate as #1 or #2:

- undyed 15 ppm MV diesel fuel
- dyed NRLM diesel fuel, also specify if
 - 15 ppm NR diesel fuel
 - 500 ppm LM diesel fuel

NOTE: marked fuel can be designated as LM or heating oil during this timeframe

Until May 31, 2014

Designate as #1 or #2:

- undyed 15 ppm MV diesel fuel
- dyed 15 ppm NRLM diesel fuel
- dyed 500 ppm NRLM small refiner or credit diesel fuel
- Heating oil
- Jet fuel
- Kerosene
- No. 4 fuel (mixture of heavy fuel and diesel)
- Distillate fuel for export only
- Exempt distillate fuels (those with NSE exemptions, R&D fuels, etc.)

Additional restrictions/clarifications:

- Prior to June 1, 2009, all 15 ppm MVNRLM must be designated as 15 ppm MV diesel fuel
- Beginning June 1, 2010 distillate fuel with a sulfur content over 15 ppm cannot be designated as MV diesel fuel
- Beginning June 1, 2014 distillate fuel with a sulfur content over 15 ppm cannot be designated as MVNRLM diesel fuel
- Any batch of #1D suitable for use as both MVNRLM and kerosene or jet fuel may be designated as any of these fuel types, as applicable

Additional clarifications for the NE/MA area:

- Beginning June 1, 2007 distillate with a sulfur content over 500 ppm distributed/intended for distribution in the NE/MA area may not be designated as MVNRLM diesel fuel
- From June 1, 2010 through May 31, 2012 distillate with a sulfur content over 15 ppm distributed/intended for distribution in the NE/MA area may not be designated as NR diesel fuel

Additional clarifications for Alaska:

- Beginning June 1, 2007 distillate with a sulfur content over 500 ppm distributed/intended for distribution in Alaska may not be designated as NRLM unless EPA has approved a compliance plan for the refiner segregating the fuel from all other types of NRLM diesel fuel from the refinery gate to the consumer
- From June 1, 2012 through May 1, 2014 distillate with a sulfur content over 15 ppm distributed/intended for distribution in Alaska may not be designated as NRLM unless EPA has approved a compliance plan for the refiner segregating the fuel from all other types of NRLM diesel fuel from the refinery gate to the consumer
- Beginning June 1, 2014 any distillate with a sulfur content greater than 15 ppm may not be designated as MVNRLM diesel fuel

Table 8. Fuel Designations for Fuel Distributors

From June 1, 2006 through May 31, 2009, when a batch of 15 ppm MVNRLM diesel fuel is transferred to another party, it must be designated as:

- #1D 15 ppm MV diesel fuel
- #2D 15 ppm MV diesel fuel

From June 1, 2009 through May 31, 2010 when a batch of 15 ppm MVNRLM diesel fuel is transferred to another party, it must be designated as:

- #1D 15 ppm MV diesel fuel
- #2D 15 ppm MV diesel fuel
- 15 ppm NRLM diesel fuel

From June 1, 2006 through May 31, 2010 when a batch of undyed 500 ppm MVNRLM is transferred to another facility, it must be designated as:

- #1D 500 ppm MV diesel fuel
- #2D 500 ppm MV diesel fuel
- 500 ppm NRLM diesel fuel

From June 1, 2007 through May 31, 2010 when a batch of fuel (that is not jet fuel, kerosene, No. 4 fuel, or fuel for export) greater than 500 ppm is transferred to another party, it must be designated as:

- High sulfur NRLM diesel fuel
- Heating oil
- Exempt distillate fuel

From June 1, 2010 through May 31, 2012 when a batch of fuel (that is not jet fuel, kerosene, No. 4 fuel, or fuel for export) with a sulfur content greater than 15 ppm is transferred to another party, it must be designated as:

- 500 ppm NR diesel fuel
- 500 ppm LM diesel fuel
- Heating oil
- Exempt distillate fuel

From June 1, 2012 through May 31, 2014 when a batch of fuel (that is not jet fuel, kerosene, No. 4 fuel, or fuel for export) with a sulfur content greater than 15 ppm is transferred to another party, it must be designated as:

- 500 ppm NRLM diesel fuel
- Heating oil
- Exempt distillate fuel

Beginning June 1, 2014 when a batch of fuel (that is not jet fuel, kerosene, No. 4 fuel, or fuel for export) with a sulfur content greater than 15 ppm is transferred to another party, it must be designated as:

- 500 ppm LM diesel fuel
- Heating oil
- Exempt distillate fuel

► NOTE: Please see also §80.598 (b)(9) for additional restrictions and clarifications that may apply to fuel distributors

6.0 Recordkeeping and reporting requirements

6.1 Requirements for small refiners under the highway diesel rule

Under the regulatory flexibility options for small refiners, these entities may be subject to new reporting and recordkeeping requirements to help ensure compliance with the options and the integrity of 15 ppm diesel fuel as it moves from the refinery gate to the retail outlet. These requirements are listed below in Table 9.

