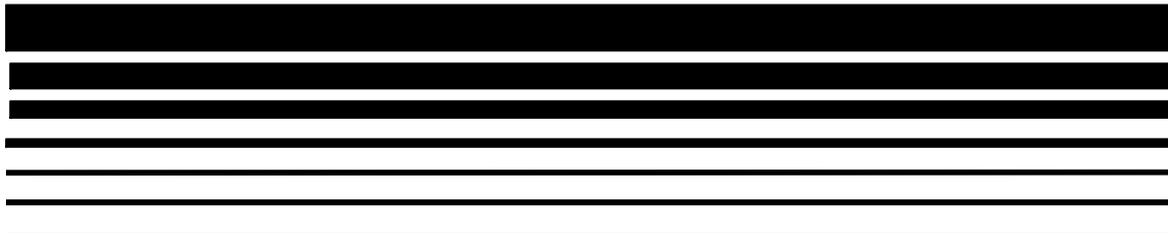




EPA

National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products--Summary of Public Comments and Responses on Proposed Rule



NESHAP

EPA-453/R-03-008
August 2003

**National Emission Standards for Hazardous Air Pollutants (NESHAP):
Surface Coating of Miscellaneous Metal Parts and Products-Summary of
Public Comments and Responses on Proposed Rule**

U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
Emission Standards Division
Research Triangle Park, North Carolina 27711

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TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	PUBLIC COMMENTS	2
3.0	THE MACT FLOOR ANALYSIS	7
3.1	The HAP-to-VOC Ratio	10
3.2	HAP from Cleaning Materials	11
3.3	Pollution Prevention	14
3.4	Rubber-to-Metal Bonding	14
3.5	Aerospace Facilities	15
4.0	OPTIONS MORE STRINGENT THAN THE MACT FLOOR:	16
5.0	UNITS FOR THE NUMERICAL EMISSION LIMITS	18
6.0	OVERLAP WITH OTHER NESHAP	24
6.1	Department of Defense Coatings	24
6.2	Exclusion of Activities Subject to Other Surface Coating NESHAP	27
6.3	Complying With the Rule Representing the Majority of the Substrate (Plastic or Metal) on Pre-assembled Parts	29
6.4	Comply with the most stringent NESHAP	34
6.5	Assembled On Road Vehicle Coating	39
6.6	Miscellaneous Comments on Compliance with Multiple NESHAP	41
7.0	SCOPE AND APPLICABILITY OF THE MISCELLANEOUS METAL PARTS AND PRODUCTS SOURCE CATEGORY	45
7.1	General Applicability Comments	45
7.2	Types of Materials That are Coatings	49
7.3	Regulated Pollutants	53
7.4	Gallons-Used Applicability Threshold and the Small Volume Exemption	54
7.5	Janitorial Operations, Facility Maintenance, and Hand-held Non-refillable Aerosol Cans	61
7.6	Research and Development Facilities	67
7.7	High Performance Coatings	68
8.0	NEW SOURCE APPLICABILITY	75
9.0	EMISSION LIMITS	79

TABLE OF CONTENTS (Continued)

10.0	COMPLIANCE OPTIONS	85
10.1	General Comments on Compliance Options	85
10.2	Compliant Materials Option	88
10.3	Emission Rate Without Add-on Controls Option	90
10.4	Emission Rate with Add-on Controls Option	92
11.0	COMPLIANCE DATES AND AVERAGING PERIOD	94
12.0	COMPLIANCE CALCULATIONS	97
13.0	TEST METHODS	102
13.1	ASTM Methods	102
13.2	Comparing Formulation Data and Default HAP Contents to EPA Test Methods	103
13.3	Using OSHA Reporting Cutoffs When Determining HAP Content	105
13.4	Reactive Coatings	107
13.5	Using VOC as Surrogate for HAP	107
14.0	MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS	109
15.0	ADD-ON CONTROLS	124
15.1	General Comments	124
15.2	Performance Testing Requirements	125
15.3	Work Practices Requirements	133
15.4	Operating Limits and Monitoring for Emission Capture Systems	134
15.5	Operating Limits and Monitoring for Add-on Controls	136
15.6	Add-on Control Failures, Bypasses, and Deviations	143
15.7	Compliance During Start-up, Shutdown, and Malfunction Periods	147
15.8	Miscellaneous Comments on Add-On Control Device Provisions	150
16.0	MAGNET WIRE	153
17.0	DEFINITIONS	158
18.0	IMPLEMENTATION	161
19.0	CLARIFICATIONS	164
20.0	GENERAL COMMENTS	168

1.0 INTRODUCTION

On August 13, 2002, the U.S. Environmental Protection Agency (EPA) proposed national emission standards for hazardous air pollutants (NESHAP) for Surface Coating of Miscellaneous Metal Parts and Products. The proposed rule fulfills the requirements of the Clean Air Act (CAA), which requires EPA to regulate emissions of hazardous air pollutants (HAP) listed in section 112(b) of the CAA.

This document contains summaries of the 66 public comments that EPA received on the August 13, 2002 proposal to establish NESHAP for Surface Coating of Miscellaneous Metal Parts and Products. In this document, EPA responds to the public comments. This summary of public comments and EPA responses serves as the basis for revisions made to the Surface Coating of Miscellaneous Metal Parts and Products NESHAP between proposal and promulgation.

2.0 PUBLIC COMMENTS

The EPA received 66 comment letters for the August 13, 2002 proposed rule before the comment period closed on October 15, 2002. These comments are contained in category IV-D of Docket ID No. OAR-2003-0116 (formerly Docket No. A-97-34). The commenter, affiliation, and item number in Docket ID No. OAR-2003-0116 are listed in Table 1.

**TABLE 1. DOCKET ID NO. OAR-2003-0116
CATEGORY: IV-D**

Doc. Number	Commenter, Addressee, Title or Description, etc.
IV-D-01	J. Bardi, Administrative Assistant, ASTM International, West Conshohocken, PA
IV-D-02	A.N. Zoulin, Safety & Environmental Manager, Unifab International Inc., New Iberia, LA
IV-D-03	A.N. Zoulin, Safety & Environmental Manager, Unifab International, Inc., New Iberia, LA
IV-D-04	Florida State Clearinghouse, Department of Environmental Protection, Tallahassee, FL
IV-D-05	J. Jay Grove, Director, Environment, Health & Safety, General American Transportation Corporation, (GATX) Rail Corporation, Chicago IL
IV-D-06	D.J. Krueger, Senior Environmental Engineer, Environmental Technology and Safety Services, 3M Company, St. Paul, MN
IV-D-07	W.A. Leasure, Jr., President, Truck Manufacturers Association (TMA), Washington, D.C.
IV-D-08	C.L. Pettit, Vice President, Regulatory and Technical Affairs, Reusable Industrial Packaging Association (RIPA), Landover, MD

**TABLE 1. DOCKET A-97 -34 (Continued)
CATEGORY: IV-D**

Doc. Number	Commenter, Addressee, Title or Description, etc.
IV-D-09	L. Luna, Senior Engineer, Earth Tech, Warner Robins, GA [representing clients also subject to the Aerospace Manufacturing and Rework NESHAP]
IV-D-10	T.P. Feldman, Vice President, Government Affairs, National Electrical Manufacturers Association (NEMA), Rosslyn, VA
IV-D-11	T.P. Feldman, Vice President, Government Affairs, National Electrical Manufacturers Association (NEMA), Rosslyn, VA
IV-D-12	Neil Chrisman, President, Spectrum Metal Finishing, Youngstown, OH.
IV-D-13	Jim Serne, P.E., Project Director, TRC, Raleigh, NC [representing members of the Truck Manufacturers Association]
IV-D-14	Stephen Yohay, Arent Fox Kintner Plotkin & Kahn, PLLC, Washington, DC [representing an unnamed client]
IV-D-15	Thomas R. Julien, General Manufacturing Unit, Permit Section, Air Quality Division, Michigan Department of Environmental Quality
IV-D-16	Rand A. Baldwin, President, Aluminum Extruders Council, Wauconda, IL
IV-D-17	Robert J. Nelson, Senior Director, Environmental Affairs and Alison Keane, Counsel, Government Affairs, National Paint & Coatings Association
IV-D-18	David V. Snyder, Air Programs - Health, Safety, Environmental & Remediation, Honeywell International, Inc., Morristown, NJ
IV-D-19	Bill Juris, Supervisor, VOC Control Unit, Department of Air Pollution Control, Ohio Environmental Protection Agency, Columbus, OH
IV-D-20	David C. Foerter, Institute of Clean Air Companies, (ICAC) Washington, D.C.
IV-D-21	Scott F. Belcher, Managing Director, Environmental Affairs and Assistant General Counsel, Air Transport Association.
IV-D-22	Jack H. Goldman, Ph.D., General Counsel/Director of Government Affairs, Patio and Barbecue Association.

TABLE 1. DOCKET A-97 -34 (Continued)
CATEGORY: IV-D

Doc. Number	Commenter, Addressee, Title or Description, etc.
IV-D-23	Matthew Frank, The Boeing Company, Arlington, VA
IV-D-24	Bruce Hopkins, Vice President, Standards and Education, Recreation Vehicle Industry Association, Reston, VA
IV-D-25	Ajay Bhari, Project Engineer, Shaw Environmental & Infrastructure, Inc, Cincinnati, OH [representing numerous commercial and government clients]
IV-D-26	Terry A. Noteboom, Corporate Environmental Engineer, Pella Corporation
IV-D-27	David A. Buff, P.E., Principal Engineer, Golder Associates Inc. [representing several industrial clients]
IV-D-28	Tracey J. Norberg, Vice President, Environmental and Resource Recovery, Rubber Manufacturers Association
IV-D-29	Thomas E. Hutch, Jr. President, Aerolite Extrusion Company
IV-D-30	Jordan Jacobsen, Acting General Counsel, Alyeska Pipeline Service Company, Anchorage, AK
IV-D-31	Robert T. Marlow, Vice President, Government Division, Aerospace Industries Association of America, Inc., Washington, D.C.
IV-D-32	Karen M. Bond, Environmental Compliance Specialist, LORD Corporation, Erie, PA
IV-D-33	Donald R. Schregardus, Deputy Assistant Secretary of the Navy, (Environment)
IV-D-34	Kenneth R. Meashey, Vice President, Corporate Energy, Environment, Safety & Health, Lockheed Martin Corporation, Bethesda, MD
IV-D-35	Deanne M. Ottaviano, Arent Fox Kintner Plotkin & Kahn, PLLC, Washington D.C. [representing the Motor and Equipment Manufacturers Association (MEMA)]
IV-D-36	Valerie Ughetta, Director, Stationary Sources, Alliance of Automobile Manufacturing, Washington D.C.
IV-D-37	Kevin S. Barnett, Alcoa, Inc., Pittsburgh, PA

**TABLE 1. DOCKET A-97 -34 (Continued)
CATEGORY: IV-D**

Doc. Number	Commenter, Addressee, Title or Description, etc.
IV-D-38	Allen Weidman, Executive Director, Fluoropolymer Division, The Society of the Plastics Industry, Inc, Washington, D.C.
IV-D-39	Olga M. Dominguez, Director, Environmental Management Division, National Aeronautics and Space Administration, Washington, D.C.
IV-D-40	R.E. Lide, EH&S Regulatory Management, Union Carbide Corporation, Texas City, TX
IV-D-41	Terry Stimmel, Vice President, Manufacturing and Operations, PD Wire & Cable, Fort Wayne, IN
IV-D-42	Robert J. Morehouse, ExxonMobil Refining and Supply Company, Houston, TX
IV-D-43	R. Donald Murphy, Managing Director, Steel Joist Institute, Myrtle Beach, SC
IV-D-44	Michael Johnson, Director, Regulatory Affairs, Michigan Manufacturers Association
IV-D-45	Neil Chrisman, President, Spectrum Metal Finishing, Youngstown, OH
IV-D-46	John McKnight, Director, Environmental and Safety Compliance, National Marine Manufacturers Association, Washington, D.C.
IV-D-47	David L. Chapman, Manager, Global Environmental Services, Goodyear Tire & Rubber Company
IV-D-48	Judy O, Neil P.E., Project Supervisor, Trinity Consultants [representing various aerospace clients]
IV-D-49	Michael Robinson, Vice President, Environmental, Safety and Security, Alliant TechSystems Inc., Edina, MN
IV-D-50	Scott F. Belcher, Managing Director, Environmental Affairs and Assistant General Counsel, Air Transport Association of America, Inc.
IV-D-51	Jerry Watkins, Vice President of Manufacturing, North America Operations, ThyssenKrupp Elevator Manufacturing, Inc
IV-D-52	Rodger Talbert, President, Chemical Coaters Association International

TABLE 1. DOCKET A-97 -34 (Continued)
CATEGORY: IV-D

Doc. Number	Commenter, Addressee, Title or Description, etc.
IV-D-53	Bill Juris, Supervisor, VOC Control, Department of Air Pollution Control, Ohio Environmental Protection Agency, Columbus, OH
IV-D-54	Sally B. Mann, Director, Office of Intergovernmental Programs, Florida Department of Environmental Protection, Tallahassee, FL
IV-D-55	John A. Dege, Director, Air Programs, DuPont SHE Excellence Center, Wilmington, DE
IV-D-56	Kenneth H. Meashey, Vice President, Corporate Energy, Safety & Health, Lockheed Martin Corporation
IV-D-57	Robert B. Ballard, Director, Health, Safety and Environmental, Varco International, Inc., Houston, TX
IV-D-58	Jim Sell, Senior Counsel, National Paint and Coatings Association, Washington, D.C.
IV-D-59	Ronald C. Methier, Chief, Air Protection Branch, Georgia Department of Natural Resources, Atlanta, GA
IV-D-60	Leon Joyner, Manager, Safety and Regulatory Compliance, Hatteras Yachts, New Bern, NC
IV-D-61	Myron Hafele, Supervisor - EHS Air Group, KOHLER, Kohler, WI
IV-D-62	Scott Bergeron, P.E., Group Health, Safety and Environmental Manager, J. Ray McDermott, Inc., Houston, TX
IV-D-63	Robert W. Schenker, Manager-Air Pollution Control, General Electric Company, Fairfield, Connecticut
IV-D-64	Jeffrey T. Silva, Corporate Environmental Engineer, Tyco Healthcare Group L.P., Mansfield, MA
IV-D-65	Eric Trauner, P.E., Superior Essex, Inc., Fort Wayne, IN
IV-D-66	Steven Moore, Supervisor, Rule Development Section, San Diego Air Pollution Control District

3.0 THE MACT FLOOR ANALYSIS

Comment: One commenter (IV-D-08) supported the MACT floor approach, referring to it as a “novel but necessary approach.” Another commenter (IV-D-63) supported the floor determination approach used for general use coatings as being technically sound, plus the commenter (IV-D-63) supported the various compliance options and the 12-month compliance period.

Response: The EPA agrees with the commenter that the MACT floor approach described in the preamble to the proposed rule was necessary for the same reasons as stated in the preamble (67 FR 52790-52793) and in the response to commenter IV-D-14 in this section.

Comment: One commenter (IV-D-14) contended that EPA improperly used State VOC emission limits instead of levels “actually achieved” by the best performing 12 percent of sources to set the MACT floor. The commenter (IV-D-14) argued that one legal precedent [*Sierra Club v. U.S. EPA.*, 167 F.3d 658, 664 (D.C. Cir. 1999)] has found that the use of regulatory permit data in place of actual performance data is only permissible for setting a MACT floor when a rational relationship exists between permitted emissions and actual emissions. The commenter argued that a significant difference existed between the allowable VOC emissions under State rules and actual HAP emissions of the best performing facilities because EPA improperly assumed that all facilities operated at the allowable VOC level in the state rules. That is, EPA assumed that VOC emissions were no lower than the State VOC limits.

In place of using State VOC rules, the commenter argued that EPA should use the average emission rate of 0.1 lb HAP per gallon coating solids that was the result of a preliminary ranking presented in the preamble to the proposed rule (67 FR 52791). The commenter further argued that unless EPA sees a need to establish additional subcategories, this limit should apply to all sources in the general use coating category.

The commenter (IV-D-14) noted that the HAP limits for the general use category are higher than the actual emissions of “a large portion” of the existing sources that will be regulated by the rule. From this observation, the commenter concluded that the rule will allow several hundred sources to increase HAP emissions.

The commenter (IV-D-14) also contended that data from the metal parts industry indicated that coating formulations with less HAP do not result in less VOC and it is incorrect to assume that VOC control is a proxy for HAP control. The commenter concluded from this observation that using State VOC rules to develop the MACT floor for HAP emissions was inconsistent with the Act because no rational relationship existed between permitted VOC emissions and actual HAP emissions.

Response: For most of the sources in this source category, the State VOC rules constituted the only applicable and measurable emission limit that could be used in a MACT floor ranking for some subcategories. We did not adopt the emission level indicated by the preliminary MACT ranking because that level was not achievable for the extremely diverse facilities in the relevant subcategories, as represented by the miscellaneous metal parts and products database. Along with various stakeholder groups, we also considered MACT rankings for individual industry segments, but the results for individual segments would not be achievable for all sources within those segments because of diversity even within those segments. The only exceptions were for the rubber-to-metal subcategory and the magnet-wire subcategory, where the MACT emission limits are based on the MACT database rankings for these segments. Therefore, we chose the final approach of basing HAP limits on State VOC limits for the general use and high performance categories. State VOC limits have been demonstrated to be achievable emission limits for the range of sources included within these two miscellaneous metal parts and products subcategories.

We started our development of HAP limits with the State VOC limits and then applied the appropriate HAP-to-VOC ratio to determine a good representation of the HAP content of coatings that meet the VOC limits. If we had just used the VOC limits as HAP limits without adjusting for the HAP-to-VOC ratio, then the assertion in the comment would be more accurate.

Although we agree that some sources achieved nominally lower HAP emission rates than those derived from the State VOC limits, it is not clear that those lower-emitting facilities

represent the range of sources in the source category or in any distinct or clearly definable subcategory or industry segment.

Contrary to the commenter's assertion, VOC limits do reduce HAP emissions because nearly all organic HAP used in coatings and related solvents are also VOC. Limiting VOC reduces HAP because the HAP content cannot exceed the VOC limit, unless a facility is using a non-VOC HAP, such as methylene chloride. However, that is not the case in the vast majority of metal parts surface coating operations. Therefore, those sources subject to VOC limits have also reduced HAP emissions to comply with the VOC emission limits. Likewise, those sources that are still subject to VOC limits will not be able to increase VOC emissions and will also now need to comply with HAP limits. Those sources not meeting the final HAP emission limits will need to reformulate their coatings (such as switching to waterborne, low-HAP solventborne, or powder coatings) or use add-on controls that will reduce HAP and also probably VOC emissions.

The EPA has established for this source category that a reasonable relationship exists between State VOC rule limits and actual VOC emissions for most facilities. Using the metal parts survey data, EPA calculated the average VOC content (in lb VOC per gallon of coating, less water) for each facility subject to a state VOC rule limit. The average VOC content for each facility subject to a State VOC limit is nominally lower than the applicable State VOC limit, consistent with a reasonable margin for compliance¹.

Although the general use HAP emission limits are higher than the actual HAP emissions from about a third of the existing sources in the metal parts database, these limits will not allow several hundred, if any, sources to increase emissions. It is important to note that the metal parts database included only a sample of the 1,500 or so major sources that are expected to be subject to this rule. The EPA earlier determined that this database did not adequately represent the diversity of sources for the purposes of setting a MACT emission limit for the general use subcategory. For this reason, EPA adopted the MACT approach based on State VOC rules. For

¹Memorandum from Palmer, Brian, ERG, Inc., to Teal, Kim, EPA/ESD. August 2003. "Analysis of State volatile organic compound (VOC) rule limits and actual VOC emissions for metal part surface coating facilities in the EPA miscellaneous metal parts and products survey database." (Docket ID No. OAR-2003-0116).

the same reason, the metal parts database cannot be used to infer that any sources, much less several hundred, will be allowed to increase emissions. As described in the EPA's cost and economic impacts analysis, EPA expects the majority of sources will need to spend significant resources to reduce emissions to comply with these standards.

3.1 The HAP-to-VOC Ratio

Comment: One commenter (IV-D-36) supported the HAP-to-VOC ratio that was used to convert the VOC limits in State coating rules to HAP limits.

Another commenter (IV-D-14) argued against using the average HAP-to-VOC ratio for all sources in setting the MACT floor, stating that among the best performing sources, the HAP-to-VOC ratio is much less than the 43-percent overall average ratio used by EPA. The commenter did not provide specific HAP-to-VOC ratios for any of the lower emitting facilities. The commenter argued that if EPA decides to base the rule on State VOC limits, EPA should replace the 43-percent HAP-to-VOC ratio with the average HAP-to-VOC ratio for the best performing 12 percent of sources.