» 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 EPA.

» Pre-Compliance Reports

All refiners (including small refiners) and importers must report their progress toward compliance with the highway diesel fuel sulfur standards to EPA. These pre-compliance reports are due by June 1 of every year from 2003 through 2005. Generalized data from the reports will be presented each year on a PADD basis in annual reports following the receipt of the year's pre-compliance reports (we will maintain the confidentiality of information submitted in pre-compliance reports). EPA will not hold refiners liable if their actual actions deviate from these reports- as we fully expect that refiners' plans may change-therefore, the rule requires that the reports be updated annually through 2005.

» Annual Compliance Reports

When the highway diesel sulfur requirements begin on June 1, 2006, refiners and importers will be required to submit annual reports that demonstrate compliance with the requirements of the rule. The first annual compliance report, for the period of June 1, 2006 through December 31, 2006, will be due by the end of February 2007. The reports will be required annually through February 2011 (after the end of the extended interim low sulfur gasoline program for small refiners on December 30, 2010).

» Product Transfer Documents

Refiners and importers will be required to provide information on commercial Product Transfer Documents (PTDs) that identify diesel fuel distributed for use in motor vehicles and state that the fuel complies with the 15 ppm sulfur standard. In addition, PTDs will also be required to identify any diesel fuel having a sulfur content of 500 ppm and must state that its use in motor vehicles

is limited to pre-2007 motor vehicles. PTDs must also include the volume of fuel delivered (for each grade, 15 ppm and 500 ppm). With the exception of transfers to truck carriers, retailers and wholesale purchaser-consumers, product codes may be used to convey the information (more explicit language on PTDs to these parties is necessary since employees of such parties are less likely to be aware of the meaning of product codes). PTDs are not required for transfers of product into motor vehicles at retail outlets or wholesale purchaser-consumer facilities. Lastly, PTDs must identify whether or not distillates meet the 15 ppm standards, and must identify tax-exempt highway fuel.

Since the rule also allows for the production and sale of 500 ppm sulfur diesel fuel for use in pre-2007 model year vehicles, there are specific requirements for PTDs regarding additives. These requirements are listed in detail in Table 9, below.

» 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 (TCO) or any hardship program (i.e., small refiner relief provisions), 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, the batch designations, and the batch volumes. The refiner must maintain records regarding credit generation, use, transfer, purchase, or termination. Recordkeeping information that must be kept is listed in detail in Table 9. This information must be kept by refinery (separately by refinery and by PADD of import, for foreign refiners) and by PADD for importers.

Table 9. Recordkeeping and Reporting Requirements for Highway Diesel Small Refiners

	101 1	ngriway Dieser Oman Kermers
Registration Requirements		
		Corporate name and address of the refiner or importer and any parent companies and a contact person
		Name and address of all refineries or import facilities (including, for mporters, the port of entry and PADD)
	• (Contact person
	٠ ـ ا	ocation of records
	• E	Business activity (refiner or importer)
	• (Capacity of each refinery in barrels of crude oil per calendar day
	6	Application for small refiner relief, including average number of employees for all pay periods from 1/1/99 to 1/1/00 for the company, all parent companies, and all subsidiaries or joint ventures
	• \	Which small refiner option(s) the refiner expects to use at each refinery
Pre-Compliance Reports	_	
		Any changes in the basic corporate or facility information since registration
	t t	Estimates of the volumes (in gallons) of 15 ppm fuel (and, if applicable, 500 ppm fuel) to be produced from crude oil in each refinery, as well as the volumes of each grade of highway diesel fuel produced from other resources
		Estimates of numbers of credits to be earned and/or used (for entities expecting to participate in the credit program)
	k C	information regarding engineering plans (e.g., design and construction), the status of obtaining any necessary permits, and capital commitments for making the necessary modifications to produce low sulfur highway diesel fuel, and actual construction progress; reports due in 2004 and 2005 must provide an update of the progress in each of these areas

	 Additional information required for the small refiner options: 500 ppm Option- the refiner must make a showing that sufficient sources of 15 ppm fuel will likely exist in the area; if after 2003 the sources of 15 ppm fuel decrease, the pre-compliance reports for 2004 and/or 2005 must identify this change and include a supplementary showing that the sources of 15 ppm fuel are still sufficient Small Refiner Credit Option- the requirement for this option is the same as that for the 500 ppm Option, with the additional requirement that the refiner also report on any credits it expects to generate and sell Diesel/Gasoline Compliance Date Option- the refiner must provide information showing that diesel desulfurization plans are on track; the refiner also needs to reasonably show that it will be in a position by June 1, 2006 to produce 100 percent of its highway diesel fuel at 15 ppm sulfur at a volume at least 85 percent of its baseline highway diesel volume
Compliance Reports (Information must be included	l for each refinery)
	The volumes of 15 ppm and 500 ppm sulfur highway diesel fuel produced from crude oil during the compliance period, as well as the volumes of each grade of highway diesel fuel produced from other sources
	The number of credits, if any, used to demonstrate compliance with the 80 percent requirement for 15 ppm sulfur fuel, and their source(s)
	The number of credits, if any, generated
	Additional information required for the small refiner options: 500 ppm Option- small refiners need to show that the volume of highway diesel fuel they produce meeting the 500 ppm sulfur standard meets the lesser of the following values: (1) 105 percent of the average highway diesel volume produced in calendar years 1998 and 1999, or (2) the average highway diesel volume produced from crude oil in calendar years 2004 and 2005 Small Refiner Credit Option- same as requirements for the 500 ppm Option Diesel/Gasoline Compliance Date Option- refiner must, in each annual compliance report, confirm that it continues to produce 100 percent of its highway diesel fuel at 15 ppm sulfur and that its highway diesel volume continues to be at least 85 percent of its baseline volume
PTDs	
	Must identify 500 ppm fuel as such and state that its use in motor vehicles is limited to pre-2007 motor vehicles
	Must include the volume of fuel delivered (for each grade, 15 ppm and 500 ppm)
	Must identify distillates as meeting the 15 ppm standard
	Dyed, tax-exempt highway diesel fuel must be identified

	 Requirements for additives: for additives that have a sulfur content not exceeding 15 ppm, the PTD must state: "The sulfur content of this additive does not exceed 15 ppm." for additives that may have a sulfur content exceeding 15 ppm, the additive manufacturer's PTD, and PTDs accompanying all subsequent transfers, must provide: a warning that the additive's sulfur content exceeds 15 ppm; the maximum sulfur content of the additive; the appropriate amount of additive to blend to highway diesel fuel, stated as gallon of additive per gallon of diesel fuel; and the increase in sulfur concentration of the fuel the additive will cause when used at the specified concentration
Recordkeeping Requiremer	nts
	The total volume of highway diesel fuel produced or imported
	The total volume of highway diesel fuel produced or imported meeting the 500 ppm sulfur standard
	The total volume of highway diesel fuel produced or imported meeting the 15 ppm sulfur standard
	 A statement of the baseline volume and whether the volume of 15 ppm fuel produced or imported is at least equal to 85 percent of the baseline volume
	 The percentage of highway diesel fuel produced or imported meeting the 15 ppm sulfur standard before inclusion of credits
	The volume of 15 ppm highway diesel fuel represented by credits
	The percentage of 15 ppm highway diesel fuel produced or imported that is represented by credits
	The number of credits in the refinery's or importer's possession at the beginning of the compliance period, separately by early credits and all other credits
	The number of credits generated during the compliance period
	The number of credits used, separately by early credits and all other credits
	 If any credits were obtained from or transferred to other parties, for each other party, its name, its EPA refiner or importer registration number, and the number of credits obtained from or transferred to the other party, provided separately for early credits and all other credits
	The percentage of compliance with the 15 ppm motor vehicle diesel 80 percent volume requirement by use of credits (provided separately for early credits and all other credits)
	 The number of credits that will carry over to the next averaging period, provided separately for early credits and all other credits
	Records regarding test results, including mandatory quality assurance tests

Contracts or other commercial documents that establish each transfer of credits

6.2 Requirements for small refiners under the nonroad rule

Under the regulatory flexibility options for small refiners, these entities may be subject to new reporting and recordkeeping requirements to help ensure compliance with the options and the integrity of 15 ppm diesel fuel as it moves from the refinery gate to the retail outlet. These requirements are listed below in Table 10.

» Registration Reports

Refiners that are either currently producing or supplying NRLM diesel fuel, or that expect to do so by June 1, 2007, must register with EPA by December 31, 2005.

» Pre-Compliance Reports

All refiners (including small refiners) and importers must report their progress toward compliance with the highway diesel fuel sulfur standards to EPA. These pre-compliance reports are due by June 1 of every year from 2005 through 2011, or until the refiner or importer produces or imports NR or NRLM diesel fuel meeting the 15 ppm sulfur standard. Generalized data from the reports will be presented each year on a PADD basis in annual reports following the receipt of the year's pre-compliance reports (we will maintain the confidentiality of information submitted in pre-compliance reports). EPA will not hold refiners liable if their actual actions deviate from these reports- as we fully expect that refiners' plans may change- therefore, the rule requires that the reports be updated annually through 2011.