Another commenter (IV-D-24) noted that the EPA database and the Recreational Vehicle Industry Association (RVIA) database did not include or account for HAP contained in solvent blends. The commenter noted that Tables 3 and 4 in the rule add default fractions for these products and could "significantly impact the baseline." The commenter requested that the VOC-to-HAP conversion factor be reviewed to ensure that these default factors are addressed. The commenter estimated that the HAP concentration per pound of solids was underestimated in the RVIA database by 5 percent compared to if HAP from solvent blends were included.

Response: As suggested by commenter IV-D-14, EPA assessed the HAP-to-VOC ratio of those facilities that represented the MACT floor and as suggested by commenter IV-D-24, EPA reviewed the solvent blends that were used by the facilities that are subject to the most stringent State VOC coating rules. Contrary to commenter IV-D-14's contention, we found that the HAP-to-VOC ratio for sources subject to State VOC rules was not lower than or substantially different from the 0.43 ratio used to develop the proposed emission limits.

As suggested by commenter IV-D-24, EPA assessed the amount of HAP that is found in solvent blends and determined whether this would affect the HAP-to-VOC ratio that was used in establishing the general use emission limits. We reviewed the solvent blends in the coating

materials used by the 67 facilities in the MMPP database subject to the most stringent State VOC rules and found that solvent blends accounted for about 2 percent of all HAP. Therefore, the HAP-to-VOC ratio used for calculating the general use limits has been increased from 0.43 to 0.44 to account for the organic HAP in solvent blends, and the general use limits were recalculated and then rounded to two significant figures. The revised existing source limit is 2.6 lb organic HAP/gal (0.31 kg organic HAP/liter) coating solids used, which is the same as the proposed limit. The revised new source limit is 1.9 lb organic HAP/gal (0.23 kg organic HAP/liter). Some of the emission limits changed slightly due to rounding the proposed emission limits to two or three significant figures.

Since the high performance, magnet wire, and rubber-to-metal coating emission limits were not developed using the HAP-to-VOC ratio of 0.43, the emission limits for these coating operations were not recalculated. For the high performance limit, a ratio of 0.70 provided by industry was used. For magnet wire and rubber-to-metal, HAP content from the survey database were used to establish the floor, so no HAP-to-VOC ratio was needed for these subcategories.

3.2 HAP from Cleaning Materials

Comment: Several commenters (IV-D-02, IV-D-09, IV-D-12, IV-D-16, IV-D-29, IV-D-31, IV-D-37, IV-D-56, IV-D-62) stated that cleaning materials should not be included in the MACT floor or in calculating emission limits for general use coatings. The commenters argued that the state VOC rules on which these limits are based do not include cleaning solvents in those limits. By including the cleaning solvents, EPA has made the proposed limits more stringent than allowed by the MACT analysis based on State VOC rules, according to the comments.

One commenter (IV-D-02) argued that cleaning solvents do not meet the definition of a coating in the Shipbuilding and Ship Repair NESHAP, and therefore are not covered in that NESHAP. Specifically, the Shipbuilding and Repair NESHAP defines “as applied” as “the condition of a coating at the time of application to the substrate, including any thinning solvent,” according to the commenter.

One commenter (IV-D-09) suggested cleaning solvents be regulated separately from coatings based on HAP composition or vapor pressure.

One commenter (IV-D-12) added that cleaning solvent should be removed from the emission limits for general use coatings because including them would penalize general use coating facilities that frequently change colors and need to use more solvent than facilities with fewer color changes.

Two commenters (IV-D-31, IV-D-56) pointed out that State VOC rules follow the recommendations of EPA's control technique guideline (CTG) document for metal parts surface coating, and the CTG document recommends excluding cleaning solvents.

One commenter (IV-D-34) argued that regulating cleaning solvents should not be the main intent of the rule and cleaning solvents account for an insignificant percent of the HAP emissions. The commenter listed ten States that either do not cover solvent cleaning operations or regulate them separately from surface coating operations.

Two commenters (IV-D-02, IV-D-62) pointed out that the Louisiana MACT for Shipbuilding, Repair, and Outdoor Surface Coating of Large Structures and the NESHAP for Shipbuilding and Ship Repair do not include cleaning solvents. The commenters suggested that if a cleaning solvent limit is necessary, it should be listed separately or averaged separately and then added directly to the HAP limit.

One commenter (IV-D-16) suggested that add-on controls will be needed to comply if cleaning solvents are included in the emission limits and EPA's cost impact estimates did not include add-on controls.

Three commenters (IV-D-31, IV-D-34, IV-D-56) stated that if cleaning solvents must be included they should be exempt from the proposed HAP limit provided such cleaning operations are conducted in closed containers. This approach is consistent with State RACT rules which incorporate solvent cleaning with coating operations, according to the commenters. Two commenters (IV-D-16 and IV-D-36) suggested that the final rule should include work practices for cleaning solvents. One commenter (IV-D-36) noted that the Industrial Cleaning Solvent alternative control technique (ACT) document suggested solvent accounting and plant management practices to address emissions from solvent cleaning. The same commenter also noted that EPA has used its authority under 112(h) of the Act to incorporate work practices for cleaning solvents for the Wood Furniture, Aerospace, and Shipbuilding and Repair NESHAPs. The Aerospace Manufacturing NESHAP cleaning solvent requirements were based on California

State VOC rules, according to the commenter. The commenter also noted that the metal parts rule has work practices to control emissions from material handling, storage, and transport if the source uses an add-on control and suggested these could be expanded to other cleaning operations by adding language similar to that in the auto/light duty truck surface coating MACT. Finally, the commenter supported allowing a source to substitute an existing work practice plan rather than develop a new one.

Response: The EPA reviewed the cleaning material reported in the database for the miscellaneous metal parts and products rule and concluded that non-HAP cleaners are a viable option for sources subject to the final rule. The proposed and final emission limits reflect the fact that greater than 12 percent of the miscellaneous metal parts and products sources, for which EPA had data, were using cleaning solvents that contained no organic HAP or were using solvent blends containing only small percentages of organic HAP, which would have little, if any, effect on their facility-wide emission rate. These data also appear to represent the diversity of miscellaneous metal part surface coating facilities in the source category². As described in section 3.1, we have adjusted the HAP-to-VOC ratio used to establish the emission limits to account for the HAP contained in solvent blends. Therefore, it is appropriate to include cleaning solvents in the emission limits as proposed and no changes to the limits are necessary to accommodate cleaning.

Given the available data, it is not appropriate to set work practices for cleaning instead of emission limits for cleaning. Under section 112 of the CAA, work-practice standards can be set only if it is not feasible to prescribe or enforce an emission standard. For miscellaneous parts and products, we have enough information to develop an emission standard that includes cleaning.

The final rule accounts for cleaning operations that are conducted in closed containers, although there is no specific requirement to perform cleaning in closed containers. In the compliance calculations used in the emission rate without add-on controls option and the emission rate with add-on controls option, you only need to include the organic HAP contained

²Memorandum from Palmer, Brian, ERG, Inc., to Teal, Kim, EPA/ESD. August 2003. "Analysis of cleaning materials reported in the EPA miscellaneous metal parts and products survey database." (Docket ID No. OAR-2003-0116).

in materials that are consumed during the previous 12-month period and you can take credit for organic HAP contained in materials that are sent off-site for recycling or disposal. If cleaning is performed in closed containers, the amount that evaporates to the atmosphere is minimized.

3.3 Pollution Prevention

Comment: One commenter (IV-D-14) argued that EPA, through faulty MACT floor calculations and disregard of sources using pollution prevention, has developed a rule that does not encourage pollution prevention. The commenter argues that Congressional records indicate it is clear that Congress intended that EPA give priority to pollution prevention measures, like process changes and materials substitution.

Response: The EPA disagrees with the commenter that the rule discourages pollution prevention. On the contrary, the rule is based on an emission level that is achievable through coating reformulation, such as a switch to waterborne coatings and powder coatings, without the use of add-on controls. In addition, the rule has compliance options that are based on coating reformulation rather than the use of add-on controls.

3.4 Rubber-to-Metal Bonding

Comment: One commenter (IV-D-19) asked why the existing and new source limits for the rubber-to-metal subcategory differ so widely (4.50 vs. 0.82 kg/liter solids) and suggests this difference may encourage existing sources to expand by adding new emission units at facilities subject to the existing source limits.

Response: Because the rubber-to-metal source category includes less than 30 sources, the MACT floors were based on the average of the five best sources for existing sources and the best controlled source for new sources. This is consistent with CAA requirements. The best and second best performing sources use a thermal and a catalytic oxidizer, respectively. EPA has determined that, with the use of control equipment, new emission units in this source category could achieve the new source limit, which is also the MACT floor for new sources. For existing sources, the emission limits are set at the existing source MACT floor (average of the best five sources). As described in section 4.0, EPA considered and rejected the option of requiring control more stringent than the MACT floor for existing sources.

3.5 Aerospace Facilities

Comment: One commenter (IV-D-21) disagreed with EPA's method for establishing the proposed metal parts MACT standards as applied to aerospace facilities. The commenter stated EPA did not find aerospace facilities that in practice could achieve the metal parts MACT standards under the worst foreseeable circumstances. According to the commenter, EPA did not analyze the operating circumstances of aerospace facilities, instead relying on generically applicable State VOC coating rules, which do not resemble the proposed MACT standards. The commenter noted that while the proposed MACT standards apply to coatings, thinners, and cleaners, several of the State coating rules apply only to coatings. The commenter also argued that EPA assumed that the State VOC rules apply equally to all coating facilities, including any aerospace coating facilities, although several of those rules exempt aerospace facilities, or provide special emission limits for aerospace facilities not reflected in the proposed MACT standards. Finally, the commenter stated that EPA appears to have ascribed a single emission limit to certain State coating rules when, in fact, those rules impose a range of emission limits depending on the type of coating used.

Response: We agree with the commenter that it is appropriate to exclude all aerospace surface coating operations, that were considered in the development of the Aerospace Manufacturing and Rework NESHAP, from the metal parts rule. The commenter is correct that many State VOC rules often exclude these operations from miscellaneous metal part emission limits and address them in separate emission limits for aerospace surface coating operations. Therefore, the results of the MACT analysis based on State VOC limits for miscellaneous metal parts coating operations cannot be extended to aerospace surface coating operations.

The specialty coatings that are addressed in the Aerospace Manufacturing and Rework NESHAP, and for which EPA determined that MACT controls were not needed under that NESHAP, were not intended to be regulated under the Miscellaneous Metal Parts and Products NESHAP. To clarify this intent, the final miscellaneous metal parts rule includes a provision that specifies that the final rule does not apply to coatings that meet the applicability criteria for the Aerospace Manufacturing and Rework NESHAP (40 CFR part 63, subpart GG). In addition, the final rule specifically excludes the application of specialty coatings, as defined in appendix A to subpart GG, to metal parts of aerospace vehicles or components.

The coating of metal parts that would not meet the applicability of the Aerospace Manufacturing and Rework NESHAP or that would not require any of the specialty coatings defined in appendix A to 40 CFR part 63, subpart GG would be subject to the miscellaneous metal parts final rule. Information provided during the comment period indicates that any miscellaneous metal coating activities would comprise less than 5 percent of total coating activities at an aerospace facility. Consequently, the facility could elect to comply with the predominant activity compliance alternative to reduce its recordkeeping and reporting burden.

4.0 OPTIONS MORE STRINGENT THAN THE MACT FLOOR:

Comment: Two commenters (IV-D-36 and IV-D-44) supported EPA's analysis of "beyond the floor options" and the conclusion that beyond-the-floor alternatives are not appropriate for the metal parts category.

One commenter (IV-D-14) noted that EPA did not include any above-the-floor requirements that might lower actual emissions and asserted that EPA has failed to recognize facilities that have selected lower HAP coatings or adopted add-on controls.

One commenter (IV-D-20) maintained that the proposed rule is too lenient and does not represent maximum achievable control technology, especially for new sources. The rule, if implemented as proposed, would achieve about a 50 percent HAP reduction, whereas a 95-percent reduction is achievable, according to the commenter. The commenter argued that EPA has identified three feasible control options that would obtain greater emission reductions than the proposed rule: powder coatings, low/no HAP coatings, and permanent total enclosures (PTE) with control devices. The commenter asserts that the first two options are feasible and available for at least portions of the industry and asserts that control devices are feasible for all or at least a broad portion of the industry and, when used with a PTE, can achieve at least a 95-percent emission reduction. The commenter suggests that EPA should develop a more stringent emission limit and allow facilities to choose among these options for compliance.

The commenter (IV-D-20) also notes that the EPA rejected these technologies as beyond-the-floor options based on cost. The commenter claims that while the cost of a capture and control system may have an upper limit of \$1 million in capital cost, actual costs for the majority of facilities would be less. The commenter believes that the costs are reasonable especially for new sources.

The commenter (IV-D-20) also disagreed with EPA's position that the need for further controls would be evaluated as part of the residual risk assessment in the future. The commenter believes that it would be more difficult for industry if EPA imposed a second round of controls in the future. The commenter expressed that the need for additional controls in the future would be avoided if all feasible controls were required now. The commenter stated that adopting a more stringent MACT standard also will result in more VOC control, which will provide a benefit for tropospheric ozone control.

Response: The EPA did not adopt a standard more stringent than the MACT floor, including a standard achievable through the use of add-on controls, for the same reasons that EPA did not adopt the standard based on the preliminary MACT analysis described in the proposal preamble. That is, there were no options more stringent than the floor that were applicable to the range of sources in the source category. Powder coatings or non-HAP coatings are not feasible in all applications in the range of sources considered in this category. No clearly definable subcategory or other group of sources could be identified for which these coatings would always be feasible. As described in the preamble, add-on controls were not applicable for typical sources in this category because of high-volume, low-concentration exhaust streams (67 FR 72292). In addition, no clearly definable subcategory or other group of sources could be identified for which add-on controls would be technically feasible or cost-effective at all new or existing sources. The commenter did not provide any detailed information to support their contention that the costs of add-on controls would be less than estimated by EPA.

5.0 UNITS FOR THE NUMERICAL EMISSION LIMITS

Comment: Several commenters (IV-D-02, IV-D-62, IV-D-24) stated that the limits should be in units of *pounds of HAP per gallon of coating, rather than pounds of HAP per gallon of solids*. Also, one commenter (IV-D-62) noted that changing the units from lb/gallon coating to lb/gallon solids would not allow the facility to continue to track performance improvements from VOC emission reduction initiatives. Two commenters (IV-D-02, IV-D-62) noted that existing permits and State rules are in units of lb/gallon coating. One commenter (IV-D-24) stated that using lb HAP/gallon of solids would be consistent with other coating rules that affect the recreational vehicle industry.

Two commenters (IV-D-17, IV-D-32) objected to expressing the emission limits in lb HAP/gallon coating solids, because this unit of measure is hard to understand and verify for several reasons:

- Estimating gallons of solids is based on theoretical calculations. Manufacturers do not routinely measure gallons solids.
- The two ASTM methods specified for measuring volume solids (ASTM methods D2697-86 (1998) and D6093-97) are inaccurate and costly to run.
- The limits were based on an arbitrarily chosen “default” density for coating solids.

These commenters (IV-D-17, IV-D-32) recommended using lb HAP/lb coating solids, because this metric is readily available from the manufacturers; is based on a reliable test method; and is more universally used by the industry.

One commenter (IV-D-13) suggested that the metal parts and the plastic parts rules should be in the same units of measure since this would greatly reduce the reporting burden at the many facilities subject to both rules. The commenter suggested that EPA should change the

units on the plastic parts MACT to lb HAP per gallon of solids, or change metal parts to lb HAP per lb solids and suggested that lb HAP/per gallon coating units are more consistent with State VOC rules derived from EPA CTGs.

Response: The unit of *mass of HAP per volume of coating solids used* was selected to normalize the assessment of organic HAP emissions across all affected sources. This unit was meant to relate directly to production rates, on the assumption that average dry coating film thicknesses are fairly constant across product types. The EPA disagrees with the commenters that these units are impractical.

The emission limits in many State VOC rules for miscellaneous metal parts coating are expressed in units of mass of VOC per volume of coating less water and less exempt compounds. Similar units were used for the emission limit recommendations in EPA's 1978 guidance document for this surface coating category titled "Control of Volatile Organic Emissions from Existing Stationary Sources-Volume VI: Surface Coating of Miscellaneous Metal Parts and Products" (EPA-450/2-78-015). These "less water" units are difficult to work with and are impractical for facilities with add-on control equipment. As a result of 1987 EPA guidance (52 FR 45108, November 24, 1987), some States have changed the units for their VOC limits to mass of VOC per volume of solids, and most States have added alternative limits in units of mass of VOC per volume of solids for use by facilities with add-on control equipment.

The use of "less water" units for HAP in this rule would lead to even more difficulties and probable confusion. In order to provide a meaningful basis for comparison of the HAP content of different coatings, the units would need to be mass of HAP per volume of coating less water and less non-HAP organic volatiles. Most coatings contain non-HAP organic volatiles. In order to express the HAP content of such coatings in these units, the weight fraction and density of each non-HAP organic volatile would be needed. This could be a significant additional data gathering burden. In addition, these units would be unworkable for facilities with add-on control equipment.

Contrary to commenters IV-D-17 and IV-D-32, this rule was developed using State rules to limit VOC emissions from metal parts coating operations and did not assume any default value for solids density. These State VOC rules for coating operations are expressed either in terms of lb VOC per gallon of coating, less water and other exempt compounds, or in lb VOC

per gallon of solids. The conversion from VOC per gallon of coating to VOC per gallon of solids used a standard default value for VOC density of 7.36 lb/gallon. This VOC density was used in EPA's 1978 guidance document for this source category and is commonly used for converting emission limits for this source category from a "less water" to a volume solids basis. The density of coating solids is not needed and was not used to make this conversion.

Many Federal and State VOC rules use units of mass of VOC per volume of solids. In over 20 years of use, there have been no significant difficulties identified or reported in the use or understanding of these units. The volume solids content of coatings is routinely used by both coating manufacturers and coating users as a measure of coverage. The survey data that EPA collected on miscellaneous metal parts and products coatings indicate that volume solids data are commonly available.

The test methods for volume solids are one option for generating volume solids content data. Formulation data for volume solids can also be used. The final rule states that the test method results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

As discussed in the proposal preamble (67 FR 52798), the National Technology Transfer and Advancement Act of 1995 (NTTAA), section 12(d), directs the EPA to use voluntary consensus standards (VCS) in our regulatory and procurement activities if possible. The two ASTM methods referred to by the commenter are examples of these VCS.

Section 63.3941(b) in the proposed rule provided two options for determining the volume fraction of coating solids (nonvolatiles) for each coating: (1) use of either of the two referenced ASTM methods (D2697-86 (1998) or D6093-97), or (2) use of information from the supplier or manufacturer of the material. However, based on these comments, we realized that there may be situations for some coatings where either the ASTM test methods cannot be used or manufacturer's data are not available to determine the volume fraction coating solids. We added a paragraph to §63.3941 of the final rule for this situation:

Calculation of volume fraction of coating solids, V_s . If the volume fraction of coating solids cannot be determined using the options in paragraphs (b)(1) and (b)(2) of this section, you must determine it using Equation 1 of this section:

$$V_s = 1 - (m_{\text{volatiles}}/D_{\text{avg}})$$

Where:

- V_s = Volume fraction of coating solids, liters coating solids per liter coating.
- $m_{\text{volatiles}}$ = Total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A of 40 CFR part 60, grams volatile matter per liter coating.
- D_{avg} = Average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475-90, information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-90 test results and other information sources, the test results will take precedence.

This third option will allow a source to avoid the cost of using the two ASTM methods. The three options in the final rule provide sources with the flexibility to choose the approach that is compatible with their preferences as well as the coating information available to them.

The commenters are also reminded that the General Provisions, in §63.7(f) of subpart A of Part 63, allow alternatives to the specified test methods to be used if a validation and justification are submitted for the alternative methods. The commenter did not include any suggested alternatives to the methods shown in the proposal. However, affected sources wishing to use alternatives to the listed approaches may present those to the Agency for approval before using them for compliance determinations.

This rule is intended to limit HAP emissions. Since there are many non-HAP VOC, the HAP content and VOC content of a coating can be very different. The choice of units for this HAP rule will have no effect on a facility's ability to track VOC emission reductions.

Comment: Two commenters (IV-D-02, IV-D-62) claimed that different units would require the purchase of new record keeping software. Another commenter (IV-D-24) noted that volume solids data are not currently tracked in most compliance programs. Tracking volume solids would require significant effort to update and modify existing programs.