» Annual Compliance Reports

Beginning with the annual compliance period that begins June 1, 2007, or the first period during which NRLM diesel fuel is produced under a small refiner compliance option (whichever is earlier), refiners and importers will be required to submit annual reports that demonstrate compliance with the requirements of the rule. The first annual compliance report, for the period of June 1, 2007 through June 30, 2008, will be due by the end of February 2009. The reports will be required annually through February 2011 (after the end of the extended interim low sulfur gasoline program for small refiners on December 30, 2010).

» Product Transfer Documents

Refiners and importers will be required to provide information on commercial Product Transfer Documents (PTDs) that identify diesel fuel distributed for use in NRLM applications, and state whether the fuel complies with the 15 ppm sulfur standard, 500 ppm sulfur standard, or contains more than 500 ppm sulfur. PTDs must also include the volume of fuel delivered for each grade (15 ppm, 500 ppm, and >500 ppm). With the exception of transfers to truck carriers, retailers and wholesale purchaser-consumers, product codes may be used to convey the information (more explicit language on PTDs to these parties is necessary since employees of such parties are less likely to be aware of the meaning of product codes). PTDs are not required for transfers of product into motor vehicles at retail outlets or wholesale purchaser-consumer facilities. Lastly, PTDs must identify tax-exempt highway fuel.

Since the nonroad rule allows for concurrent production and sale of 15 ppm and 500 ppm sulfur NRLM diesel fuel, there are specific requirements for PTDs regarding sulfur levels in additives. These requirements are listed in detail in Table 10, below.

» Recordkeeping Requirements

Refiners and importers of distillate fuel must maintain several records for each batch of highway diesel fuel produced or imported. The records will be used to check compliance with the designate and track requirements, sulfur test method requirements and credit generation and usage. Recordkeeping information is listed in detail in Table 10. This information must be kept by refinery and by import facility for importers.

Table 10. Recordkeeping and Reporting Requirements for NRLM Diesel Small Refiners				
Registration Requirements				
	Corporate name and address of the refiner or importer and any parent companies and a contact person			
	Name and address of all refineries or import facilities (including, for importers, the port of entry and PADD)			
	Location of records			
	An indication of which option the refiner is applying for at each of its refineries			
	Business activity (refiner or importer)			
	Capacity of each refinery in barrels of crude oil per calendar day			

	•	Application for small refiner relief, including average number of employees for all pay periods from 1/1/02 to 1/1/03 for the company, all parent companies, and all subsidiaries or joint ventures
	•	Which small refiner option(s) the refiner expects to use at each refinery
Pre-Compliance Reports		
	•	All refiners and importers planning to produce or import NR or NRLM diesel fuel must submit pre-compliance reports beginning on June 1, 2005, and for each year until June 1, 2011, or until the entity produces or imports NR or NRLM diesel fuel meeting the 15 ppm sulfur standard.
	•	Any changes in the basic corporate or facility information since registration.
	•	An estimate of the average daily volumes (in gallons) of each sulfur grade of motor vehicle and NRLM diesel fuel produced (or imported) at each refinery (or import facility). These volume estimates must be provided both for fuel produced from crude oil, as well as any fuel produced from other sources, and must be provided for the periods of June 1, 2010 through December 31, 2010, calendar years 2011 through 2013, January 1, 2014 through May 31, 2014, and June 1, 2014 through December 31, 2014.
	•	Estimates of numbers of credits to be earned and/or used (for entities expecting to participate in the credit program).
	•	Information on project schedule by quarter of known or projected completion date by the stage of the project, for example, following the five project phases described in EPA's June 2002 Highway Diesel Progress Review report (EPA420-R-02-016, http://www.epa.gov/otaq/regs/hd2007/420r02016.pdf): Strategic planning, Planning and front-end engineering, Detailed engineering and permitting, Procurement and construction, and Commissioning and startup.

Compliance Reports	 Additional information required for the small refiner options: NRLM delay option (option 1) - An approved NRLM small refiner may produce NRLM diesel fuel from crude oil that contains more than 500 ppm sulfur (HSNRLM) from June 1, 2007 through May 31, 2010, for a volume of HSNRLM diesel that may not exceed 105% of its refinery's baseline volume. The refiner must submit a compliance plan to EPA detailing how the refiner will segregate its HSNRLM diesel, from the refinery through to the ultimate consumer, from fuel having any other designations and from fuel produced by any other refiner. The compliance plan must also identify all ultimate consumers to whom the refiner supplies such HSNRLM diesel fuel. NRLM delay option (option 2) - An approved NRLM small refiner may produce NR diesel fuel from June 1, 2010 through May 31, 2014, and NRLM diesel fuel from June 1, 2012 through May 31, 2014 from crude oil that meets the 500 ppm sulfur standard, subject to refinery baseline volume limitations. The refiner must submit a compliance plan to EPA detailing how the refiner will segregate its 500 ppm diesel, from its refinery through to the ultimate consumer, from fuel having any other designations and from fuel produced by any other refiner. The compliance plan must also identify all ultimate consumers to whom the refiner supplies such diesel fuel. NRLM credit option (Option 3) -The requirement for this option is the same as that for the Options 1 or 2, with the additional requirement that the refiner also report on any credits it expects to generate and sell NRLM/Gasoline Compliance Date Option (Option 4) - the refiner must provide information showing that refinery diesel desulfurization plans are on track; the refiner also needs to reasonably show that each refinery will be in a position by June 1, 2006 to produce 95 percent of its NRLM diesel fuel at 15 ppm sulfur at a volume at least 85 percent of the refinery baseli
(Information must be included	for each refinery)
	 For each batch of NRLM diesel fuel and heating oil (if applicable) produced or imported and delivered during the compliance periods from June 1, 2007 through May 31, 2010, by each refinery or import facility, the batch number, volume, date of production or importation, and whether the batch was dyed red or marked with the heating oil marker.
	The number of credits, if any, used to demonstrate compliance with the 500 ppm and/or 15 ppm NRLM standards, and their source(s)
	The number of credits, if any, generated

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	 Additional information required for the small refiner options: NRLM delay option (option 1) - from June 1, 2007 through May 31, 2010, small refiners need to show for each of their refineries that the volume of HSNRLM diesel fuel they produce does not exceed 105 percent of the refinery baseline volume. NRLM delay option (option 2) - small refiners need to show for each of their refineries that the volume of 500 ppm NR diesel fuel they produce does not exceed 113 percent of the refinery NRLM baseline volume from June 1, 2010 through June 30, 2011, and 96 percent of the refinery NRLM baseline volume from July 1, 2011 through May 31, 2012, less any volume of LM diesel fuel produced NRLM delay option (option 2) - small refiners need to show for each of their refineries that the volume of 500 ppm NRLM diesel fuel they produce does not exceed 113 percent of the refinery NRLM baseline volume from June 1, 2012 through June 30, 2013, and 96 percent of the refinery NRLM baseline volume from July 1, 2013 through May 31, 2014 Diesel/Gasoline Compliance Date Option- refiner must, in each annual compliance report, confirm that each refinery continues to produce 95 percent of its NRLM diesel fuel at 15 ppm sulfur and that each refinery's NRLM diesel volume continues to be at least 85 percent of the refinery baseline volume
PTDs	
	Names and addresses of transferor and transferee
	 Volume, and the sulfur content for MVNRLM, of the diesel fuel/distillate being transferred
	Location of the fuel at the time of the transfer
	Date of the transfer
	Beginning June 1, 2006, fuel with any given designation must also include: the transferor's facility registration number clear statement of the applicable designation and/or classification, and whether or not the fuel is dyed and/or marked
	For transfers of title or custody to a facility where fuel or distillates are taxed, dyed, or marked an accurate statement on the PTD should be provided for each of the following fuel types: Undyed 15 ppm sulfur diesel fuel Dyed 15 ppm sulfur diesel fuel Undyed 500 ppm sulfur diesel fuel Dyed 500 ppm sulfur diesel fuel Dyed High Sulfur NRLM diesel fuel Please see § 80.590 (7)(i)-(vi) for the applicable statement that must appear on a PTD for each of the above designations
	If fuel is dyed and/or marked after a PTD is issued, a new PTD must be prepared (following the guidelines listed above for dyed/marked fuel) and must be provided to all subsequent transferees
	Product codes may not be used to convey information on PTD in transfers to truck carriers, retailers, or wholesale purchaser-consumers

	 A fuel designation can be stated only as a sub-designation if that sub- designation accurately identifies the fuel type (i.e. fuel designated as NR diesel fuel, does not also need to be designated as NRLM or MVNRLM) 				
Recordkeeping Requirements					
	All applicable PTDs				
	 Records for each batch must be kept that state: the batch number (with an indication of whether the batch was received or delivered date and time custody was transferred the designation and volume (in gallons) the name and EPA entity and facility registration number of each party for MV diesel fuel- whether the batch was received or delivered with or without taxes paid for NRLM diesel fuel- whether the batch was received or delivered with or without dye added for heating oil and LM diesel fuel- whether the batch was received or delivered with or without the fuel marker added 				
	Records for any sampling and testing that was performed, which must include the following information: Iocation, date, time, and identification of the storage tank/truck for each sample collected name and title of the person(s) who collected the sample and performed the testing the results of the test(s) and the volume of the product in the storage tank/container from which the sample was taken				
	Records for beginning and end inventory volume must be kept, and must state if adjustments are made to the inventory (detailing amount, type of, and reason for the adjustment)				