Response: All recordkeeping and reporting costs are included in the cost and burden estimates for the rule, including the cost for recording the volume solids content of coatings and performing the compliance calculations based on HAP per volume of coating solids. Volume

solids data were readily obtained for the majority of coatings included in the metal parts database. The volume solids content of coatings is routinely used by both coating manufacturers and coating users as a measure of coverage. The survey data that EPA collected on miscellaneous metal parts and products coatings indicate that volume solids data are commonly available.

Comment: One commenter (IV-D-33) suggested that rules applicable to Department of Defense (DoD) coating operations should be in mass of VOC per volume of coating using VOC as a surrogate for HAP for a number of reasons:

- Aerospace and Shipbuilding NESHAP are already in these units.
- DoD suppliers are under contractual agreement to meet limits in these units for State rules and for Aerospace Manufacturing and Shipbuilding and Repair NESHAP.
- Most DoD coatings have a HAP:VOC ratio close to 1.0. Therefore, VOC is a good indicator of HAP.
- There is a direct linear relationship between VOC per gallon coating and HAP per unit solids for any given coating formulation.
- Since DoD facilities will be selecting from existing coatings rather than reformulating, other units will have little effect on emissions.
- Variations in solvent density (part of EPA's rationale for VOC per solids basis) is not important at DoD facilities because of the high number of coating used; variations above and below the default value for solvent density will tend to cancel each other out.

Response: The EPA will be developing a separate NESHAP for Department of Defense coating operations that are not currently covered by the Aerospace Manufacturing and Rework NESHAP or the Shipbuilding and Ship Repair NESHAP. These comments on the format of the emission limits will be taken into consideration in the development of that NESHAP.

Comment: One commenter (IV-D-17) recommended use of lb HAP/lb coating solids for all surface coating standards because using different units will create confusion and an unnecessary burden (both to coating users and manufacturers) to track coatings HAP content on two different bases.

Response: The different NESHAP developed by EPA for surface coating operations reflect the different types of data that were available for those NESHAP and the different approaches that were used in determining MACT for each source category. The final rule includes provisions that were not included in the proposed rule to reduce the likelihood that a facility will need to demonstrate separate compliance with more than one NESHAP that may be in different emission units and track materials separately to determine compliance with each NESHAP. These provisions are discussed in more detail in Section 6.0 of this document.

6.0 OVERLAP WITH OTHER NESHAP

6.1 Department of Defense Coatings

Comment: One commenter (IV-D-33) stated that EPA should establish a separate source category for DoD surface coating operations not covered by the Aerospace or the Shipbuilding and Ship Repair NESHAP (40 CFR part 63, subparts GG and II, respectively) and exempt these coating operations from the final rule for miscellaneous metal parts. The commenter described the unique material requirements and operating conditions for military coating operations that are different from commercial operations. The commenter claimed that the proposed compliance options would be impractical and extremely costly for DoD facilities because of the complexity of military coating operations, the number of coatings and solvents used, and the number of different items and substrates coated. Many DoD installations (especially those that service or remanufacture artillery, armored vehicles, weapons systems, and support equipment) use thousands of different coatings, and each material is subject to its own military specification.

Because DoD facilities use HAP-containing solvents, the commenter (IV-D-33) claimed they could not use the proposed compliant materials option. Reformulating solvents or coatings requires extensive field testing before they can be approved for use in tactical field equipment and weapons systems. In addition, updating the coatings for which there is a military specification requires updating the documentation applicable to military specifications and the documentation for the relevant equipment and weapons systems that adopt those military specifications.

According to the commenter (IV-D-33), the proposed emission rate option and the add-on controls option are not feasible because they would require DoD to be able to accurately track the amount of coating or cleaning solvent used on each item or substrate. As noted above, DoD installations may use thousands of different coatings on a variety of substrates, including metal, plastic, ceramics, rubber, fabric, wood, and composites.

The commenter (IV-D-33) requested a separate source category so that emission limits and a regulatory format could be developed that would be most appropriate for military coating needs. The commenter claimed that a separate rule also would ensure that all DoD coatings could comply with emission limits using the same units of measure. The commenter noted that DoD facilities use many of the same high performance coatings on plastic and metal items and substrates and they could be potentially regulated by both the NESHAP for plastic parts and products and the NESHAP for miscellaneous metal parts and products.

The commenter (IV-D-33) specifically requested that touch-up painting should be exempt. The commenter claimed this type of coating is very common at DoD facilities using a brush or roller, especially on mobile equipment. In addition, the commenter requested that EPA specifically exempt coating of museum/historical items because DoD must use historically accurate coatings for these items.

The commenter (IV-D-33) also requested that EPA exempt Department of Defense munitions (as defined in 40 CFR 260.10) manufacturing from all surface coating NESHAP for several reasons: munitions have unique coating specifications that relate directly to performance and safety (several examples were provided); developing and qualifying compliant coatings, if possible, would require more time than allowed under the Clean Air Act (i.e., greater than 3 years); and frequent changes in the mix of munitions that are produced that are unpredictable and dictated by world events would prevent compliance using either the averaging or add-on control options.

A second commenter (IV-D-49) strongly suggested exempting sealing operations conducted on ammunition from the proposed rule. The commenter manufactures small and medium caliber ammunition primarily for military purposes, wherein sealants are applied to various components of the ammunition for safety and reliability reasons. The commenter claimed there are technical and material compatibility obstacles to using low HAP coatings, and that changing sealants could compromise the performance of ammunition and the safety of company employees and military personnel.

Response: After several visits to DoD surface coating operations and meetings with DoD stakeholders, EPA agrees that a separate source category for DoD surface coating operations is warranted. One factor that we considered in this decision is the unique military specifications

for coatings used on tactical and other military equipment. Further data collection and analysis are required to determine what emission limits are achievable for these coating operations. Another factor that we considered is the issue that military facilities may use thousands of different coatings, and that the types of equipment that are coated and the types of coatings used in a given time period are unpredictable and often influenced by world events. Further analysis is needed to determine what emission limit formats and compliance demonstration and recordkeeping are practical for this type of situation. Another consideration was the high probability that these sources would be subject to multiple NESHAP.

The EPA will be developing a separate NESHAP for “Defense Land Systems and Miscellaneous Equipment” surface coating operations. That NESHAP will include operations that do not meet the applicability criteria of the Aerospace Manufacturing and Rework NESHAP or the Shipbuilding and Ship Repair NESHAP. The comments pertaining to the format of the standard and appropriate compliance options will be taken into consideration in the development of that NESHAP.

Since a separate source category will be established for DoD surface coating operations, the definition of high performance coating in the final rule has been revised so that it no longer includes "military combat, tactical, and munitions coating" and the definition of "military combat, tactical, and munitions coating" is not included in the final rule.

Comment: One commenter requested that the final rule exempt the coating of NASA launch support equipment or include the coating of this equipment in the surface coating NESHAP being developed for defense land systems and miscellaneous equipment. The commenter explained that these coatings have unique performance requirements, such as the ability to withstand the exhaust from rocket engines, and the coatings that meet these requirements must be qualified for use under NASA specifications.

Response: We agree that the coatings used on NASA launch support equipment have unique performance requirements. These performance requirements and the coatings needed to meet them will require further analysis before emission limits can be established. Since the process for qualifying coatings under NASA specifications is similar to the process of qualifying coatings for use under military specifications, these coating operations will be included in the

development of the surface coating NESHAP being developed for defense land systems and miscellaneous equipment.

6.2 Exclusion of Activities Subject to Other Surface Coating NESHAP

Comment: Several commenters (IV-D-19, IV-D-21, IV-D-31, IV-D-48, IV-D-63) requested that EPA clarify that the Aerospace Manufacturing NESHAP (40 CFR 63, subpart GG), rather than the metal parts rule, cover parts necessary for the proper functioning of aircraft. The commenters were concerned in particular that this rule, as proposed, could be interpreted to apply to the specialty coatings included in appendix A to subpart GG. Two commenters (IV-D-19, IV-D-31) noted that the proposal preamble indicated that the surface coating of certain aerospace equipment would be subject to this NESHAP. The commenters argued that the Aerospace Manufacturing NESHAP found that MACT controls were not warranted for certain aerospace surface coating operations and that regulating these operations under this rule would be an unexplained change in policy.

Two commenters (IV-D-17, IV-D-36) suggested that the final rule include an alternative compliance option for facilities subject to the final NESHAP under development for the surface coating of automobiles and light-duty trucks that also coat metal parts. The commenter noted that some automobile and light-duty truck facilities will be subject to the final rule for metal parts coating, the NESHAP for the surface coating of automobiles and light-duty trucks, and the Plastic Parts and Products NESHAP. The commenter suggested that a source be allowed to comply with the final NESHAP for automobiles and light-duty trucks for all coating operations if the principle activity is the surface coating of automobiles and light-duty truck bodies. The commenter noted that the metal and plastic part coating operations are often integrated with the body coating operations, since all three coating operations may share common coating supplies, application equipment, cleaning solvents, and emission controls. The shared equipment and materials could make tracking separate compliance for each NESHAP overly burdensome and would reduce the certainty of compliance.

One commenter (IV-D-33) requested that EPA clarify that no shipbuilding or ship repair surface coating operations are subject to this or any other NESHAP, except the Shipbuilding and Ship Repair NESHAP (40 CFR part 63, subpart II). The commenter noted that the Shipbuilding

and Ship Repair NESHAP covers only paints and thinners, and does not cover caulks, sealants, and adhesives. Since the metal parts rule covers all coating materials, the commenter was concerned that it would cover those materials that were not specifically addressed by the Shipbuilding and Repair NESHAP and will make shipbuilding and ship repair sources subject to multiple NESHAP.

Response: We agree with the commenter that coating operations that are addressed in the Aerospace Manufacturing and Rework NESHAP, and for which EPA determined that MACT controls were not needed, are not intended to be regulated under the Miscellaneous Metal Parts and Products NESHAP. To clarify this intent, the final miscellaneous metal parts rule includes a provision that specifies that the final rule does not apply to coatings that meet the applicability criteria for the Aerospace Manufacturing and Rework NESHAP (40 CFR part 63, subpart GG). In addition, the final rule excludes the application of specialty coatings, as defined in appendix A to subpart GG, to metal parts of aerospace vehicles or components.

The coating of metal parts that would not meet the applicability of the Aerospace Manufacturing and Rework NESHAP or that would not require any of the specialty coatings defined in appendix A to 40 CFR part 63, subpart GG would be subject to the miscellaneous metal parts final rule. Information provided during the comment period indicates that any miscellaneous metal coating activities would comprise less than 5 percent of total coating activities at an aerospace facility. Consequently, the facility could elect to comply with the predominant activity compliance alternative to reduce its recordkeeping and reporting burden.

We agree that the final rule for the surface coating of miscellaneous metal parts is not intended to apply to coating operations that meet the applicability criteria of the Shipbuilding and Ship Repair NESHAP. Although the Shipbuilding and Ship Repair NESHAP did not establish emission limits for sealants, caulks, and adhesives used in shipbuilding or ship repair, such types of coatings used for shipbuilding or repair operations are more appropriately addressed under the Shipbuilding and Ship Repair NESHAP. The review of the Shipbuilding and Ship Repair NESHAP, required by section 112(d)(6) of the CAA, is an appropriate mechanism for evaluating whether emission limits are needed for sealants, caulks, and adhesives used in shipbuilding or ship repair. Based on this information, the final metal parts rule contains

an exclusion for surface coating of metal components of ships that meet the applicability criteria of the Shipbuilding and Ship Repair NESHAP.

For sources that will be subject to the final Automobiles and Light-Duty Trucks NESHAP, the final miscellaneous metal parts and products rule includes a provision to mitigate the overlap at these facilities. For these metal part surface coating operations, a facility has the option to comply with the requirements of the final Automobiles and Light-Duty Trucks NESHAP as long as the metal parts are for use in automobiles or light-duty trucks. Surface coating operations for other metal parts (such as those for motorcycles or lawn mowers) at the same facility will still be subject to the metal parts rule.

6.3 Complying With the Rule Representing the Majority of the Substrate (Plastic or Metal) on Pre-assembled Parts

The proposed rule contained a provision to allow a source coating pre-assembled products, comprising plastic and metal substrates to comply with the NESHAP representing the substrate to which more than 50 percent of the volume of coatings is applied. (See proposed §63.3881, 67 FR 52800, August 13, 2002.)

Comment: Several commenters (IV-D-35, IV-D-36) supported this provision of the proposed rule. Several other commenters (IV-D-17, IV-D-24, IV-D-33, IV-D-44, IV-D-52) did not support the proposed provision or suggested significant modifications. Several commenters (IV-D-24, IV-D-36, IV-D-52) noted that the source would be required to determine every month whether the majority substrate on these parts was metal or plastic based on the coatings applied during the previous 12-month period and argued this would be overly burdensome. Two commenters (IV-D-34, IV-D-36) suggested that because the relative amount of metal and plastic coated could change over time, a facility could potentially fluctuate between applicable NESHAP. Two commenters (IV-D-28, IV-D-36) also suggested that the final rule require facilities to establish whether the majority of surfaces coated are metal or plastic only at the time of their Title V permit renewal, rather than on a 12-month rolling basis, to provide stability and reduce the recordkeeping burden.

Several commenters (IV-D-19, IV-D-28, IV-D-36, IV-D-44, IV-D-47) claimed that the rule does not adequately address situations where separate plastic and metal parts are coated on the same line. As proposed, separate metal and plastic parts coated on the same line would need to comply separately with the plastic parts and the metal parts rules. One commenter (IV-D-36) noted that the same coatings and feed systems are often used for both plastic and metal parts on a single line. Three (IV-D-28, IV-D-36, IV-D-47) commenters recommended that the final rule adopt a “predominant activity” concept, whereby the facility could determine the predominant coating activity of a line and then comply with a single NESHAP.

Response: We recognize and appreciate some of the problems that were identified with this approach by the commenters. Although some commenters supported this approach, it is not included in the final rule. The final rule instead allows a variety of more practical compliance options that address the metals and plastics coating at a facility rather than just pre-assembled parts. These include a predominant activity alternative, as suggested by some of the commenters.

The predominant activity alternative allows a facility to identify its predominant type of coating activity and comply with the emission limit that applies to that activity for all coating operations. The predominant activity is defined as the activity that represents 90 percent or more of the surface coating that occurs at a facility. For example, if a facility is subject to both the Plastic Parts and Products NESHAP and Miscellaneous Metal Parts and Products NESHAP and the activities subject to the Miscellaneous Metal Parts and Products NESHAP account for 90 percent or more of the surface coating activity at the facility, then the facility may comply with the emission limitations for miscellaneous metal parts and products for both types of surface coating operations.

You must include all surface coating activities that meet the applicability criteria of a subcategory in a surface coating NESHAP and constitute more than 1 percent of total coating activities. Coating activities that meet the applicability criteria of a subcategory in a surface coating NESHAP but comprise less than 1 percent of total coating activities need not be included in the determination of predominant activity but they must be included in the compliance calculations.

We have analyzed the relative differences in emission limits that are included in the predominant activity compliance option, as it would apply to the NESHAP for plastic parts and products and the NESHAP for miscellaneous metal parts and products. We have determined, for certain subcategories, that the environmental impact of complying with the emission limit for the predominant activity is essentially equivalent to complying separately with each emission limit. For other subcategories, the environmental impact could be substantially different. To prevent situations that could lead to substantial emissions increases, the following activities cannot be used as the predominant activity at a facility: high performance, rubber-to-metal bonding, and extreme performance fluoropolymer coatings. Emission limits for these coating operations reflect the need for specialized performance requirements that can currently be accomplished only with materials that contain substantially higher HAP than materials used at other types of coating operations. It would be inappropriate to allow coating operations that can be performed with lower-HAP materials to comply with substantially higher-HAP emission limits than would otherwise be applicable.

Under the predominant activity alternative, if all coating operations comply with the emission limit applicable to the predominant activity, the facility will be considered in compliance with the emission limits otherwise applicable to the minority surface coating operations (i.e, those that amount to less than 10 percent of the coating activity).

The EPA agrees with the commenters that the predominant activity determination should be made at the time of the notification of compliance status and less frequently than on a monthly basis. A less frequent determination would substantially reduce the recordkeeping compared to a monthly determination and would reduce the potential that a source's operations could fluctuate between compliance requirements. However, we feel it is important to determine predominant activity more frequently than at Title V renewal, since this may occur only every 5 years or so, and may not accurately reflect current coating operations. Therefore, the final rule requires that a facility determine their predominant activity on an annual basis.

The predominant activity determination must accurately reflect current and projected coating operations and must be verifiable through appropriate documentation. The determination can be based on representative coating data for any reasonable time period of at least 1 year of operation for existing sources, provided the data represent the way the source will

continue to operate in the future and are approved by the Administrator. For new sources with no prior coating activity, the initial determination would be based on only projections of coating activity for the next year. Subsequent determinations would be based on both past and projected coating activity.

We believe the most appropriate basis for the predominant activity determination is the percentage of coating solids that is applied to parts subject to different emission limits. A facility would not need to measure or calculate the amount of coating solids used on different parts and products to determine the relative amount of coating activity subject to different emission limits. Instead, a facility could use other reliable and verifiable information to estimate the relative volume of coating solids used, including, but not limited to, product design, specifications for the parts and products coated and the number of different parts and products produced during a representative period. The use of parameters other than coating consumption and volume solids content must be approved by the Administrator.

Another compliance option to eliminate the need to comply with more than one coating NESHAP has also been added to the final rule. This second option allows a facility to calculate and comply with a facility-specific emission limit, as discussed in section 6.4 of this document.

Comment: One commenter (IV-D-19) suggested that §63.3881(a) should be clarified to indicate that when parts that are preassembled from metal and plastic components are being coated on the same line as plastic parts, the metal parts rule does not apply to the coating of plastic parts on that same line.

Response: Section 63.3881(a) has been revised and this provision is not included in the final rule. Therefore, the clarification suggested by the commenter is not needed. The final rule includes various provisions so that a surface coating facility will be less likely to be required to make part-by-part applicability determinations.

Comment: One commenter (IV-D-13) suggested that the metal parts and the plastic parts rules should have the same compliance date and reporting periods.

Response: The EPA worked to promulgate the final metal parts rule and plastic parts rule as close together as possible so they would have the same compliance dates for both new and existing sources. However, since they were proposed on different dates (August 13, 2002 for the metal parts rule and December 4, 2002 for the plastic parts rule), the same source may be

considered a new source under the metal parts rule and an existing source under the plastic parts rule if construction began between those two dates. However, we expect this to affect very few, if any, facilities. In addition, both final rules include provisions that were not included at proposal that will reduce the probability that a facility will need to comply with the two rules separately. Finally, a facility may work with their permitting authority to harmonize their reporting periods and dates.

Comment: Two commenters (IV-D-17, IV-D-36) supported the applicability provision that a source can comply with the metal parts rule in lieu of the plastic parts rule if they coat plastics contained in metal parts and more than 50 percent of the coating is applied to metal surfaces. However, the commenters suggested that the final rule allow the source to comply with the metal parts rule instead of the plastic parts rule if metal is less than 50 percent of the surface coated, but the metal surfaces dictate the requirements of the coating used on the entire part (e.g., for corrosion protection or durability). According to the commenters, this approach recognizes that the metal parts rule has evaluated the achievability of the standards with respect to the unique requirements of metal coatings.

Response: The final rule does not include the provision for pre-assembled parts containing metal and plastic that was included in the proposed rule. However, the final rule does include a provision that will allow a facility to determine a facility-specific emission limit that reflects the different emission limits in the surface coating NESHAP that apply to the mix of substrates and products that are coated at that facility. This approach will allow a facility to account for the different performance requirements of different substrates, even if they are not the predominant substrate coated at that facility.

Comment: In determining whether metal parts or plastic parts apply to an operation (i.e., is it greater than 50 percent metal or plastic), one commenter (IV-D-33) suggested that the rules explain how coatings should be counted if they are applied to non-metal and non-plastic surfaces, such as wood, fabric, or ceramics.

Response: The final rule does not include the provision for pre-assembled parts containing metal and plastic that was included in the proposed rule. However, it does include two provisions that require a facility to determine the relative amount of surface coating activity subject to different emission limits or NESHAP. These are the predominant activity alternative

discussed earlier in this section and the facility-specific emission limit alternative discussed in section 6.4. These determinations do not need to include coating operations, products, or substrates that do not meet the applicability criteria of any surface coating NESHAP. This clarification has been included in the final rule.

6.4 Comply with the most stringent NESHAP

The proposed rule contained a provision that if a source is subject to more than one NESHAP, they could comply with the most stringent NESHAP for all coating operations and this would constitute compliance with all applicable NESHAP. The determination of which NESHAP is most stringent would be based on a facility-specific estimate of emissions under each separate NESHAP. (See §63.3881(d), 67 FR 52800, August 13, 2002.)

Comment: Two commenters (IV-D-09, IV-D-46) supported this provision of the proposed rule. One commenter agreed that complying with one NESHAP would prevent excessive monitoring, recordkeeping, and reporting. One commenter suggested that this option would require less recordkeeping than tracking and determining which substrate represents the greatest coating activity.

However, several commenters did not support this option. Several commenters (IV-D-17, IV-D-33, IV-D-34) stated that different units of measure (e.g., lb organic HAP per lb solids versus lb organic HAP per gal solids) make it difficult to determine which surface coating NESHAP among several is most stringent. Three commenters (IV-D-09, IV-D-31, IV-D-34) argued that the different units of measure between the metal parts rule and the Aerospace Manufacturing NESHAP will impact the monitoring, record keeping, and reporting burden on sources subject to multiple NESHAP and make it difficult to determine which NESHAP is more stringent. One commenter (IV-D-33) noted that cleaning solvents in particular are a problem, since some NESHAP emission limits include cleaning solvents while others impose work practices instead.

Two commenters (IV-D-09, IV-D-33) suggested that the relative stringency of different NESHAP should be stated in each rulemaking so that facilities subject to more than one NESHAP do not need to perform a case-by-case determination of which applicable rule is most stringent.

Response: Through clarification of the applicability provisions of the final rule, we have significantly reduced the potential for sources to be subject to multiple surface coating NESHAP. However, we recognize that some sources may be subject to both this rule and the Plastic Parts and Products NESHAP, and possibly other surface coating NESHAP. We agree with the commenters who argued that demonstrating compliance with the most stringent NESHAP is complicated by the fact that it may be hard to determine which NESHAP is most stringent because of differences in units, the affected source, whether cleaning is included in the emission limits, and compliance periods.

Instead, EPA is providing in the final rule, the opportunity for a source to determine and comply with a facility-specific weighted emission limit for all coating operations that take place at the source. The emission limit would be weighted according to the relative amount of coatings used that would be subject to separate emission limits. This alternative emission limit can include applicable emission limits from two or more NESHAP, as provided in the example calculation below. As with the predominant activity alternative, you must include all surface coating activities that meet the applicability criteria of a subcategory in a surface coating NESHAP and constitute more than 1 percent of total coating activities. Coating activities that meet the applicability criteria of a subcategory in a surface coating NESHAP but comprise less than 1 percent of total coating activities need not be included in the facility-specific emission limit calculation but they must be included in the compliance calculations.

In calculating the facility-specific emission limit, the basis for the weighting of the individual emission limits must be the volume of coating solids used in each subcategory. The volume coating solids used in the different coating operations may be calculated by a variety of methods, as long as it is accepted by the permitting authority. For example, in some cases a facility that uses the same coating for plastic and metal parts may be able to use the design specifications of the parts coated and the numbers of each type of part coated to calculate the weight of coating solids applied to metal and plastic surfaces subject to the individual emission limits. In other situations, actual records of coating usage for each operation may be needed to provide a valid calculation.

In calculating a facility-specific emission limit for operations subject to NESHAP with emission limits in different formats, you will need to convert emission limits to the same format.

To do so, you must use a default value for solids density of 10.5 lbs solids per gal solids (1.26 kg solids/liter solids) to convert emission limits in the Plastic Parts and Products NESHAP that are in “HAP per mass solids” to the “HAP per volume solids” units of the Miscellaneous Metal Parts and Products NESHAP. This default value was calculated from the weighted-average solids density of coatings in the plastic parts survey database and represents the average solids density of plastic parts coatings.

The following example illustrates how the facility-specific emission limit can be used. Assume a facility has three coating operations subject to the following emission limits:

- plastic parts general use (0.16 lb organic HAP/lb solids);
- miscellaneous metal parts extreme performance fluouopolymer coatings (12.4 lb organic HAP/gal solids); and
- miscellaneous metal parts general use (2.6 lb organic HAP/gal solids).

The three coating operations account for the following gal of coating solids used in the past 12 months:

- plastic parts general use: 40,000 gal solids;
- miscellaneous metal parts extreme performance fluouopolymer coatings: 2,000 gal solids; and
- miscellaneous metal parts general use: 58,000 gal solids.

First, the plastic parts general use emission limit must be converted to lb organic HAP/gal solids units as in the metal parts rule using the default solids density of 10.5 lb solids per gal solids:

$$\frac{0.16 \text{ lb HAP}}{\text{lb solids}} \times \frac{10.5 \text{ lb solids}}{\text{gal solids}} = \frac{1.7 \text{ lb HAP}}{\text{gal solids}}$$

Next, the facility-specific emission limit is calculated using equation 1 in §63.3890 of the rule:

Facility - Specific Emission Limit =

$$\frac{(1.7)(40,000) + (12.4)(2,000) + (2.6)(58,000)}{(40,000 + 2,000 + 58,000)} = \frac{2.4 \text{ lb HAP}}{\text{lb solids}}$$

If all coating operations comply with an emission limit of 2.4 lb organic HAP/gal solids and with the other compliance provisions of this rule, the facility will be in compliance with this rule for that compliance period. The calculation must be repeated for each 12-month compliance period. In this example, compliance will also constitute compliance with the Plastic Parts and Products NESHAP for the plastic parts coating operations. The facility can use either the compliant materials option, the emission rate without add-on controls option, or the emission rate with add-on controls option to demonstrate compliance with the facility-specific emission limit.

We believe that this approach is consistent with the CAA because the emission limits from which the facility-specific emission limit would be calculated are based on the MACT emission limits for each applicable coating operation. Therefore, overall emissions would be essentially the same as if each coating operation were complying separately with each applicable emission limit.

The facility-specific emission limit must be calculated monthly for each 12-month compliance period to accurately reflect the portion of coating that would have been subject to the different NESHAP or subcategory emission limits and ensure that the facility-specific emission limit alternative achieves essentially equivalent environmental benefits as separate compliance. As the portion of coating activities subject to the underlying emission limits changes over time, the facility-specific emission limit should appropriately reflect these changes. There are wide differences in the various emission limits available for inclusion. A relatively small change in the mix of coating operations conducted during a compliance period can have a significant effect on the weighted emission limit. Thus, it would not be appropriate for a facility to establish and maintain a fixed facility-specific emission limit based on historical data or long term projections.

This option will be less burdensome than separate compliance with each NESHAP because the facility can keep records and demonstrate compliance using a single unit of measure and will only have one set of recordkeeping and reporting requirements (instead of potentially different recordkeeping and reporting requirements for two or more different NESHAP).

In the final rule, the facility-specific emission limit alternative and the predominant activity alternative provide sources with comprehensive and flexible approaches that will reduce the recordkeeping associated with sources that coat multiple substrates and whose workload

could fluctuate over time. These alternatives reduce the likelihood of overlap among multiple surface coating NESHAP. Furthermore, potential overlap with specific source categories has been clarified and compliance demonstrations for automobile and light-duty truck sources are simplified by the changes to the applicability section of the rule discussed in sections 6.2, 6.5, and 6.6. Together, these changes address the comments on regulatory overlap issues and approaches, and provide flexible compliance options where facilities may be subject to more than one coating NESHAP.

Another approach that you may use is the equivalency by permit option in 40 CFR part 63, subpart E (§63.94). Under this approach, you may design an emissions control program that is suited for your process or plant as long as you can demonstrate that your program will achieve the same emissions reductions as the NESHAP. You must then work with your State, local, or tribal air pollution control agency to submit an equivalency demonstration. This equivalency demonstration will be reviewed by the appropriate EPA Regional Office. The equivalency demonstration is approved as part of the operating permit approval process. For more information, please see the section 112(l) website at [http://www.epa.gov/ttn/atw/112\(l\)/112-lpg.html](http://www.epa.gov/ttn/atw/112(l)/112-lpg.html).

Comment: One commenter (IV-D-09) requested that EPA specify that the Aerospace Manufacturing NESHAP is the more stringent rule in the metal parts rulemaking so that facilities have the option to comply only with the Aerospace Manufacturing NESHAP without extensive demonstration. The commenter submitted an analysis of 62 coatings to demonstrate that compliance with the Aerospace Manufacturing NESHAP constitutes compliance with the Miscellaneous Metal Parts and Products NESHAP. The commenter also stated that aerospace work practice standards and monitoring, recordkeeping, and reporting are at least as stringent as the metal parts rule.

Response: The final rule specifies that it does not apply to facilities meeting the applicability criteria of the Aerospace Manufacturing and Rework NESHAP and does not apply to the specialty coatings listed in Appendix A to the Aerospace Manufacturing and Rework NESHAP when they are applied to aircraft or aerospace vehicles or their components. Therefore, it is not necessary for the final rule to state that the Aerospace Manufacturing and Rework NESHAP is more stringent than the metal parts rule. Also, we note that information

provided during the comment period indicates that any miscellaneous metal coating activities would comprise less than 5 percent of total coating activities at an aerospace facility. Consequently, the facility could elect to comply with the predominant activity compliance alternative to reduce its recordkeeping and reporting burden.

6.5 Assembled On Road Vehicle Coating

Comment: Two commenters (IV-D-17, IV-D-24) recommended that the predominant substrate type on motor homes and other recreational vehicles (RVs) be established as the most restrictive substrate type (plastics) and that the final exterior painting of RVs should be subject to only the specific limit being developed for that operation within the plastic parts rulemaking. They argued that a single emission limit should be established for coating motor homes and other assembled on-road vehicles (AORV) that reflects the restrictions of the plastic substrate used on the bodies of motor homes and other RV. The commenters argued that the recordkeeping to document the fraction of plastic and metal on RV would be a major challenge because of the different options for each RV that can be chosen by the customer which affect the ratio of metal-to-plastic that is coated on each vehicle.

One commenter (IV-D-13) suggested that the metal parts rule should specifically exclude aftermarket repairs and refinishing of heavy duty trucks, buses, and other vehicles because these coating operations have different operational constraints and processes compared to an original equipment manufacturer. The commenter noted that such an exclusion is expected in the upcoming automobile and light-duty truck surface coating rule.

One commenter (IV-D-58) requested that the final rule exclude refinishing of assembled vehicles that contain both plastic and metal substrates, regardless of the relative amount of plastic and metal coated. The commenter requested that the preamble to the final rule should state that the refinishing of assembled vehicles will be covered under the upcoming plastic parts rule AORV coating subcategory. The same commenter also requested that the plastic parts rule (and not the metal parts rule) apply to vehicle parts that are separate from the assembled vehicle at the time of coating application, if the part is eventually to be incorporated into a vehicle. The commenter reasoned that emissions from such operations are negligible in comparison to emissions from overall refinish coating emissions and tremendous costs would be involved with

having to reformulate all the colors required to color match under two different regulatory limits and units of measure.

Response: We agree that a single emission limit should apply to all surface coating operations on motor homes and other AORV. Even though fully assembled vehicles may contain a mix of plastic and metal substrates, the majority of the surface coatings applied to the vehicle are automotive-type refinish coatings. In the proposed rule for plastic parts and product surface coating (40 CFR part 63, subpart PPPP; 67 FR 72276, December 4, 2002), we proposed an emission limit for an AORV surface coating subcategory and an emission limit for that subcategory has been included in the final plastic parts rule.

The AORV subcategory in the final Plastic Parts and Products NESHAP will include the aftermarket repair and refinishing of heavy duty trucks, buses, and other vehicles, and the final exterior painting of RVs, such as motor homes and travel trailers, among other vehicles, regardless of the relative amount of metal and plastic. Therefore, the coating of these vehicles will be exempt from the Miscellaneous Metal Parts and Products NESHAP. Surface coating operations that are subject to the AORV surface coating emission limit in the plastic parts rule are not subject to any of the emission limits in this rule. This subcategory in the plastic parts rule also includes the surface coating of parts that are coated with the assembled vehicle but are coated off-vehicle to protect systems and equipment or to allow full coverage. One example would be the coating of grill fronts on motor homes that are removed so they can be coated with the motor home without coating the radiator surface that is behind them. Because coating of such parts is subject to the AORV emission limits, it is not subject to the metal parts rule. The AORV subcategory does not otherwise include the coating of separate parts at original equipment manufacturers.

The limit for the AORV subcategory was developed from data on after-market automotive coatings used by the recreational vehicle industry for the coating of motor homes and other recreational vehicles. These finishes are also used on heavy duty trucks, buses, and other vehicles, as well as the refinishing of automobiles and light-duty trucks.

Comment: One commenter (IV-D-19) argued that the final rule should exempt automobile refinishing operations in order to reduce the number of facilities that need to apply for federally enforceable permit limits. The commenter suggested that all auto refinishing be

assumed to be area sources and that HAPs from these operations should be regulated with a national rule similar to the one for VOCs.

Response: We disagree with the commenter that automobile refinishing should be exempt from HAP regulations. Emissions of HAP from automobile refinishing operations will be regulated under the AORV subcategory in the final plastic parts rule and will be exempt from the metal parts rule. While most automobile refinishing operations are not major sources for HAP emissions, we cannot assume this is true for all such operations and we cannot assume that no automobile refinishing operations are collocated within a major source of HAP. We also disagree that exempting automobile refinishing would reduce the number of sources that need to obtain limits on their potential to emit, since these facilities are also sources of VOC and PM, which are not regulated by either this rule or the plastic parts rule.

6.6 Miscellaneous Comments on Compliance with Multiple NESHAP

Comment: One commenter (IV-D-40) stated that EPA should avoid unnecessary differences among surface coating NESHAP. Since many facilities are subject to multiple standards, the commenter believes that slight differences are without justification and cause unnecessary work, confusion, and costs without achieving any environmental benefit.

A second commenter (IV-D-21) requested that the final rule revise the recordkeeping and reporting requirements. The commenter stated that some materials subject to one NESHAP may have emission limits while materials subject to a second NESHAP may have work practice standards; therefore, facilities have to segregate requirements by NESHAP and maintain separate records and reports. The commenter requested that the recordkeeping and reporting be made consistent among NESHAPs.

Response: The EPA has attempted to achieve as much consistency as possible among the recently proposed and promulgated surface coating NESHAP through the use of rule templates and coordinated rule development. However, we do recognize that some differences exist among surface coating rules that are due to differences in the coating technology used, emission control strategies, and the data that were available for developing the emission standards. In order to minimize the impact of these differences, EPA has carefully examined the applicability criteria for each rule to minimize the potential for a facility to be subject to more than one

surface coating NESHAP. For the final metal parts rule and plastic parts rule, we have included applicability provisions that will further reduce the probability that facility will be subject to multiple NESHAP and we have included alternatives to facilitate the compliance demonstration for facilities that are subject to multiple NESHAP.

Comment: One commenter (IV-D-26) suggested that EPA clarify the applicability of the Metal Parts and Products NESHAP, the Wood Building Products NESHAP, and the Plastic Parts and Products NESHAP to aluminum- and plastic-clad doors and windows and add language to each rule so that a facility can comply with the NESHAP representing the predominant coating use. The commenter stated it is possible that the coating done in a single booth at their facility could be subject to all three NESHAP and it is not practical to require recordkeeping down to a single paint-hanger level in a continuous painting system. The commenter believes that compliance with the Miscellaneous Metal Parts and Products NESHAP (their predominant usage) should also constitute compliance with the Wood Building Products NESHAP and the Plastic Parts and Products NESHAP. In the wood building products rule, the commenter requested that EPA clarify the definition of wood building product and its applicability to the window/door category. According to the commenter, the current definition of a wood building product is an item that is greater than 50 percent wood, and windows and doors are listed as categories of products. However, the commenter noted that for their aluminum-clad doors and windows, the majority of the weight is glass and wood is often only about 25 percent of the weight. The commenter also reported that greater than 95 percent of coated surfaces is aluminum, 3 percent is wood, and 1 percent is plastic.

Response: The commenter's concerns with the definition of a wood building product was addressed in the development of the final Wood Building Products NESHAP (68 FR 31746, May 28, 2003). The final metal parts rule includes a predominant activity alternative which the commenter could use to demonstrate compliance with a single surface coating NESHAP. Since greater than 90 percent of the surface coating is applied to metal, the facility could use compliance with the general use emission limit in the metal parts NESHAP as the predominant activity to constitute compliance with any other applicable surface coating NESHAP.

Comment: Two commenters (IV-D-46, IV-D-60) requested that EPA exempt from the metal parts rule anti-foulant coatings, caulks, adhesives, and sealants used by recreational boat

manufacturing for three reasons. First, these coating operations are exempt from the Boat Manufacturing NESHAP (40 CFR 63, subpart VVVV) because they are used by a small percent of boat manufacturers and these operations account for less than 1 percent of the total HAP emissions from major source recreational boat manufacturers. Second, EPA never considered the corrosive salt-water environment, humidity, temperature extremes, and intense sunlight experienced by boats when collecting data for the proposed metal parts rule. According to the commenters, limited coating choices are available that can withstand this type of environment to protect metal parts. Third, the commenters claimed that no small business boat manufacturers were notified to participate in the data collection as mandated by the Small Business Regulatory Enforcement Fairness Act (SBREFA).

The commenters (IV-D-46, IV-D-60) also claimed that, if included, the final rule would impose a significant recordkeeping burden for small businesses. According to the commenters, the use of anti-foulant coatings, caulks, adhesives, and sealants are an insignificant, secondary operation from an emissions standpoint, but are very important to the safety and durability of fiberglass, metals, and other materials. The commenters added that the 250-gallon exemption would not provide any relief because of the recordkeeping needed to separate the coatings used on just the metal parts in order to claim the exemption and most major source boat manufacturers probably use more than 250 gallons of coatings on metal parts per year.

Response: The final rule does not apply to surface coating of boats or metal parts of boats (including, but not limited to the use of assembly adhesives) where the facility meets the applicability criteria of the Boat Manufacturing NESHAP (40 CFR 63, subpart VVVV). We agree with the commenters that these surface coating operations were already evaluated in the development of the Boat Manufacturing NESHAP and it was determined at that time that they should not be regulated. The Boat Manufacturing NESHAP regulates the surface coating of aluminum boats and these operations are not regulated by the metal parts rule.

This exemption does not apply to surface coating performed on personal watercraft or in the manufacture of personal watercraft. Due to their smaller size and the greater number of personal watercraft manufactured relative to other types of boats, the surface coating of personal watercraft and their components is more similar to other types of metal parts surface coating (such as parts for motorcycles and snow mobiles) than the surface coating of larger boats. The

surface coating of personal watercraft and their parts is often collocated with the surface coating of motorcycles and snow mobiles and their parts. The Miscellaneous Metal Parts and Products NESHAP applies to coating operations performed on personal watercraft or parts of personal watercraft.

Comment: One commenter (IV-D-26) noted that EPA has stated in several surface coating NESHAP that a facility can comply with the most stringent NESHAP if more than one applies. The commenter then raised the question: If this were achievable in practice, why did the MACT development process not establish the same limitations for the two processes (i.e., source categories or subcategories) equal to the more stringent NESHAP?

Response: The suggestion that a facility can comply with the most stringent NESHAP is always made as one option in the context of several different compliance alternatives for facilities that are subject to more than one NESHAP. For the final metal parts rule, we have included several different alternatives for facilities that are potentially subject to more than one NESHAP. For the reasons discussed earlier in this section, the alternative that a facility may comply with the most stringent NESHAP has been replaced with a predominant activity alternative and a facility-specific emission limit alternative.

7.0 SCOPE AND APPLICABILITY OF THE MISCELLANEOUS METAL PARTS AND PRODUCTS SOURCE CATEGORY

7.1 General Applicability Comments

Comment: One commenter (IV-D-27) requested that EPA clarify whether agricultural field equipment, such as harvesters, tillers, elevators, rock crushers, etc., would be covered under the rule.

Response: Metal part surface coating operations on the types of agricultural field equipment described by the commenter will be covered by the metal parts rule. These types of equipment are miscellaneous metal products. They do not meet the definition of “assembled on-road vehicle” and would not be covered by the AORV subcategory in the plastic parts rule.

Comment: One commenter (IV-D-19) questioned whether asphalt coatings should be a separate subcategory. The commenter also asked whether the default HAP contents of asphalt coatings are higher than the limit for general-use coatings.