For the purposes of D&T, the following records must also be kept by facility:

- for any fuel received or distributed from <u>June 1, 2006 through May 31, 2007</u>- records must be kept for each batch designated as #1D or #2D 15 ppm sulfur MV diesel fuel or 500 ppm #2D MV or NRLM diesel fuel
- for any fuel received or delivered from June 1, 2007 through May 31, 2010- records must be kept for each batch designated as #1D or #2D 15 ppm sulfur MV diesel fuel; #1D or #2D 500 ppm sulfur MV diesel fuel; 15 ppm, 500 ppm, or high sulfur NRLM diesel fuel; or heating oil
- for any unmarked diesel fuel received or delivered from <u>June 1, 2010</u> <u>through May 31, 2012</u>- records must be kept for fuel designated as 500 ppm sulfur NR or LM diesel fuel, or heating oil
- for unmarked fuel received and designated as heating oil from <u>June 1</u>, <u>2012 through May 31</u>, <u>2014</u>- records must be kept for fuel received or delivered that is designated as 500 ppm sulfur NRLM diesel fuel or heating oil
- for unmarked fuel received and designated as heating oil from <u>June 1</u>, <u>2012 through May 31</u>, <u>2014</u>- records must be kept for fuel received or delivered that is designated as 500 ppm sulfur NRLM diesel fuel or heating oil

For Alaska:

- for any unmarked high sulfur diesel fuel received or delivered from <u>June 1, 2007 through May 31, 2010</u>- records must be kept for fuel designated as high sulfur NRLM diesel fuel or heating oil
- for any unmarked high sulfur diesel fuel received or delivered from <u>June 1, 2010 through May 31, 2012</u>- records must be kept for fuel designated as 500 ppm sulfur NR diesel fuel, 500 ppm sulfur LM diesel fuel, or heating oil
- for any unmarked high sulfur diesel fuel received or delivered from <u>June 1, 2012 through May 31, 2014</u>- records must be kept for fuel designated as 500 ppm sulfur NRLM diesel fuel or heating oil

6.3 Requirements for downstream parties

Consistent with other fuel programs, the rule imposes some new recordkeeping requirements for diesel marketers and distributors, specifically PTDs that track transfers of diesel fuel. However, such transfer records are currently maintained by most parties for business and/or tax reasons, so the new requirements should not impose any significant burden on these entities. Information on commercial PTDs identifying diesel fuel distributed for use in motor vehicles and stating that the fuel is compliant with the 15 ppm sulfur standard must be provided. PTDs must also identify any 500 ppm fuel and state that the fuel's use in motor vehicles is restricted to pre-2007 motor vehicles. Lastly, PTDs must include the volume of each fuel grade (15 ppm and 500 ppm) delivered. The specific recordkeeping requirements for these entities are detailed in Table 11 below.

The retention period for all records required to be kept by the rule is 5 years. This is the same period of time required in other fuels rules, and it coincides with the applicable statute of limitations. This retention period applies to PTDs and records of

any test results performed by any regulated party for quality assurance purposes or otherwise (along with supporting documentation such as date of sampling and testing, batch number, tank number, and volume of product). Business records regarding actions taken in response to any violations discovered are also required to be maintained for 5 years.

Table 11. Reporting and Recordkeeping Requirements for Downstream Parties							
PTDs							
	Names and addresses of transferor and transferee						
	Volume, and the sulfur content for MVNRLM, of the diesel fuel/distillate being transferred						
	Location of the fuel at the time of the transfer						
	Date of the transfer						
	Beginning June 1, 2006, fuel with any given designation must also include: the transferor's facility registration number clear statement of the applicable designation and/or classification, and whether or not the fuel is dyed and/or marked						
	For transfers of title or custody to a facility where fuel or distillates are taxed, dyed, or marked an accurate statement on the PTD should be provided for each of the following fuel types: Undyed 15 ppm sulfur diesel fuel Dyed 15 ppm sulfur diesel fuel Undyed 500 ppm sulfur diesel fuel Dyed 500 ppm sulfur diesel fuel Dyed High Sulfur NRLM diesel fuel Please see § 80.590 (7)(i)-(vi) for the applicable statement that must appear on a PTD for each of the above designations						
	If fuel is dyed and/or marked after a PTD is issued, a new PTD must be prepared (following the guidelines listed above for dyed/marked fuel) and must be provided to all subsequent transferees						
	Product codes may not be used to convey information on PTD in transfers to truck carriers, retailers, or wholesale purchaser-consumers						
	For mobile refuelers, each visit to a location to dispense fuel is considered a separate occasion where title/custody of fuel is transferred, and the PTDs must accurately reflect that						
	A fuel designation can be stated only as a sub-designation if that sub-designation accurately identifies the fuel type (i.e. fuel designated as NR diesel fuel, does not also need to be designated as NRLM or MVNRLM)						
Recordkeeping requirements							
	All applicable PTDs						

Any actions taken, if any, to stop the sale or distribution of noncompliant fuel
Records for any sampling and testing that was performed, which must include the following information: I location, date, time, and identification of the storage tank/truck for each sample collected name and title of the person(s) who collected the sample and performed the testing the results of the test(s) and the volume of the product in the storage tank/container from which the sample was taken
 For the purposes of D&T, the following records must also be kept by facility: for any fuel received or distributed from June 1, 2006 through May 31, 2007- records must be kept for each batch designated as #1D or #2D 15 ppm sulfur MV diesel fuel or 500 ppm #2D MV or NRLM diesel fuel for any fuel received or delivered from June 1, 2007 through May 31, 2010-records must be kept for each batch designated as #1D or #2D 15 ppm sulfur MV diesel fuel; #1D or #2D 500 ppm sulfur MV diesel fuel; 15 ppm, 500 ppm, or high sulfur NRLM diesel fuel; or heating oil for any unmarked diesel fuel received or delivered from June 1, 2010 through May 31, 2012- records must be kept for fuel designated as 500 ppm sulfur NR or LM diesel fuel, or heating oil for unmarked fuel received and designated as heating oil from June 1, 2012 through May 31, 2014- records must be kept for fuel received or delivered that is designated as 500 ppm sulfur NRLM diesel fuel or heating oil for unmarked fuel received and designated as heating oil from June 1, 2012 through May 31, 2014- records must be kept for fuel received or delivered that is designated as 500 ppm sulfur NRLM diesel fuel or heating oil For Alaska:
 for any unmarked high sulfur diesel fuel received or delivered from June 1, 2007 through May 31, 2010- records must be kept for fuel designated as high sulfur NRLM diesel fuel or heating oil for any unmarked high sulfur diesel fuel received or delivered from June 1, 2010 through May 31, 2012- records must be kept for fuel designated as 500 ppm sulfur NR diesel fuel, 500 ppm sulfur LM diesel fuel, or heating oil for any unmarked high sulfur diesel fuel received or delivered from June 1, 2012 through May 31, 2014- records must be kept for fuel designated as 500 ppm sulfur NRLM diesel fuel or heating oil
Records for each batch must be kept that state: the batch number (with an indication of whether the batch was received or delivered date and time custody was transferred the designation and volume (in gallons) the name and EPA entity and facility registration number of each party for MV diesel fuel- whether the batch was received or delivered with or without taxes paid for NRLM diesel fuel- whether the batch was received or delivered with or without dye added for heating oil and LM diesel fuel- whether the batch was received or delivered with or without the fuel marker added

 Records for beginning and end inventory volume must be kept, and must state if adjustments are made to the inventory (detailing amount, type of, and reason for the adjustment)

7.0 For More Information

Who can I contact if I have questions or need further assistance?

- General questions about small refiner relief:
 Anne Pastorkovich- (202) 564-8987, pastorkovich.anne-marie@epa.gov
 Tia Sutton- (734) 214-4018, sutton.tia@epa.gov
- Questions about small refiner status/applications:
 Larry Haslett- (202) 343-9728, haslett.larry@epa.gov
- Compliance/enforcement questions:
 Erv Pickell- (303) 236-9506, pickell.erv@epa.gov
- Recordkeeping/reporting questions: John Weihrauch- (202) 343-9477, weihrauch.john@epa.gov

Where can I find rulemaking documents?

- All rulemaking documents and information regarding the nonroad diesel rule can be found on the Nonroad Diesel home page at: http://www.epa.gov/nonroad-diesel
 - » Preamble and regulations: http://www.epa.gov/otaq/url-fr/fr29jn04.pdf
 - » Regulatory Impact Analysis: http://www.epa.gov/nonroad-diesel/2004fr/420r04007.pdf
- Additional information on all of EPA's clean diesel programs can be found on the Clean Diesel home page at: http://www.epa.gov/cleandiesel