Response: The July 16, 1992 source category list (57 FR 31576) included major sources emitting HAP from “asphalt/coal tar application–metal pipes” (hereafter referred to as asphalt coating). In developing the proposed rule, we decided not to establish MACT standards separately for the asphalt coating category but, rather, to include asphalt coating of metal pipes in the source category for coating of miscellaneous metal parts and products (67 FR 52783, August 13, 2002). Data and information gathered from the asphalt coating industry indicated that the equipment, emission characteristics, and applicable emission reduction measures are similar to the broad group of miscellaneous metal sources. Therefore, we included asphalt coating in the proposed rule. We received no adverse comment on the proposal to include asphalt coating of metal pipes in the source category. The asphalt coating of metal pipes is subject to the emission limit for general-use coatings and is not subject to a separate subcategory because these coatings can comply with this emission limit.

Comment: One commenter (IV-D-63) supported the final rule applying to major sources of HAP only and not including minor sources.

Response: We agree with the commenter that HAP emissions should be regulated from metal parts coating operations that are major sources or are part of a major source of HAP emissions. In the future, EPA will determine if area source emissions should be regulated under §112(d)(6).

Comment: One commenter (IV-D-40) requested the final rule include a definition of “miscellaneous metal parts.” The commenter believes the descriptive list found in §63.3881 is not exclusive and does not reflect the discussion found in the proposal preamble. A second commenter (IV-D-44) stated that the scheme of describing what types of parts and products are not covered by another NESHAP is inadequate for defining the applicability of this rule.

Response: The applicability provisions in the final rule have been revised since proposal to clarify the applicability of this rule relative to surface coating operations that may meet the applicability criteria of other surface coating NESHAP. An expanded list of exclusions for surface coating that meets the applicability criteria of several specific surface coating NESHAP is contained in §63.3881 of the final rule. The rule applies to major sources that perform surface coating (as defined in the rule) of miscellaneous metal parts or products that is not specifically excluded. Because of these clarifications in the applicability section, a more specific definition of “miscellaneous metal parts” is not needed.

Comment: One commenter (IV-D-44) requested that EPA expand §63.3882(b)(3) (definition of affected source) to specifically include pumps and piping of the coating, in addition to other equipment and storage of the coatings, so that these systems are clearly covered under this MACT and not subject to another MACT.

Response: The current definition of affected source §63.3882 of the rule includes the manual and automated equipment for conveying coatings and waste materials. Pumps and piping qualify as equipment for conveying coatings and waste materials. Specifically including them in the definition of affected source is not needed.

Comment: One commenter (IV-D-19) requested the final rule remove “extruded aluminum coils” from Table 1, Regulated Entities, of the final rule preamble.

Response: We agree with the commenter that the surface coating of extruded aluminum coils is only subject to the NESHAP for surface coating of metal using a coil coating process (40 CFR part 63, subpart SSSS). The reference to “extruded aluminum coils” was not included in Table 1, Regulated Entities, of the final rule preamble. The applicability section of the rule (§63.3881) has been revised to indicate the rule does not apply to surface coating operations meeting the applicability of 40 CFR 63, subpart SSSS.

Comment: One commenter (IV-D-19) suggested that EPA should provide guidance to sources that have halogenated solvent cleaning operations on how they should estimate their potential to emit (PtE) and their major source status for determining applicability to the proposed NESHAP. The commenter asked whether they should use the PtE equation in §63.465(e) of subpart T if PtE is not stated in a federally enforceable limit. The commenter included an e-mail to EPA Region 5 with several questions regarding how a source may determine PtE and when that PtE limit has to be achieved. The commenter included an e-mail response from EPA Region 5 indicating that the PtE limit would have to be in a Federally enforceable permit prior to the new NESHAP compliance date.

Response: Whenever a facility is determining the potential to emit HAP for determining major source status, it must consider potential emissions considering Federally enforceable controls, including limits placed on the facility in a federally enforceable operating permit. This issue is not unique to this coating rule or subpart T. If the facility has a Federally enforceable limit on annual emissions (on a rolling 12-month basis) from a HAP-emitting operation, the facility may use that limit in determining whether it is a major source of HAP. If the facility is subject to and in compliance with a Federally enforceable HAP emission limit, it may assume compliance with that limit in determining potential to emit. If a facility is not subject to an emission limit and does not have a federally enforceable limit on annual emissions, then it must use some other means for determining potential to emit. For halogenated solvent cleaning operations, a facility could use the guidance included in §63.465(e).

If a facility is subject to subpart T and is meeting the subpart T emission standards, the facility can consider the subpart T controls in calculating the potential to emit for the halogenated solvent cleaning operations that are subject to subpart T. Subpart T, as well as other NESHAP and new source performance standards (NSPS) for which the compliance date has

already occurred, are Federally enforceable emission limitations and, therefore, can be considered in determining potential to emit. To be considered an area (non-major) source for purposes of determining applicability of the Miscellaneous Metal Parts and Products NESHAP, a facility would need to achieve area source status (considering Federally enforceable control requirements) prior to the compliance data of the Miscellaneous Metal Parts and Products NESHAP.

Comment: One commenter (IV-D-44) suggested that EPA include provisions for a risk-based determination of MACT applicability, similar to the ideas presented in the preamble to the proposed Brick and Structural Clay Products NESHAP (67 FR 47904-47909, July 22, 2002).

Response: The preamble to the proposed Brick and Structural Clay Products NESHAP cited by the commenter requested comment on whether there might be further ways to structure that rule to focus on the facilities which pose significant risks and avoid the imposition of high costs on facilities that pose little risk to public health and the environment. Specifically, the brick and structural clay products proposal requested comment on the technical and legal viability of two risk-based approaches: (1) An applicability cutoff for threshold pollutants under the authority of CAA section 112(d)(4); and (2) subcategorization and delisting under the authority of CAA sections 112(c)(1) and 112(c)(9). As described in the preamble to the final Brick and Structural Clay Products NESHAP (68 FR 26690, May 16, 2003), numerous commenters submitted detailed comments on these risk-based approaches. These comments are summarized in the brick and structural clay products response-to-comments document. Based on our consideration of the comments received and other factors, EPA decided not to include the risk-based approaches in the final Brick and Structural Clay Products NESHAP. The risk-based approaches described in the proposed brick rule and addressed in the comments we received on that rule raise a number of complex issues. Given the range of issues raised by the risk-based approaches in the brick rule and the need to promulgate the final metal parts rule expeditiously, we believe that it is appropriate not to include any risk-based approaches in the final Miscellaneous Metal Parts and Products NESHAP, as was done in the final Brick and Structural Clay Products NESHAP. Nonetheless, while we are not including risk-based approaches in the final metal parts rule, we have included a number of other measures that we expect will reduce the costs and burdens on the affected sources.

Comment: One commenter (IV-D-63) requested that the final rule exclude surface coatings exempt from Federally enforceable state VOC RACT regulations. The commenter (IV-D-63) provided language from New York State rules that exclude thirteen types of coatings from emission limitations.

Response: The metal parts rule includes some of the same exclusions found in State RACT rules, such as the exemption for coatings used in research and development activities, coatings used to fill minor surface imperfections, and coatings applied with hand-held aerosol cans. However, the EPA disagrees with the commenter that all exclusions from State RACT rules should be included in the final metal parts rule. The metal parts rule has emission rate compliance provisions that are not found in State VOC rules and these provisions allow more flexibility to use small quantity, higher emitting specialty materials. In most State VOC rules, each coating must meet the applicable emission limits and the rules generally have no provision to comply using a weighted-average emission rate to offset excess emissions from some coatings with lower emissions from other coatings. This flexibility in the metal parts rule will allow a facility to use these specialty coatings and still comply with the emission limits.

7.2 Types of Materials That are Coatings

Comment: One commenter (IV-D-10) supported the provisions of the rule that exempt the extrusion of plastic onto metal. A second commenter (IV-D-40) supported the exemption of a plastic covering extruded onto metal wire or cable as not being a surface coating operation.

Response: We agree with the commenters that the rule should not regulate these operations as metal part surface coating operations and these exemptions are retained in the final rule.

Comment: One commenter (IV-D-34) requested that sealants, caulks, and adhesives be exempt from the metal parts NESHAP. The commenter noted that the Aerospace Manufacturing NESHAP specifically exempts sealants and adhesives and does not address caulks. The commenter questioned whether data were available to show significant sealant, caulk, and adhesive use in metal part surface coating operations.

Response: The data available to EPA through the metal parts survey database and observations made during visits to facilities in this source category indicate that sealant, caulk,

and adhesive use can be a substantial source of HAP emissions from some types of metal part surface coating facilities. Therefore, these materials are included in the scope of surface coating materials regulated by the final rule.

Comment: Two commenters (IV-D-17, IV-D-36) requested that EPA clarify that oils used for metal stamping, drawing, and cutting (machining operations) are not coatings.

Response: The definition of protective oils includes those used for lubrication and extrusion that do not form a solid film. Since the use of oils in metal stamping, drawing, and cutting (machining operations) is for lubrication purposes and these oils do not form a solid film, they would meet the definition of a protective oil and are not coatings regulated by the metal parts rule.

Comment: Two commenters (IV-D-19, IV-D-63) requested that powder coatings be specifically excluded from the final rule. One commenter (IV-D-63) stated that powder coatings typically have no HAP or trace amounts of HAP that would easily comply with the emission limitations. The commenter (IV-D-63) stated that powder coating operations should not be subject to a recordkeeping and reporting burden that would have no resulting environmental benefit. One commenter (IV-D-19) suggested that including powder coatings would reduce “expected” HAP reductions from this NESHAP and that averaging could be limited to liquid coatings only.

Response: Powder coatings are included in the definition of a coating in the final rule. However, if a source is using only powder coating or powder coating and less than 250 gal of HAP-containing coating, they would be excluded from all rule requirements based on their use of non-HAP coating and less than 250 gal of HAP-containing coating. If a source is using greater than 250 gal of HAP-containing coating and also has a powder coating line, they may choose to comply with the compliant material option for their powder coating line. The records necessary to demonstrate compliance with the compliant material option are significantly less than required under one of the emission rate options. Alternatively, if a source chooses to use either of the emission rate options, powder coatings can be included in the compliance calculations for the emission rate options. Inclusion of powder coatings in the compliance calculations was intended to serve as an incentive for sources to use powder coatings in reducing their overall emission level. We expect that increased use of powder coatings will promote this

technology as a pollution prevention alternative and will result in greater emission reductions than if powder coatings were specifically excluded from compliance calculations. If a source chooses to omit powder coatings from the compliance calculations, the source could document that the powder coatings are in compliance under the compliant materials option since powder coatings are essentially 100 percent solids.

Comment: One commenter (IV-D-61) requested that rust inhibitors not be considered coatings under the rule and that this be clarified in the definition of “coating.” The commenter contended that the rule currently exempts protective oil-type rust inhibitors, but should also exempt aqueous-based materials used for the same purpose.

Response: Aqueous rust inhibitors, which are typically acids or bases, are already excluded from the definition of coating as acids or bases.

Comment: One commenter (IV-D-52) asked whether the definition of cleaning material in §63.3981 includes the following and whether it could be clarified:

- Does the definition of cleaning include aqueous based alkaline strippers used to clean equipment? The commenter reported that these often do not contain any VOC or HAP.
- Does the definition include surface preparation systems using an alkaline wash, water and phosphate rinse, and sealers that generally contain no VOC or HAP. Again, the commenter reported that these often do not contain any VOC or HAP

The commenter noted that other NESHAP have used the term “organic HAP solvent” instead of “solvent” and defined these as volatile organic liquids containing HAP. The commenter argued that the two examples would not meet the definition of organic HAP solvents.

Response: In the final rule, we have not excluded the examples cited by the commenter from the definition of cleaning material or from the definition of coating since we do not have data indicating that these materials are always very low or non-HAP. However, the final rule includes a definition of non-HAP materials based on common reporting thresholds that are already in use. Thinners and other additives, cleaning solvents, and coatings are considered non-HAP if the organic HAP level does not exceed the OSHA reporting thresholds for HAP (0.1 percent by weight for OSHA-defined carcinogens and 1.0 percent by weight for other HAP). Depending on the compliance option selected by a facility, the compliance demonstration can be greatly simplified for coating materials that meet the definition of non-HAP coating.

Comment: One commenter (IV-D-63) requested that EPA revise the definition of “protective oil” to clarify that protective oils, which are exempt from the rule, include coatings that leave a solid film that is not permanent. The commenter described three protective coatings that should be covered under the protective oils definition. The first are temporary protective coatings put on metal products to protect them from rust and corrosion during shipment and storage but that leave a removable hard film. These temporary coatings have trace or low HAP content (the commenter provided MSDS). The second are magnet wire lubrication that is put on the wire before it is wound on a spool and forms a wax film. This wax film prevents the wire from sticking when being unwound and protects the wire during installation in an assembly process. The third is a bar seal lubrication that prevents hand gloves from sticking to generator parts during taping. The commenter provided a revised definition of “protective oil” and recommended these three coating examples be included in the final preamble to help clarify the protective oils definition.

Response: We agree with the commenter that the definition of protective oils should be revised to include magnet wire lubrication and soft temporary protective coatings that are removed prior to installation or further assembly of a part or component. Those materials that do not form a solid film are not typically considered coatings. We do not feel it is necessary to specifically include bar seal lubricants used to prevent hand gloves from sticking to generator parts during taping. This is a specific process using the bar seal lubricant in a way that qualifies as a protective oil by providing lubrication.

Comment: One commenter (IV-D-64) requested that EPA modify the definition of “protective oil” to specifically include or exclude carrier solvents. The commenter claimed that skin lubricants used on hypodermic needles do not meet the definition of a coating because they do not cure and form a solid film. The commenter stated that the lubricant is a viscous liquid that uses a HAP as a carrier; after the HAP evaporates, the lubricant is still liquid. Except for the carrier solvent, the commenter claimed that skin lubricants could otherwise meet the definition of a protective oil and would be exempt from the standard.

Response: We agree with the commenter that the definition of protective oils should be revised to include those oils that include a carrier solvent and that do not form a solid film (e.g.,

skin lubricants on hypodermic needles). This change has been made to the definition in the final rule.

Comment: One commenter (IV-D-61) requested clarification that plating and anodizing operations are not included in the metal parts rule. A second commenter (IV-D-19) suggested that the final rule should include a definition for “organic coating” or a statement that inorganic coatings and metal plating operations are not included in the metal parts rule. The second commenter provided an example definition of organic coating from an earlier EPA publication.

Response: Plating and anodizing operations are not metal part surface coating operations meeting the applicability criteria of the metal parts rule. Emissions from hard and decorative chromium electroplating and chromium anodizing operations are regulated by the NESHAP for that source category (40 CFR 63, subpart N). We do not feel that a definition of organic coating or a statement that inorganic coatings and plating operations are not covered by the final rule are needed in the final rule to clarify its applicability. The current applicability language in the rule and the clarifications presented in this document are sufficient.

7.3 Regulated Pollutants

Comment: Two commenters (IV-D-15, IV-D-59) suggested that the final rule should include control requirements for inorganic HAP. One commenter (IV-D-15) noted that the Aerospace Manufacturing NESHAP included detailed control requirements for inorganic HAP overspray, but the proposed metal parts rule included no requirements for control of inorganic HAP overspray. The commenter also reported that the Aerospace Manufacturing NESHAP documents noted that the quantity of inorganic HAP emissions is relatively small, but that control requirements were justified based on their high toxicity. In contrast, the proposed metal parts rule merely stated that inorganic HAP emissions are minimal because of water curtain or dry filter controls on metal part surface coating paint booths. The second commenter (IV-D-59) noted that the preamble to the proposed rule stated that inorganic HAP from coatings are typically controlled by dry filters or water curtains. Therefore, according to the commenter, these controls appear to be the MACT floor to control inorganic HAP emissions.

Response: As noted in the proposal preamble (67 FR 52789, August 13, 2002), most of the coatings used in this source category do not contain inorganic HAP and the facilities in this

source category employ filters on paint booths that collect paint overspray and any inorganic HAP in that overspray. The use of inorganic HAP in aerospace coating operations is more common because of the need to use chromium pigments to prevent corrosion of the metal parts of the aircraft critical to flight.

7.4 Gallons-Used Applicability Threshold and the Small Volume Exemption

Comment: One commenter (IV-D-15) stated that the final rule should clarify whether coatings subject to the 50-gallon-per-year exemption in §63.3881(c)(5) of the proposed rule (§63.3881(c)(3) in the final rule) should be included in the total for determining applicability under the 250-gallon-per-year threshold in §63.3881(b).

Response: A facility should apply the provisions in §63.3881 in the order in which they appear in the rule. The rule applies to facilities that are major sources and use 250 gallons or more per year of metal parts surface coatings as specified in §63.3881(b). If a facility exceeds this threshold, then some coatings may be exempt from regulation under §63.3881(c)(3). A facility should include those metal parts coatings that may be eligible for the exemption under §63.3881(c)(3) in the final rule in determining whether they exceed the 250 gallon per year threshold in §63.3881(b). This would avoid a potential situation in which a facility could use nearly 500 gallons per year of coating and not be regulated.

Comment: The commenter (IV-D-52) agreed with the exemption for coatings used at less than 50 gallons per year up to a total of 250 gallons per year. However, the commenter asked for two clarifications:

- Can facilities choose not to exempt coatings that may qualify for this exemption, to avoid the additional record keeping needed to exclude coatings based on usage?
- If a facility uses many coatings in quantities less than 50 gallons, but the total is greater than 250 gallons, can the facility: (1) choose to exempt the non-compliant low-volume coatings under the compliant material option, and (2) choose to exempt the highest HAP coatings under the emission rate without add-on controls option?

Response: Facilities may choose not to exclude coatings used in small volumes if they find it easier to include all coatings in their compliance demonstration. In response to the second question, even if a facility uses many HAP-containing coatings in quantities of less than

50 gallons per year, the facility may exempt no more than a total of 250 gallons of HAP-containing coatings. It does not matter if a facility is using multiple compliance options (e.g., the compliant materials option and the emission rate without add-on controls option), the total that can be exempt at the facility is 250 gallons. In the commenter's example, the facility may choose which of their low-volume coatings to exempt under §63.3881(c). They could choose to exempt the higher HAP coatings that are used in quantities less than 50 gallons per year, as long as they exclude a total of less than 250 gallons of HAP-containing coatings. They would have to demonstrate compliance for the remaining low volume coatings. They could use the compliant materials option or one of the other options to demonstrate compliance for the remaining coatings.

Comment: One commenter (IV-D-19) recommended that the final rule should have a larger applicability threshold than 250 gallons per year. The commenter cited the Wood Furniture NESHAP (40 CFR 63, subpart JJ), which has three thresholds: 250 gallons per month, 3,000 gallons per rolling 12-month period, and one half of the HAP emission criteria for major sources per rolling 12-month period. The commenter contended that larger applicability thresholds would reduce the need for permit limits for thousands of facilities that EPA has presumed to be area sources.

Response: The 250 gallon per year threshold in §63.3881(b) of the metal parts rule is intended to exclude incidental metal parts surface coating operations from the applicability criteria of the metal parts rule. The thresholds cited by the commenter in the Wood Furniture Manufacturing NESHAP (see §63.800(b)) are for establishing that a wood furniture manufacturing facility is not a major source subject to that rule. A wood manufacturing facility that is a major source of HAP emissions due to some other emission source would still be required to comply with the Wood Furniture Manufacturing NESHAP even if it used less than the quantities cited by the commenter. Since the thresholds in the Wood Furniture Manufacturing NESHAP and this rule serve different purposes, the commenter cannot infer that the wood furniture thresholds establish a precedent that should be followed by the metal parts rule. The Miscellaneous Metal Parts and Products NESHAP does not require control of area sources. The applicability section of the metal products rule clearly states that it applies only to

surface coating that is a major source or is located at a major source or is part of a major source of HAP.

Comment: Two commenters (IV-D-17, IV-D-24) asked for clarification of the exemptions in §63.3881: Do non-HAP coatings count toward the exemption limits? For example, if a company uses 10,000 gallons of non-HAP coating in one operation and less than 50 gallons of HAP-containing coatings in seven other operations totaling less than 250 gallons per year, is the facility exempt from the rule? Alternatively, if a company uses 1,000 gallons of HAP-containing coating in one operation and less than 50 gallons of HAP-containing coatings in seven other operations totaling less than 250 gallons per year, is the one large operation subject to the rule and the seven minor operations are exempt?

Response: Non-HAP coatings do not need to be counted towards the applicability threshold. Because the purpose of the rule is to control HAP, we agree that it is appropriate to consider only HAP-containing coatings in determining whether a source meets the applicability threshold. We revised §63.3881(b) of the rule to clarify that when determining whether your facility is below the applicability threshold, you may exclude non-HAP coatings (as defined in the final rule) when determining whether you use 946 liters (250 gal) per year, or more, of coatings in the surface coating of miscellaneous metal parts and products. The final rule includes a definition of non-HAP coating, which is a coating containing less than 0.1 percent by weight of each individual organic HAP that is an OSHA-defined carcinogen and less than 1.0 percent by weight of all other individual HAP.