Appendix A. Highway and Nonroad Diesel Fuel Compliance Dates

Table A-1. Highway and Nonroad Diesel Fuel Standards										
Who	Covered Fuel	2006	2007	2008	2009	2010	2011	2012	2013	2014
	Highway Diesel Fuel				100% 15 ppm (including small refiner fuel)					
Large Refiners/ Importers	NR		500	500	500	15	15	15	15	15
Large Refiners/ Importers	LM		500	500	500	500	500	15	15	15
	NRLM w/ credit in NE or Ar	•	HS	HS	HS	500	500	500	500	15
Small Refiners	NRLM (not in NE w/ approval in		HS	HS	HS	500	500	500	500	15
Transmix Processor & In-use	NR (not in NE or)	AK)	HS	HS	HS	500	500	500	500	15
Transmix Processor & In-use	LM (not in NE or)	AK)	HS	HS	HS	500	500	500	500	500

Dates for <u>HW diesel fuel</u> are: June 1 for refiners, July 15 for downstream parties, and September 1 for retail and wholesale purchaser-consumers

Dates for <u>NR diesel fuel</u> are: June 1 for refiners, August 1 for terminals, October 1 for retailers, and December 1 for in-use

^{**} Anti-downgrading provisions begin October 1, 2006 **

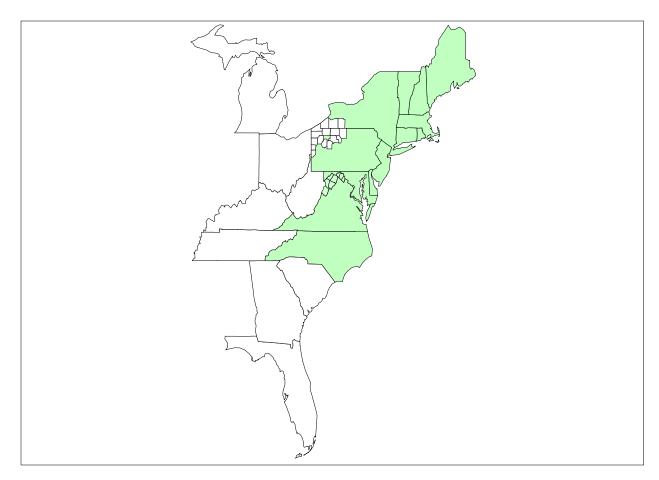
Table A-2. Diesel Fuel Dye and Marker Requirements						
October 1993	June 2006	June 2007	June June 2010 2012		June 2014/ Post-2014	
Highway Diesel Fuel >15 ppm (undyed, unmarked)	80% 15	Highway Diesel 5 ppm/ 20% 500 ppm adyed, unmarked) All Highway Diesel 15 ppm				
		NR Diesel 500 ppm	NR Die 15 ppi			
		Small & Credit ~ 3000 ppm *	Small & Credit 500 ppm	Small 500 ppm	All NRLM Diesel 15 ppm	
All Nonroad Diesel > 500 ppm *		LM Diesel 500 ppm	LM Diesel 500 ppm **	LM Diesel 15 ppm		
		Transmix/ Downgrade > 500 ppm *	Transmix/Downgrade 500 ppm		Transmix/ Downgrade 500 ppm LM <i>ONLY</i>	
Heating Oil **						
* The red dye requirement applies at the refinery gate until 2010; and at the terminal thereafter. ** The yellow marker requirement applies at the terminal.						

Appendix B. The Northeast/Mid-Atlantic Area

As previously discussed, the NEMA area is excluded from the marker requirement. In addition, the sale of NRLM diesel fuel produced or imported under the credit and hardship provisions (including the small refiner provisions) or from the downstream downgrade provisions is prohibited.

In most cases, whole states in PADD I were assigned to the NEMA area, since it was projected that the level of heating oil use in these states would be high, and the lack of significant concern regarding the elimination of the program's flexibilities to produce high sulfur NRLM diesel fuel in these states. A few counties in eastern West Virginia were also assigned to the Northeast/Mid-Atlantic area based on similar supply patterns in these areas. Likewise, some counties in western New York and Pennsylvania were not assigned to the NEMA area due to the need to maintain flexibilities for refiners serving this area.

Figure B-1.
The Northeast/Mid-Atlantic Exclusion Area



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	Table B-1. The Northeast/Mid-Atlantic Exclusion Area (these areas are shaded in Figure A-1.)					
•	Connecticut	Delaware	Maine			
•	Maryland	Massachusetts	New Hampshire			
•	New Jersey	North Carolina	Rhode Island			
•	Vermont	Virginia	Washington D.C.			
•	 West Virginia's eight easternmost counties- Jefferson, Berkely, Morgan, Hampshire, Mineral, Hardy, Grant, and Pendleton 					
•	New York (<u>except for</u> : Allegany, Cattaraugus, and Chautauqua counties)					

Pennsylvania (<u>except for</u>: Beaver, Cameron, Clarion, Crawford, Elk, Erie, Forest, Greene, Jefferson, Lawrence, Mc Kean, Mercer, Potter, Venango, Warren, and Washington counties)

Appendix C. PADD Map

Figure C-1.