Thus, a facility using mostly non-HAP coatings and less than 250 gal per year of HAP-containing coatings will not be subject to the final rule. In addition, we added a definition of “non-HAP coating” to the definitions section of the final rule. In the commenters’ examples, the facility using 10,000 gallons of non-HAP coating in one operation and less than 50 gallons of HAP-containing coatings in seven other operations totaling less than 250 gallons per year would not need to demonstrate compliance with the rule. In the second example, the large coating operation using 1,000 gallons per year of HAP-containing coating would need to demonstrate compliance with the rule while the seven other operations totaling less than 250 gallons per year are exempt.

Comment: One commenter (IV-D-25) objected to the level of the annual coating usage cutoff of 250 gallons/year as too low, resulting in many small, low-emitting sources being subject to the rule. The commenter agreed with EPA's rationale that the rule should apply to facilities where the coating of miscellaneous metal parts is part of the principal activity of the facility or an integral part of the production process, and to other types of facilities where collocated surface coating operations are comparable in type and size to dedicated facilities. However, the commenter disagreed that a 250-gallon/year collocated operation is comparable in size to typical production processes in the regulated category. To avoid an undue burden on small facilities, the commenter recommended that the cutoff be 5,000 gallons/year.

Response: We disagree with the commenter that the annual usage cut-off for applicability of this rule should be set at 5,000 gallons per year and the 250 gallon/yr cut-off has been retained in the final rule. The commenter provided no data to support their contention that this cut-off better represents facilities where metal part surface coating is part of the principal activity of the facility. The commenter provided a case study of the coating operations at a DoD Air Force base that is a major HAP source because of hydrogen chloride emissions from a coal fired boiler and also performs miscellaneous metal parts surface coating. However, as discussed in section 6.0 of this document, miscellaneous surface coating operations at DoD facilities will be addressed under a separate rule making and will not be regulated by this NESHAP.

Comment: One commenter (IV-D-33) suggested EPA retain the exemption for each coating (individual formulation) used at less than 50 gallons per year, but increase the allowed facility total to 500 gallons per year. The commenter reported that DoD facilities may use thousands of different surface coating materials at a single installation, and these will include caulk, sealants, and adhesives which are not currently regulated under the aerospace or shipbuilding and repair NESHAP. The commenter predicted that tracking small containers (e.g., 8 ounces or less) would be excessively costly and burdensome for DoD facilities with little environmental benefit and an exemption of 500 gallons per year would reduce this burden.

Response: Miscellaneous surface coating operations at DoD facilities that are not regulated by the Aerospace Manufacturing and Rework NESHAP or Shipbuilding and Ship Repair NESHAP will be addressed by a NESHAP being developed specifically for these types of operations. These comments will be taken into account in the development of that NESHAP.

Comment: One commenter (IV-D-44) recommended that the exemption for up to 250 gallons per year of coating should be increased such that the rule would only apply to coating operations that are major sources in and of themselves. The commenter cited several court decisions which the commenter interpreted to support “the concept that EPA has the authority to craft de minimis exemptions, if in the Agency’s opinion, the strict implementation of the statute leads to ‘a gain of trivial or no value’ or ‘absurd or futile’ results.”

Response: We disagree with the commenter that the metal parts rule should apply only to metal part surface coating operations that are major sources in and of themselves. Section 112(c)(2) of the CAA requires that we establish NESHAP for the control of HAP from both new and existing major sources. Section 112(a) defines the term "major source" as "any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any one hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants..." From this definition, it is clear that in setting MACT standards EPA must consider emissions from collocated activities in determining whether a source is major. It has been well established throughout EPA's implementation of Section 112 of the CAA that NESHAP apply to all major sources including those that are not major sources in and of themselves but are collocated with other sources and together this collection of sources is a major source of HAP. The court case the commenter cites as a precedent to establish de minimis exceptions is a 1979 decision that does not pertain directly to section 112 or to the determination of major sources, because section 112 and its definition of major sources were first added to the CAA in the 1990 amendments. Furthermore, the information available to the EPA indicates that a substantial portion of the emissions from this source category is from sources that are not major sources in and of themselves. Limiting the applicability of the final rule to only coating operations that are major sources in and of themselves would substantially reduce the emission reductions achieved, and is not consistent with the CAA.

Comment: One commenter (IV-D-59) requested that EPA clarify the purpose of the exemption in §63.3881(c)(5) for coatings used in quantities of 50 gallons or less up to a total of 250 gallons per year. The commenter requested that EPA clarify that these exempt coatings are not included in the compliance calculations. The commenter also recommended that if these

coatings are not included in compliance calculations, then the definition of “exempt compound” in §63.3981 should be revised to specifically exempt low-volume usage materials defined in §63.3881(c)(5). The commenter also requested an explanation of the 50 gallon per year difference between the 250 gallon per year exemption in this rule and the 200 gallon per year exemption in §63.741(g) of the Aerospace Manufacturing and Rework NESHAP (40 CFR 63 subpart GG). Finally, the commenter recommended that the record keeping requirements in §63.3930 should require monthly records and a 12-month rolling total of exempted low-volume materials.

Response: The purpose of the small volume exemption in §63.3881(c)(5) of the proposed rule (now §63.3881(c)(3) of the final rule) is to reduce the burden on sources that use small quantities of specialty materials that may have higher HAP contents than otherwise allowed by the emission limits. The commenter is correct in noting that these exempt coatings are not included in the compliance calculations. However, these low-volume coatings should not be included in the definition of exempt compound found in §63.3981 since this definition refers to those organic compounds that are not considered VOC for the purposes of determining VOC content of coatings and compliance with VOC content limits.

This rule and the Aerospace Manufacturing and Rework NESHAP are separate rules for separate surface coating source categories and these final rules reflect differences in the source categories, data availability, and input from different stakeholders and commenters during the rule development process. As a result, some differences among rules are to be expected. Explaining the rationale for the scope of the exemption in Aerospace Manufacturing and Rework NESHAP is beyond the scope of this rulemaking.

We agree with the commenter that facilities that are taking advantage of the small volume exemption should keep records of the amount of coatings used to ensure they do not exceed the amount of the exemption. However, we already expect that a facility will take it upon themselves to keep these records in order to demonstrate applicability with this rule and/or eligibility for any of the other exemptions in §63.3881(c). Therefore, it is not necessary to include recordkeeping requirements in §63.3930 of the rule for low-volume coatings that are otherwise exempt from the requirements of the rule.

Comment: One commenter (IV-D-59) recommended that the compliance demonstration procedures in §§63.3941, 63.3951, and 63.3961 be revised to exclude “exempt compounds” as defined in §63.3981 from compliance calculations and determinations.

Response: The compliance demonstration procedures and calculations in the sections referenced by the commenter are for HAP emissions. Exempt compounds are those organic compounds that are not considered VOC for the purposes of determining VOC content of coatings and compliance with VOC content limits. Exempt compounds that are HAP, such as methylene chloride, must be included in the compliance calculations along with other HAP that are found in coating materials.

Comment: One commenter (IV-D-63) stated that a facility that is subject to multiple NESHAPs may be confused by the applicability criteria. The commenter requested two rule changes to clarify the rule’s applicability. (1) Revise §63.3881(b) to clarify that surface coatings, thinners, or cleaning materials subject to other NESHAP should not be counted when determining the 250 gallon per year applicability of the rule (commenter provides revised language); (2) Revise §63.3881(c)(5) so that surface coatings subject to other NESHAP would not be counted toward the 50 gallon per year threshold when determining whether an individual coating is excluded.

Response: Section 63.3881(b) of the final rule was written to state “You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in §63.3882, that uses 946 liters (250 gallons (gal)) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of miscellaneous metal parts and products...” This has been revised since proposal to include “the surface coating of miscellaneous metal parts and products.” This change helps clarify the applicability of this section with respect to the commenter's suggestion.

We agree with the commenter that the small volume coating exemption §63.3881(c)(5) in the proposed rule (now §63.3881(c)(3) in the final rule) applies only to metal parts and products surface coatings. Surface coatings meeting the applicability criteria of other NESHAP should not be counted toward the 50 gallon per year threshold. However, other changes have been made to §63.3881(c) to clarify the applicability of this rule to surface coating operations subject to other NESHAP. Therefore, it is not necessary to specify that the exemption is only for metal

parts and products surface coatings since other coatings would be excluded from applicability under other provisions of §63.3881(c).

Comment: One commenter (IV-D-63) requested that the final rule include an emission applicability threshold to exclude coatings that contain a very low HAP concentration. The commenter explained that, for example, coatings that contain just over 1.0 percent organic HAP would emit significantly less than the emission limitation required in the final rule, but would be regulated if more than 250 gallons were used per year. In addition, the facility would be subject to a recordkeeping and reporting burden with no resulting environmental benefit. The commenter recommended the thresholds could be calculated as the product of the volume thresholds in §63.3881(b) and (c)(5) and the emission limitations in the final rule, and provided an example of this calculation. The commenter suggested that, based on this example, a facility could be exempt if HAP emissions from metal parts surface coating operations were less than 250 lb/year and a coating would be exempt if emissions were less than 50 lb/year.

Response: The final rule includes in §63.3981 a definition non-HAP coatings which are those that contain no more than 0.1 percent by mass of any individual organic HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and no more than 1.0 percent by mass for any other individual HAP. Section 63.3881(b) specifies that you do not need to include coatings that meet the definition of non-HAP coating contained in §63.3981 in determining whether you use 946 liters (250 gal) per year, or more, of coatings in the surface coating of miscellaneous metal parts and products. In addition, the final rule includes an exemption for coatings used in volumes of 50 gallons per year or less (not to exceed a total of 250 gallons per year). Finally, the rule also includes the compliant material option for low-HAP coatings that comply with the emission limits and this option has simplified recordkeeping compared to the other compliance options. Taken together, these applicability provisions and compliance options will accomplish nearly the same objective as the HAP emission thresholds suggested by the commenter, but with fewer calculations.

7.5 Janitorial Operations, Facility Maintenance, and Hand-held Non-refillable Aerosol Cans

Comment: One commenter (IV-D-35) suggested that EPA should retain the exemptions for janitorial, building, and facility maintenance. These exemptions will make the rule clearer and more achievable, according to the commenter.

Response: Janitorial, building, and facility maintenance operations are not part of the metal parts and products surface coating source category, even though they occur at the same facility at which metal parts surface coating occurs. This exemption has been retained in the final rule.

Comment: One commenter (IV-D-30) stated that the preamble should clarify that the exclusion for painting of buildings pertains to coatings applied during construction to structures that are part of industrial facilities.

Response: The field application of coatings to metal parts of buildings during construction is not subject to the metal parts rule. However, the shop application of coatings to pre-fabricated metal parts, such as metal joists or other architectural elements, is subject to the metal parts rule.

Comment: One commenter (IV-D-63) requested that the final rule clarify that coating of manufacturing equipment and tools that are used to manufacture parts and products are not covered by the rule. The commenter noted that the rule defines miscellaneous metal parts and products as including “industrial machinery” and “other industrial products.” The rule attempts to clarify the applicability by exempting “facility maintenance operations” but it is still unclear what operations are included in facility maintenance (e.g., mold release), according to the commenter. The commenter suggested that an additional subparagraph should be added to §63.3881(c) to clarify that surface coating of manufacturing equipment, metal molds, and tools is not covered except when these tools would be sold or otherwise put into interstate commerce. The commenter requested that the definition of facility maintenance be revised so that the repair of metal molds is specifically cited as facility maintenance.

One commenter (IV-D-21) requested that EPA expand the definition of facility maintenance to include the fabrication and coating of equipment needed to support the function of the facility (e.g., equipment required for supporting, holding, or reaching aircraft or aircraft parts and components). Another commenter (IV-D-23) supported the exemption for surface coating activities for facility maintenance operations, but requested the facility maintenance

exemption for surface coating on tools and equipment also apply to tools used occasionally off-site. The same commenter requested that the definition also include the fabrication of new tools and equipment to support a manufacturing operation, not just repair and renovation of tools.

Response: The EPA agrees that the coating of machinery or tools used by a manufacturing facility (compared to machinery and tools that are sold as industrial products) should be considered part of facility maintenance operations and not part of the metal parts surface coating source category, even though they may occur at the same facility at which metal parts surface coating occurs. The rule includes a definition of “facility maintenance operations” that includes the routine repair or renovation (including the surface coating) of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility. Infrastructure can include buildings, tools, and equipment needed to support the function of the facility that are fixed in place, or are occasionally used off-site. However, this definition has been revised to include the routine fabrication of tools used by a manufacturing facility.

Since mold release agents are applied to molds and are not applied to the part being produced and do not become part of the part being produced, they would be considered part of facility maintenance and would not be subject to the final rule. However, EPA does not feel it is necessary to specifically include mold release agents or the repair of metal molds in the definition of facility maintenance since they would already be covered as surface coatings applied to the tools and equipment of the affected facility.

Likewise, we do not feel that an additional subparagraph is needed in §63.3881(c) to clarify that surface coating of manufacturing equipment, metal molds, and tools is not covered except when these tools would be sold or otherwise put into interstate commerce. We also do not feel that it is necessary to expand the definition of facility maintenance to specifically include the fabrication and coating of equipment needed to support the function of the facility or to include the surface coating of tools and equipment used occasionally off-site. These operations are already covered under the broader definition of facility maintenance.

Comment: The commenter (IV-D-61) believed that cleaning of any equipment that is not used to apply organic HAP-containing coatings to metal surfaces would be exempt from the rule by the facility maintenance exemption, and requested that this be clarified in the rule.

Response: The cleaning of equipment that is not used in the surface coating operation (for example, equipment used to cut, shape, or weld metal) would not be considered part of the affected source for the metal parts source category. The solvents used to clean this equipment would not be considered coatings subject to this rule. We feel that the definition of the affected source in §63.3882(b) clearly does not include this type of operation, so no changes have been made to the final rule.

Comment: Two commenters (IV-D-18, IV-D-55) requested clarification that repainting of refillable gas cylinders for the delivery of industrial gases is not covered by the rule. One commenter (IV-D-18) produces industrial gases packaged in refillable gas cylinders that are transferred back and forth to the customer as part of the production facility's product delivery system. The commenter requested clarification that this repainting of the cylinders is not a “principal activity,” and thus, not covered by the rule. The commenter suggested that EPA clarify this issue in one of either two ways:

1. Codify the concept of the rule applying to coating operations that are “principal activities or an integral part of production processes at a facility,” then define “principal activity.”
2. Clarify that coating activity such as the commenter describes falls under the exemption in the rule for facility maintenance.

The second commenter (IV-D-55) recommended that the applicability provisions be revised to clarify that the rule applies to “Facilities whose primary products are miscellaneous metal parts and products.” The commenter (IV-D-55) recommended an exclusion for activities at plant sites such as repainting of gas cylinders and painting of maintenance and construction parts and equipment and structural steel since these activities are commonly done at all industrial plants.

Another commenter (IV-D-27) stated that the rule should clarify that the rule applies only to facilities for which surface coating is the “principal activity,” rather than discussing this applicability only in the preamble. The commenter (IV-D-27) stated that it is unclear if the rule applies to refurbishment activities and maintenance coating of existing metal parts, or if the rule is intended to apply only to “new” metal parts produced for sale. The rule clearly exempts facility maintenance activities, which are defined as, “the routine repair or renovation (including

the surface coating) of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.” However, some maintenance activities conducted at facilities may include coating metal equipment and parts that are not part of the “infrastructure of the affected facility” (e.g., mobile sources, such as truck fleets or other transport vessels for raw materials or products). The commenter believes that all routine maintenance on metal parts should be exempt and that the exemption should be clearly codified in the rule.

Response: In the case of commenters IV-D-18 and IV-D-55, the regular painting of gas cylinders is not considered facility maintenance because it is not incidental to the primary activity of the facility delivering specialty gases. The repainting of the cylinders is central to the reliable delivery of industrial gases to customers, even if the cylinders are owned by and returned to the gas vendor. The coating is not episodic or occasional, but is an ongoing operation at the source for which dedicated, fixed machinery and equipment are installed at the source. For these reasons, coating of the cylinders is considered part of the principal activity of the facility, which is providing gas to customers in sound and easily identifiable containers. Facility maintenance activities, including episodic or occasional surface coating, on the other hand, is ancillary or incidental to the principal activity of the facility.

In response to commenter IV-D-27, the coating of mobile equipment and fleet trucks is considered part of facility maintenance for this NESHAP as long as the coating of mobile equipment and fleet trucks is not one of the principal activities of the source. The routine maintenance of metal parts (such as rail car maintenance and drum refurbishment) is not exempt from the final rule when it is performed at sources for which their principal activity is the routine maintenance, including surface coating, of metal parts that are not new parts.

Comment: One commenter (IV-D-42) requested that the rule clarify that coating activities at petroleum refineries and chemical plants to maintain the structural and operational integrity of process equipment is not covered by the metal parts rule. These industries coat new and existing support structures, piping, and equipment as part of routine maintenance activities, but they do not produce and coat metal parts for commercial sale. The commenter suggested including the following language for §63.3881(a): “The source category only includes facilities for which the surface coating of miscellaneous metal parts and products is either their principal

activity or an integral part of a product process that is the principal activity.” The commenter also suggested changes to the definition of “facility maintenance” to make it clear that their coating operations fit this exemption. In particular, the commenter suggested replacing the words “the routine repair or renovation” with “preventive activities and repair or renovation” and adding “existing and new” ahead of “tools, equipment, . . . ”

Response: We agree with the commenter that coating activities at petroleum refineries and chemical plants to maintain the structural and operational integrity of process equipment is not covered by the metal parts rule. However, we feel that the regulatory language in the applicability section of the final rule and the definition of facility maintenance, along with the response to this and other comments on the facility maintenance exemption, provide sufficient guidance such that the specific language changes suggested by the commenter are not needed to clarify the intent of the rule.

Comment: Three commenters (IV-D-33, IV-D-35, IV-D-40) supported the exemption for handheld non-refillable aerosol containers as stated in the proposal preamble.

Another commenter (IV-D-52) suggested that the exemption from coating operations in §63.3981 for aerosol cans should be expanded to include handheld adhesive applications since they are used with the same logic and frequency as handheld aerosol cans. The commenter (IV-D-52) asserts that adhesive manufacturers have not been able to provide information about HAP content so the commenter has been unable to evaluate compliance for these adhesives.

Another commenter (IV-D-61) requested that single-use containers of 1-liter or less be exempt from rule requirements, just as non-refillable aerosol containers. The commenter claimed total emissions from such containers are very small, and that it is burdensome to keep records of coatings in small containers to demonstrate that they fall below the proposed 250-gallon exemption for low-use coatings.

Response: We are not expanding the exemption for aerosol containers to include handheld adhesive applicators and single-use containers of 1-liter or less. However, these materials will be exempt if they are packaged in non-refillable aerosol containers. We considered non-refillable handheld aerosol containers to be a different type of source (as compared to typical high capacity surface coating operations such as spraying and dipping), because the coating applied by this type of source must meet specific requirements in order to be sprayed from an

aerosol can. We found no practical controls applicable to this type of source and chose to exempt it from the affected source to reduce the record keeping burden on the industry. Other types of non-aerosol products, including hand-held adhesive applicators and other single-use containers, are subject to the requirements of the rule because these coatings do not need to meet the specific requirements to be sprayed from an aerosol can.

7.6 Research and Development Facilities

Comment: Several commenters (IV-D-06, IV-D-35, IV-D-52) supported the exclusion of research and development (R&D) facilities. One commenter (IV-D-06) supports the exemption for research and development facilities and the definition of research and laboratory facilities in the proposed rule, stating that it is consistent with the definition in the Clean Air Act and in other sections of 40 CFR part 63. These exemptions will make the rule clearer and more achievable, according to the commenter.

One commenter (IV-D-52) requested clarification on whether the exemption for research and development facilities includes those collocated with production facilities.

To clarify §63.3881(c)(3), one commenter (IV-D-31) suggested replacing the commas that separate the three exclusions with semicolons to make it clear each are separate and distinct exclusions, as follows: “Surface coating that is part of research or laboratory activities; that is part of janitorial, building, or facility maintenance operations; or that occurs at hobby shops operated for noncommercial purposes.”

Response: We agree with the commenters that the exclusion for R&D facilities should be retained in the final rule. The exclusion includes R&D facilities that are collocated with production facilities. We disagree with commenter IV-D-31 that the punctuation of the provision needs to be revised to clarify the scope of the three exclusions.

Comment: One commenter (IV-D-31) requested that EPA replace the proposed definition of “research or laboratory facility” at §63.3981 with the definition of “research or laboratory activities” set forth in the final 112(j) rule. The commenter (IV-D-31) included the definition. The commenter was concerned that short-term research and development activities conducted at sites that also perform commercial aerospace coating operations, or conducted on a temporary basis on an existing aerospace coating line, would not be considered research and

development facilities and would not qualify for exclusion from the emission limits in the metal parts and products rule.

Response: The primary difference in the definition recommended by the commenter is that it defines “research or laboratory *activities*” as “activities whose primary purpose is for research and development...”, whereas the proposed and final metal parts and products rule defines “research or laboratory *facilities*” as “facilities whose primary purpose is for research and development...” Both definitions include the criteria regarding R&D of new process or products, conducted under the close supervision of technically trained personnel, and is not engaged in the manufacture of products for commercial purposes, except in a de minimis manner. The definition in the final rule is consistent with definitions in several other surface coating NESHAP. The definition is broad enough to include research and laboratory facilities that are collocated with commercial coating operations. It would also be possible to temporarily dedicate a coating line to a research and development purpose and have it qualify for exclusion as a research and development facility, if a new process of product is being researched and the coated products are not being sold commercially except in a de minimis manner. Furthermore, if the commenter’s main concern deals with aerospace coating operations, these would be subject primarily to the Aerospace Manufacturing and Rework NESHAP rather than the Miscellaneous Metal Parts and Products NESHAP as explained in Section 6.2 of this document.

7.7 High Performance Coatings

Comment: The commenter (IV-D-22) supported the use of separate emission limits for high performance coatings, the level of the emission limits, the inclusion of high temperature coatings in this class of coatings, and the use of weighted-averages to determine an overall emission limit for a facility.

Response: The final rule retains high performance coatings as a subcategory with an emission limit that is higher than the general use coatings emission limit. The emission limit for high performance coatings reflects specialized performance requirements resulting in the need for higher-HAP containing materials. A facility using high performance coatings has the option to comply with the emission limit for high performance coating operations using the compliant materials approach, the emission rate without add-on controls approach, or the emission rate

with add-on controls approach. The final rule also allows a facility-specific emission limit approach described in 6.4 of this document, providing additional flexibility.

Comment: Several commenters suggested that EPA expand the definition of high performance coating to include various specialized coatings, including paints for offshore structures, oilfield coatings, coatings exposed to food grade products, and coatings with specialized performance characteristics.

Two commenters (IV-D-02, IV-D-62) requested that EPA expand the definition of high performance coating to include paints used for offshore structures since general use coatings cannot withstand saltwater. The commenters noted that in Louisiana, the coatings used for large off-shore structures are subject to the same State limits as those for the shipbuilding and repair industry and are not subject to the general use limits in the State metal parts rule. Commenter IV-D-03 attached records of HAP emissions and gallons of coating used for 2001.

One commenter (IV-D-57) requested that extreme performance oilfield coatings should be included in the definition of high performance coating. The commenter suggested the following definition: High performance coating means any coating that meets the definition of “high performance architectural coating,” “high temperature coating,” “military combat, tactical, and munitions coating,” or “extreme performance oilfield coating.” The commenter also provided a definition of extreme performance oilfield coatings:

Extreme performance oilfield coating means any coating designed to be applied to a substrate which during normal use must withstand repeated exposure to any two of the following: elevated temperatures of at least 150 F, chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solutions; or repeated heavy abrasion, including mechanical wear, abrasive fluids or repeated scrubbing with industrial grade solvents, cleansers, scouring agents.

According to the commenter (IV-D-57), internal oilfield pipe coatings must withstand elevated temperature (as high as 400 F), extreme pressure, corrosive materials, and abrasive service and these criteria are generally considered in defining the extreme performance category used in California. According to the commenter, approximately 15 plants perform oilfield equipment coating. The commenter also noted that these coatings used for the inside of oilfield pipes as being high-molecular weight resins requiring methyl ethyl ketone (MEK) as a solvent for application and cleanup.

Another commenter (IV-D-05) suggested that high performance coatings should include “extreme performance coatings” as defined by South Coast Air Quality Management District (SCAQMD) Rule 1107 with the addition of coatings exposed to food grade commodities. The commenter (IV-D-05) believes this revision is needed for coatings used on rail tank car interiors and exteriors to protect them from harsh chemicals. Tank car interiors carry corrosive chemicals or food grade products such as wine. Coatings used in tank cars carrying food must meet Food and Drug Administration (FDA) requirements. The commenter (IV-D-05) explained that tank car exteriors are exposed to spillage, fumes, salt air, snow, and temperature extremes.

Another commenter (IV-D-08) added that EPA should expand the high performance coatings category to include the coatings applied the interior of drums and pails to protect substrates from hazardous materials and safeguard food-grade products and prevent leakage. The commenter (IV-D-08) asks that EPA acknowledge that interior coatings for steel and other metal drums and pails are universally accepted as high performance coatings.

Response: We analyzed the metal parts survey data that represented the types of coating operations that the commenters argued should be included in the high performance coating category. In all cases, we found that the general use emission limit is achievable for these types of coating operations.³ The commenters submitted no coating HAP content data to support the need for including these coating types in the definition of high performance coatings.

The metal parts database includes data for facilities that coat off shore oil platforms and internal oilfield pipes. These data indicate that these facilities could comply with the general use emission limit. Therefore, based on the information available to the Administrator, the final rule does not include oil platform and internal oilfield pipe coatings in the definition of high performance coatings.

The metal parts database includes data from 21 sources performing coating operations on rail cars. These data indicate that the general use emission limit is achievable for these types of

³Memorandum from Palmer, Brian, ERG, Inc., to Teal, Kim, EPA/ESD. August 2003. “Analysis of the emission rates for surface coating operations for off-shore oil platforms, oilfield pipe interiors, rail cars, and re-usable drums reported in the EPA miscellaneous metal parts and products survey database.” (Docket ID No. OAR-2003-0116).

sources. Therefore, we did not write the final rule to include rail tank car interior or exterior coatings in the definition of high performance coatings.

The metal parts database includes data from 17 sources performing drum coating operations. These data indicate that the general use emission limit is achievable for these types of sources. Therefore, we did not write the final rule to include coatings applied to pails and drums in the definition of high performance coatings.

Comment: One commenter (IV-D-64) requested that EPA expand the definition of high performance coatings to include coatings subject to FDA requirements. The commenter stated that skin lubricants used on hypodermic needles have the high performance criteria of penetrating human skin; skin lubricant formulation and application is regulated by the FDA; and skin lubricant reformulation would take several years, including approval by the FDA.

The same commenter (IV-D-64) also asked that EPA clarify whether these lubricants qualify as coatings or as protective oils and whether the definition of protective oil can include those materials that have a carrier solvent. The commenter noted that the skin lubricating oil is applied using a carrier solvent (a HAP) that evaporates after application, but the oil never forms a solid film and remains a liquid, even when sterilized at temperatures up to 250 degrees C. Therefore, according to the commenter, it is not clear how the rule format (lb HAP per gallon solids) would apply to a material that has no “solids” and does not form a dry film. The commenter noted that with the exception of the carrier solvent, the skin lubricants meet the definition of protective oil and, if it were not for the carrier solvent, the skin lubricants would not be subject to the rule. The commenter did not provide any data on the specific HAP content of skin lubricants.

Response: Based on the description provided by the commenter, the skin lubricants would qualify as protective oils since they provide lubrication and do not form a solid film, but rather remain liquid, even after the carrier solvent has evaporated. The definition of protective oil includes evaporative oils, including those that evaporate completely, and this would include the carrier solvents used in the protective oil.

Since the skin lubricants described by the commenter would qualify as protective oils that are not subject to the emission limits in the final rule, we do not believe that the definition of high performance coatings should be expanded to include coatings subject to FDA requirements.

The commenter provided no other examples of coatings subject to FDA requirements that should be included in the definition of high performance coatings.

Comment: Another commenter (IV-D-21) requested that EPA expand the definition for high performance coating to account for other high performance characteristics that may be needed in a coating, such as resistance to corrosive materials (e.g., aviation hydraulic fluid) or other characteristics beyond that of typical general use materials.

Response: The commenter provided no data on the specific characteristics that should be included in the expanded definition of high performance coating, beyond the single example provided in the comment letter (resistance to aviation hydraulic fluid), and provided no data indicating that coatings possessing this property could not comply with the general use coating emission limit. Therefore, the definition of high performance coating has not been expanded to include this specific characteristic.

Comment: One commenter (IV-D-16) requested that the definition of high performance architectural coatings be expanded to include other coatings with specialized performance characteristics similar to those in the proposed definition. These coatings include aluminum extrusions on high rise buildings; coating with flexible properties; and aluminum window frames. The commenter noted that two of the most stringent state VOC rules for metal part surface coating operations (South Coast Air Quality Management District (SCAQMD) Rule 1107 and Bay Area Air Quality Management District (BAAQMD) Regulation 8, Rule 19) also have separate emission limits for high performance architectural coatings.

Another commenter (IV-D-51) believes that EPA should expand the definition of high performance architectural coating to include coatings used on metals other than extruded aluminum that meet the performance requirements of Architectural Aluminum Manufacturers Association (AAMA) publication 605.2-2000. The commenter argued that if a coating can pass the test methods set forth by the AAMA in the current standard for aluminum coatings, the coating should be defined as high performance, regardless of the surface coated. However, the commenter conceded that the AAMA does not endorse the use the AAMA standards outside the materials for which the material was intended.

One commenter (IV-D-19) suggested that EPA add the word “aluminum” before “subsections” in the definition of “high performance architectural coating” for clarity.

Several commenters noted that the AAMA specification cited in the proposed rule (AAMA 605.2-1980) has been updated and the final rule should include the updated specifications to avoid confusion. Two commenters (IV-D-12, IV-D-51) noted that the specification has been updated to AAMA 2605-02. Two other commenters (IV-D-16, IV-D-37) recommended that EPA revise the definition of “high performance architectural coating” to include both AAMA 2604-02 and AAMA 2605-02. According to the commenters, AAMA 2604-02 is a newer version of a five-year specification, similar to AAMA 605.2-1980, and AAMA 2605-02 is a new 10-year specification. Another commenter (IV-D-17) recommended replacing the proposed AAMA 605.2-1980 specification with AAMA 2604-98 and 2605-98.

Response: The definition of high-performance architectural coating used in the proposed and final rule is consistent with the definition used in the State VOC rules cited by commenter IV-D-16. Since the AAMA does not endorse the use of the AAMA standard beyond the material for which it was intended (aluminum), the definition of high performance architectural coating has not been expanded to include coatings used on other metal (non-aluminum) substrates.

We have not inserted the word “aluminum” before “subsections” in the definition of high performance architectural coatings. Since the definition means “any coating applied to architectural subsections which is required to meet the specifications of Architectural Aluminum Manufacturer’s Association’s publication number AAMA 605.2-1980” and the specification is not intended for substrates other than aluminum, the suggested clarification is unnecessary.

The final rule includes the most recent specifications (AAMA 2604-02 and AAMA 2605-02) in the definition of high performance architectural coatings.

Comment: One commenter (IV-D-38) suggested that Extreme Performance Fluoropolymer (EPFP) coatings (e.g., Teflon®) should be exempt from this rule. The commenter noted that both SCAQMD Rule 1107 and BAAQMD Regulation 8, Rule 19 exempt EPFP coatings (defined in those rules as “solid film lubricants”) from all requirements. According to the commenters, these coatings are used when one or more of several performance criteria are required including non-stick surface, chemical resistance, wide temperature range, FDA specifications, and others. The commenter claimed that water-borne EPFP coatings, for many applications, do not achieve satisfactory abrasion resistance, adhesion, thinness, and other

performance criteria. According to the commenters, EPFP coatings do not meet the definition high performance coatings in the proposed rule.

The commenter (IV-D-38) requested that EPFP coatings be completely exempt because that would clearly indicate to State permitting agencies that EPFP coatings should not be subject to VOC limits for general use coatings. Currently this determination needs to be made for each permit. The commenter requested that if EPFP coatings are not exempt from the final rule, they should be included in the definition of high performance coating.

The commenter (IV-D-38) offered a definition of EPFP coatings and the material safety data sheets for 10 different EPFP coatings from two different manufacturers. The HAP contents range from 1.1 to 12.4 lb HAP/gallon solids. The commenter noted that total estimated EPFP coating use is about 60,000 gallons per year in the U.S. with HAP emissions of about 45 tons per year. The commenter did not provide any data on representative emission rates from EPFP coating operations. Data on HAP content for only a few of these coatings were included in the metal parts survey database, but these data were consistent with the data provided by the commenter.

Response: Based on the HAP content data and performance requirements fulfilled by EPFP coatings, we agree that EPFP coatings should not be subject to the general use emission limit. Therefore, the final rule includes a subcategory for EPFP coatings subject to an emission limit for new and existing sources of 1.5 kg organic HAP/liter coating solids (12.4 lb organic HAP/gal coating solids) used based on the data received with the public comments. This limit is more stringent than the high performance limit because the data provided by the commenter indicate that these coatings can meet a more stringent limit. Since sufficient data were available to establish a HAP content limit for these coatings, an exemption for these coatings is not needed in the final miscellaneous metal parts rule.

8.0 NEW SOURCE APPLICABILITY

Comment: Two commenters (IV-D-17, IV-D-36) supported the proposed criteria for the applicability of new source MACT with respect to the definitions of a new source and a reconstructed source. However, two commenters (IV-D-17, IV-D-24) requested that EPA clarify the definition of existing source when the applicability of a source changes from one NESHAP to another. The commenters requested that EPA should make it clear that facilities with existing coating operations that choose to comply with one NESHAP instead of another should be considered existing sources, if the surface coating operations were present before the switch.

Response: If a metal parts surface coating affected source was constructed or reconstructed after August 13, 2002, then it is considered a new source. If a metal parts surface coating affected source was present before that date, then it is considered an existing source. A source can become a new source only if it is constructed or reconstructed. The final rule §63.3882(c) clearly states that an affected source is a new source if it commences construction after August 13, 2002 and the construction is of a completely new miscellaneous metal parts and products coating facility where previously no miscellaneous metal parts and products surface coating facility had existed. The final rule §63.3882(d) refers to §63.2 for the definition of reconstruction. The definition of reconstruction in §63.2 of the NESHAP General Provisions includes replacement of components such that the fixed capital costs of the new components include 50 percent of the fixed capital costs that would be required to construct a comparable new source. A coating operation could meet the definition of an affected source subject to one NESHAP and then become an affected source subject to a different NESHAP without performing construction or reconstruction, for example, by switching just the type of part that is coated without adding or replacing equipment. Therefore, if a coating operation began coating miscellaneous metal parts and products after August 13, 2002 without performing construction or reconstruction, it would still be considered an existing source and subject to the emission

limits and compliance dates for existing sources. If some construction or reconstruction were associated with that shift to coating miscellaneous metal parts and products, then the source would need to determine whether that activity qualified that source as a new or reconstructed source according to the language in §63.3882 of the Miscellaneous Metal Parts and Products NESHAP and the NESHAP General Provisions of subpart A.

Comment: One commenter (IV-D-13) requested that EPA confirm that the affected facility is all existing coating operations at a facility, when considering the cost threshold for reconstructions that would cause an existing source to become a new source. As an example, if a source adds a new coating line but the cost is less than 50 percent of the cost of all facility coating operations, the new line is considered part of the existing source and not a new source.

Response: The commenter is incorrect in assuming that the cost threshold is all of the existing coating operations at a facility when considering the cost threshold for reconstructions.

Section 63.2 of the General Provisions to part 63 (40 CFR 63, subpart A) define reconstruction as follows: “Reconstruction, unless otherwise defined in a relevant standard, means the replacement of components of an affected or a previously nonaffected source to such an extent that: (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and (2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.”

It is important to note that the definition of reconstruction involves the replacement of components of an affected source, and the metal parts rule defines each affected source as the collection of all coating operations, materials, and equipment that are used for the surface coating of miscellaneous metal parts and products within each subcategory. (See §63.3882(b).) Therefore, it is possible to reconstruct the affected source applicable to a single subcategory without reconstructing all of the coating operations at a facility.

For example, if a facility has only one coating line for rubber-to-metal coating operations, then the cost threshold for reconstruction applies to that single line because that

single line constitutes the affected source for that subcategory. If a facility has two or more lines for rubber-to-metal coating, then the cost threshold applies to all of the rubber-to-metal lines. If the same facility also has a general use coating operation, then the cost threshold for determining whether the rubber-to-metal affected source was reconstructed would not include the general use coating operation because that is a separate subcategory and constitutes a separate affected source.

Comment: One commenter (IV-D-11) argued that a new source should be one that commences construction after the publication date of the final rule.

Response: Section 112(a)(4) of the Clean Air Act defines a new source as “a stationary source the construction or reconstruction of which is commenced after the Administrator first proposes a regulation under this section establishing an emission standard applicable to such source.” Since the definition of a new source is specified in the Clean Air Act, EPA has no discretion to limit new sources to only those that commenced construction after publication of the final rule, rather than after the publication date of the proposed rule. The applicability of this rule to new sources is consistent with other standards established under section 112 of the Clean Air Act.

Comment: One commenter (IV-D-17) requested that the rule state that control technologies installed to comply with the metal parts rule will be exempt from New Source Review (NSR). Another commenter (IV-D-44) agreed that EPA should specifically exempt the use of add-on controls from triggering the NSR and Prevention of Significant Deterioration (PSD) programs when installed to comply with the metal parts NESHAP. Another commenter (IV-D-36) agreed and requested that EPA include language in the rule that will ensure that changes made to comply with the rule, including the replacement of application equipment or the installation of add-on controls, will not trigger additional regulatory requirements, such as NSR, PSD, or New Source Performance Standards. The commenter (IV-D-36) suggested language, which the commenter noted is similar to language found in the Coke Oven NESHAP [40 CFR 63, subpart L, §63.307(f)]:

For any existing, new or reconstructed facility, any change to the facility related to compliance with any of the requirements contained in this subpart, including those operations covered under this subpart by virtue of §63.3881(d), will not cause the

requirements of Prevention of Significant Deterioration, New Source Review, or New Source Performance Standards to apply to such facility.

Response: We are not including in the final rule an exemption from NSR, PSD, and NSPS for those coating operations that are modified or upgraded in order to comply with this rule. It would be inappropriate to include language in this NESHAP that could affect the applicability of these other programs since these are better handled on a case-by-case basis by the States and Regions implementing these other regulations. However, we do not expect compliance with this rule to require changes to existing coating operations that could trigger applicability under these other programs. The only possible exceptions could be those few facilities that install combustion devices that may lead to an increase in NO_x emissions and these should be eligible for the pollution control project exclusion in the NSR regulations. (See 67 FR 80186, December 31, 2002 for the most recent NSR regulation amendments which address pollution control projects.)

9.0 EMISSION LIMITS

Comment: One commenter (IV-D-35) suggested that EPA should not make any changes that would make the emission limits more stringent or require existing sources to use add-on controls. The commenter believed that compliance would already require significant capital costs and it is uncertain whether more low HAP coating alternatives will be available by the compliance date.

Response: We agree with the commenter that no changes should be made that would make the emission limits more stringent. We believe that the proposed and final emission limits accurately reflect MACT for this source category.

Comment: Two commenters (IV-D-11, IV-D-19) had specific requests regarding the emission limits. One commenter (IV-D-11) argued that the conversion of 0.12 kg HAP/liter coating solids should be 1.01 lb HAP/gal coating solids (not 1.00 lb HAP/gal coating solids). Another commenter (IV-D-19) stated that the number of significant digits in the emission limits for metric and English should be identical or at least comparable. The commenter (IV-D-19) suggested the following changes:

General use, existing sources:	2.60 to 2.6 lb HAP/gallon solids;
General use, new sources:	1.94 to 1.9 lb HAP/gallon solids;
High performance, new and existing sources:	27.54 to 27.5 lb HAP/gallon solids;
Rubber to metal bonding, existing sources:	37.70 to 37.7 lb HAP/gallons solids.
Rubber to metal bonding, new sources:	6.80 to 6.8 lb HAP/gallon solids;
Magnet wire, existing sources:	1.00 to 1.0 lb HAP/gallon solids;
Magnet wire, new sources:	0.05 to 0.050 kg HAP/liter solids;

Response: The final emission limits have been revised so that the metric and English equivalents have either two or three significant figures. Compliance with the applicable emission limit is determined by the calculated value for organic HAP emission rate for each

coating operation rounded to the same number of significant figures as the relevant emission limit in the final rule. Sources should carry one more significant figure through their compliance calculations than presented in the emission limits to accurately compare their emission rates to the limits.

The existing source emission limit for magnet wire coating has been rounded from 1.00 lb HAP/gallon coating solids to 1.0 lb HAP/gallon of coating solids. The same result would have been obtained had EPA started with 1.01 lb HAP/gallon of coating solids. The policy of the EPA is that when metric limits and English equivalent limits are present in the same rule, compliance will be based on the metric limits.

Comment: Several commenters (IV-D-28, IV-D-29, IV-D-47, IV-D-63) supported the emission limits and the subcategories. One commenter (IV-D-63) supported setting the emission limits for the general use category at the MACT floor. One commenter (IV-D-28) supported the subcategory and separate emission limits proposed for rubber-to-metal adhesive applications. In addition, the commenter (IV-D-28) supported the proposed facility-wide emission limits, stating that the flexibility reduces the potential compliance burden of the rule. Another commenter (IV-D-29) agreed with the separate limit on high performance architectural coatings, stating that coating suppliers have determined that reformulation is not an option.

Response: The EPA agrees with the commenters on the emission limits and subcategories and these have been retained in the final rule. As noted in Section 7.7 of this document, we have added a subcategory and emission limits for EPFP coatings.

Comment: Three commenters (IV-D-36, IV-D-63, IV-D-29) supported emission limits based on a 12-month rolling average. One commenter (IV-D-63) believes the rolling average is needed to address the needs of this diverse source category to accommodate month-to-month variation in the types of parts produced and the coatings used.

Response: The EPA agrees with the commenters and compliance based on a 12-month rolling average has been retained in the final rule. However, the rule also contains a compliant material option which will allow a facility to determine compliance without having to track materials on a rolling 12-month basis. This will facilitate compliance with fewer calculations for those facilities that can take advantage of this option.

Comment: One commenter (IV-D-33) stated that EPA should include as-applied limits per gallon of coating for different categories of coatings (e.g., topcoat, primer), since none of the current compliance options are practical for DoD facilities. The commenter predicted that it will be impossible to reformulate all DoD coatings to meet the compliant materials option within 3 years. The commenter also noted that it is impossible to predict coating needs into the future in order to use the averaging option since compliance can only be determined after the fact. According to the commenter, use of a coating cannot be stopped if the facility average approaches the emission limit for a subcategory without, in certain cases, compromising national security. Finally, the commenter argued that the proposed add-on control option will not alleviate the burden associated with tracking individual coatings and solvents.

Response: The final rule will not apply to DoD surface coating operations. The EPA will be developing a separate NESHAP for DoD coating operations that are not currently covered by the Aerospace Manufacturing and Rework NESHAP or the Shipbuilding and Ship Repair NESHAP. These comments on the format of the emission limits will be taken into consideration in the development of that NESHAP.

Comment: One commenter (IV-D-33) stated that EPA should exclude cleaning solvents in the numerator of the emission limits. The commenter noted that if paint transfer efficiency is increased, the amount of HAP cleaning solvents used remains the same, but the amount of solids in the denominator is decreased. The result is that applicators are discouraged from increasing paint application transfer efficiency.

Response: We disagree with the commenter that including solvent in the compliance calculations will discourage increases in paint application efficiency. The paints used in a coating operation are more expensive than the cleanup solvents, so there is a strong economic incentive to conserve paints through increased transfer efficiency that will outweigh any effect from the format of the regulatory calculations. Increased transfer efficiency also reduces the consumption and cost of floor and wall coverings and booth filters, adding to the economic incentive to improve transfer efficiency.

Comment: One commenter (IV-D-43) recommended that the final rule provide a credit for HAP reductions achieved through increased transfer efficiency, which results in lower coatings use. The commenter included two possible approaches:

1. Provide a credit for high efficiency application methods that would be applied to (subtracted from) the calculated lb HAP/gallon solids usage. The percentage would reflect the reduction in coating use relative to spray coating: 5 percent for HVLP, electrostatic, or other high efficiency spray coating; 30 percent for vacuum coating and dip coating.
2. Develop a separate standard for vacuum coating and dip coating that provides a higher lb HAP/ gallon solids limit, reflecting the same level of total HAP emissions as for spray-applied coatings.

A second commenter (IV-D-37) stated that other best practices, such as using electrostatic paint application techniques, should be encourage to reduce overall paint use.

Response: It is not feasible or practical to incorporate a credit for increased transfer efficiency as recommended by the commenter. The practices for which the commenter would provide credit are already being employed by many facilities in the metal parts surface coating industry, so it would be hard to determine how the credit should be adjusted to reflect the current “baseline” of coating application practices. In addition, as noted in the response to the previous comment in this section, facilities already have strong economic incentives to employ increased transfer efficiency methods where they are practical and feasible. The rule as written would also allow increased transfer efficiency as part of a compliance strategy in some cases. For example, if a facility is complying with the emission rate alternative for a mixture of metal parts coating operations including some relatively low-HAP coating materials and some high-HAP coating materials, the source could use a technique to improve the transfer efficiency of the high-HAP coating operations and reduce the use of the high-HAP coatings. This could help achieve the overall emission rate limit.

Comment: One commenter (IV-D-59) suggested that EPA should consider inorganic HAP more thoroughly in the final rule. The commenter noted that the preamble stated that inorganic HAP from coatings are typically controlled by dry filters or water curtains (67 FR 52784, August 13, 2002). Therefore, the commenter suggested that these controls are the MACT floor for inorganic HAP.

Response: As stated in the proposal preamble, most of the coatings used in this subcategory do not contain inorganic HAP. Inorganic HAP is present only in a few speciality coatings. No inorganic HAP were reported in cleaning materials. Where coatings containing

inorganic HAP are applied, most of the inorganic HAP components remain as solids on the parts being coated, or are deposited onto the walls, floor and grates of the spray booths in which they are applied. A small fraction of the inorganic HAP particles are entrained in the spray booth exhaust air. Throughout the data gathering efforts (including site visits, industry questionnaires, and literature searches) for this rulemaking, we found that coating application operations were predominately equipped with either dry filters or waterwash systems to reduce the amount of overspray⁴ emitted to the atmosphere. Such control systems are common in many other coating industries as well, and are installed and maintained for a number of reasons. This type of control reduces the amount of coating droplets emitted to the atmosphere. Because the inorganic HAP are contained in these droplets, these control systems reduce the amount of inorganic HAP emissions. These controls have been in general use for many years. We know of no reason why the industry would remove these controls after the final rule is promulgated.

Given the combination of very low usage of coatings containing inorganic HAP in this surface coating industry and the current (and expected continued) use of controls to reduce overspray emissions, we believe that levels of organic HAP emissions are very low. At this time, it does not appear that emissions of inorganic HAP from this source category warrant Federal regulation. Including control requirements such as dry filters or waterwash systems in the rule would not be expected to result in additional emission reduction and would only add to the regulatory burden on the industry and the permitting authorities. For these reasons, we have not added emission limits for inorganic HAP in the final rule.

Comment: One commenter (IV-D-65) requested that the work practice requirements for solvents should require storage in “covered” containers and not “closed” containers. The commenter argued that their experience is that inspectors interpret the term “closed” too strictly, implying that containers should be “sealed,” which is not practical when material must be added to or removed from a container.

Response: The requirements cited by the commenter are the following from §63.3893(b)(1), (3), and (4) and remain unchanged in the final rule:

⁴Overspray is the droplets of coating that do not adhere to the substrate being coated or the surfaces of the spray booth and are carried in the exhaust stream of the spray booth. Inorganic HAPs, because of their lack of volatility, are contained in these droplets.

(1) All organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers.

(3) Organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.

(4) Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.

We believe the intent of the language in the rule is clear from its context and would not cause any misunderstanding in practice among those employing a common-sense interpretation of the rule. The term “closed” may, for example, mean replacing a screw-on cap if one is available for a can or drum, or it may mean replacing the cover for a pail. To completely avoid the potential for confusion cited by the commenter, the rule would need to define specific work practices for nearly every type of container that could be encountered in a surface coating facility. This would not be practical and would make the rule unnecessarily complicated.

10.0 COMPLIANCE OPTIONS

10.1 General Comments on Compliance Options

Comment: One commenter (IV-D-13) stated that EPA should verify that a facility can choose different control options for different lines at a single facility:

- A facility can choose the compliant materials option for an e-coat line and the emission rate option for the top coat line.
- If a facility chooses the add-on control option for a single line, the work practices standards apply to only that line.
- If a facility has a metal-only line and a line that coats both metal parts and plastic parts, the metal-only line can comply with just the metal parts MACT and the metal-plastic line can comply with the presumably more stringent plastic parts MACT.

Response: The commenter's first two examples are correct. You may choose different compliance options for different lines at the same facility. For example, one line may be able to use the compliant materials option, while another line may need the flexibility to use higher- and lower-HAP materials under one of the emission rate compliance options. It may be more practical to use an add-on control for some coating operations, such as a specific line, than for others. If you have an add-on control device on some coating operations, the work practice standards apply to only the coatings and operations controlled by the add-on controls.

The commenter's third example is not entirely correct. As noted in section 6.0 of this document, the option to comply with the more stringent NESHAP has not been retained in the final rule and instead a facility would have the option of using either the predominant activity alternative or the facility-specific emission limit alternative if the facility meets the applicability criteria of more than one surface coating NESHAP.

Another approach that you may use is the equivalency by permit option in 40 CFR part 63, subpart E (§63.94). Under this approach, you may design an emissions control program that is suited for your process or plant as long as you can demonstrate that your program will achieve the same emissions reductions as the NESHAP. You must then work with your State, local, or tribal air pollution control agency to submit an equivalency demonstration. This equivalency demonstration will be reviewed by the appropriate EPA Regional Office. The equivalency demonstration is approved as part of the operating permit approval process. For more information, please see the section 112(l) website at [http://www.epa.gov/ttn/atw/112\(l\)/112-lpg.html](http://www.epa.gov/ttn/atw/112(l)/112-lpg.html).

Comment: One commenter (IV-D-44) requested that EPA clarify the rule for facilities in which some operations are subject to different subcategory limits, and when some operations comply using add-on controls and some do not. The commenter stated that it is not clear whether they should be averaged or kept separate. If a source could opt into a single NESHAP, it could average all the HAP over all the solids to demonstrate compliance with the most stringent limit.

Response: If a facility is subject to multiple subcategory emission limits they could comply with each separately, use the facility-specific emission limit alternative, or in some cases described in more detail in section 6.0 of this document, they could comply with the predominant activity alternative if the general use or magnet wire emission limits represent their predominant use. Once a facility has determined their predominant activity or facility-specific emission limit, they can demonstrate compliance using: the compliant materials option; the emission rate without add-on control option; or the emission rate with add-on control option. As discussed in the first response in this section, they could use different compliance options for different lines. For example, they could demonstrate compliance with their emission limit using the emission rate without add-on controls option for one line and the emission rate with add-on controls option for another line. The final rule does not include equations that would allow a facility to average between operations with add-on controls and others without add-on controls. However, a facility could apply for permission to do so under the equivalency by permit option in 40 CFR part 63, subpart E (§63.94), as described in the response to the first comment in this section.

Comment: One commenter (IV-D-63) requested that EPA clarify in the rule how to switch between compliance options. The commenter posed questions about determining compliance when switching between the compliant materials option and options that require 12-month rolling averages:

- Does one complete an entire 12-month initial demonstration period before starting the 12-month rolling averages, or must one use the Emission Rate Without Add-on Controls Option for the first year?
- Must one complete a full 12-month period using the Emission Rate Without Add-on Controls Option before being able to switch back to the Compliant Material Option?
- May one look back and switch between compliance options retroactively?

The commenter (IV-D-63) stated that the final rule should provide maximum flexibility in switching between options as long as all compliance periods demonstrate compliance under at least one option and the necessary data are available for calculating the needed 12-month averages.

Response: You may switch between compliance options at any time as long as you notify your permitting authority in your next semiannual compliance report, and you comply with all monitoring, recordkeeping, and reporting needed for the compliance option to which you are switching. Keep in mind, however, that if you switch from one compliance option to another, you must be able to demonstrate compliance based on the previous 12 months of data. As a result, you may need data from the previous 12 months of operation that were not specifically required by the option under which you were previously demonstrating compliance. This could be especially true if you switched from the compliant materials option to the emission rate without add-on controls option or the emission rate with add-on controls option.

If a facility is switching to either the emission rate with out add-on controls option or the emission rate with add-on controls option, the facility must be able to demonstrate that they were in compliance for the entire 12-month compliance period that ended in each month included in their semi-annual compliance report. Therefore, a facility will need to perform the compliance

calculations including data for (at first) the 11 months before they switched options, plus the data for the current month.

A facility does not need to remain under one option for 12 months before switching to another option. It is likely that coating operations that were in compliance under one option will not reduce the ability of a facility to comply under a different option. However, switching compliance options frequently could make it more difficult for a facility to accurately and confidently demonstrate compliance.

A facility must demonstrate compliance for each 12-month period that ended during each semi-annual reporting period. If a facility determines it was not in compliance under one option, it could perform the calculations under another option to determine whether it would be in compliance. For example, a facility may determine that some materials had higher than expected HAP levels and the facility could not use the compliant materials option. If the facility has all the required data, it could still determine whether it is in compliance under the emission rate without add-on controls option for that particular 12-month compliance period. However, it is important to note that §63.3900(a)(1) of the rule requires that you remain in compliance at all times.

10.2 Compliant Materials Option

Comment: One commenter (IV-D-44) requested that the HAP content of thinners and solvents not be restricted to absolute zero for the compliant materials option because they can pick up trace amounts of HAP during the recycling process.

Response: In the final rule, we have clarified that under the compliant materials compliance option, thinners and cleaning solvents do not need to be absolutely zero-HAP. We have included a definition of non-HAP materials based on common reporting thresholds that are already in use. Thinners and other additives, cleaning solvents, and coatings are considered non-HAP as long as the organic HAP level does not exceed the OSHA reporting thresholds for HAP (0.1 percent by weight for OSHA-defined carcinogens and 1.0 percent by weight for other HAP). In addition, we have included a provision that you do not need to redetermine the organic HAP content of solvents that are recycled off-site, if you have documentation showing that you received back the exact same solvent you originally sent off-site for recycling. This

documentation ensures that the solvent you receive back does not represent a potential net increase in the organic HAP being brought to the site. These two changes address the fact that solvents can pick up or retain trace amounts of HAP from coatings during their use and the recycling process. The final rule also contains a provision that you do not need to redetermine the organic HAP content of solvent recycled on site.

Comment: One commenter (IV-D-09) recommended that the rule adopt a compliant materials option for coatings and that cleaning solvents be regulated separately based on HAP composition or vapor pressure. The commenter suggested that compliance would be demonstrated by listing compliant coatings used each month and their lb HAP/gallon solids, listing compliant solvents used and their HAP level, and monthly total volume of compliant materials used.

A second commenter (IV-D-44) argued that the requirement to use thinners and cleaning solvents containing no organic HAP in the compliant materials option should be removed from the rule. The commenter also noted that the MACT floor for this category was not based on the HAP content of cleaners, and no mention of non-HAP cleaners and thinners was included in the stakeholder discussions. The commenter argued that the only requirement should be that the total emissions from the coatings meet the emission limits in the rule and the source maintain records sufficient to make such a demonstration.

Response: The compliant materials option is intended as a simple way to demonstrate compliance for a specific subset of facilities that are not using add-on control devices to comply with the emission limits and where all the coatings they use individually meet the emission limits in the final rule. Additionally, because the emission limits and compliance calculations include thinners and cleaning materials, this specific subset of facilities also must use only “non-HAP” thinners and cleaning materials (as defined in the rule). When these restrictions are met, the compliance demonstration burden can be significantly reduced. As an incentive to those facilities that choose to meet the emission limits through these pollution prevention measures, we have included this less burdensome compliance demonstration in the rule. Facilities that must use cleaning materials or thinners and other additives that contain HAP can use “Emission Rate Without Add-On Controls Option,” which was included in the proposed rule and is retained in the final rule.

The responses to other comments in this document discuss why cleaners are included in the emission limits in the proposed and final rule. In particular, see section 3.2 of this document.

Comment: One commenter (IV-D-17) requested that the compliant materials option provide a low volume exemption for thinners and other additives that contain small amounts of HAP. According to the commenter, coating manufacturers sometimes provide customers with “fixatives” for reformulated coating to solve performance problems (e.g., storage, application, cure, or aesthetic or physical properties). The fixatives may contain a small amount of HAP.

Response: The final rule does not contain a low-volume exemption for thinners and other additives in the compliant materials option. A facility needing to use thinners or additives that do not meet the definition of non-HAP can demonstrate compliance using the emission rate without add-on controls option for those coatings that need HAP-containing thinners or other additives.

10.3 Emission Rate Without Add-on Controls Option

Comment: The commenter (IV-D-08) supported EPA’s proposed regulation which would allow a weighted averaging of HAP emission levels across all coatings used within a single category at a single, contiguous facility for the purpose of determining compliance.

Response: We appreciate the commenter’s support for the emission rate without add-on controls compliance option, and have retained that option in the final rule.

Comment: Two commenters (IV-D-17, IV-D-24) requested that EPA revise §63.3942 to recognize that some cleaning materials do contain some solids and should be allowed a proportionate amount of HAP content.

Response: The unit of *mass of HAP per volume of coating solids used* was selected to normalize the assessment of organic HAP emissions across all affected sources. This unit was meant to relate directly to production rates, on the assumption that average dry coating film thicknesses are fairly constant across product types. However, the solids that may be found in some cleaning materials do not contribute to the solids that form the dry film on the metal parts and products. Allowing a facility to include them in the denominator would allow that facility excess emissions compared to a facility that used cleaning materials without solids, even though

the two may have the same production rate. Therefore, the solids that may be found in cleaning materials are not allowed in the denominator of the compliance calculations.

Comment: Two commenters (IV-D-17, IV-D-24) requested that §63.3951 (emission rate without add-on controls) be revised so that only those sub-operations that do not meet the compliant materials limits need to be averaged with other sub-operations that are below the limits to meet the emission rate (averaging) compliance option. Only those sub-operations designated for inclusion in the averaging must be included in the emission rate calculations to demonstrate compliance. Other sub-operations would demonstrate compliance with the compliant materials option based on HAP content. The commenters believed that facilities should not have to track additional materials within an operation that individually meet the compliant materials limits.

Another commenter (IV-D-61) proposed that a facility without controls be allowed to show compliance by using the emissions equations in the standard for just those coatings with higher HAP levels than the limits and a portion of their other coating operations needed to offset the higher HAP coatings. The rest of the coatings operations at the facility that use coatings that individually meet the HAP levels would not be included in the facility emissions calculation, but would meet the compliant materials option. This would simplify recordkeeping while maintaining compliance.

Response: As the commenters have suggested, you may choose different compliance options for different coating operations or lines at the same facility, and the final rule has been clarified in §63.3891 to indicate that this flexibility is available. For example, one line may be able to use the compliant materials option, while another line may need the flexibility to use higher- and lower-HAP materials under one of the emission rate compliance options. You may also use different compliance options within a single line, as long as different compliance options are not applied at the same time to the same coating applied to a single part. For example, most of the coatings used on a particular line may be able to individually meet the emission limit for a particular subcategory, but a few coatings may need a higher-HAP content. You could average these higher-HAP coatings with some of the lower-HAP materials under the emission rate without add-on controls option and demonstrate compliance for these separately, while the other lower-HAP coatings comply under the compliant materials option.

10.4 Emission Rate with Add-on Controls Option

Comment: One commenter (IV-D-37) recommended a “streamlined equivalency reporting and compliance option.” The commenter argued that such an option would allow the facility to demonstrate that it meets the limits with its worst case (highest HAP) coating and with the add-on control device capture and control efficiency measured during the performance test. To demonstrate compliance, the commenter stated that the facility would then use supplier information to show all coatings used during a 6-month period had lower HAP than the worst case coating, multiply by the overall materials use for the period, and multiply by the capture and control efficiency.

Response: We agree with the commenter that a facility may be able to demonstrate numerically that under a certain set of assumptions and limiting constraints, as in the commenters example, they are in compliance with the emission limits. However, the complete universe of possible compliance scenarios cannot be anticipated in a single rule making. Therefore, the final rule contains only those compliance options and equations and recordkeeping and reporting requirements that will at least demonstrate compliance for all affected facilities, and at the same time provide a reasonable amount of flexibility under the most likely compliance options.

Nevertheless, another approach that a facility may use is the equivalency by permit option in 40 CFR part 63, subpart E (§63.94). Under this approach, a facility may design an emissions control program that is suited for their process or plant as long as they can demonstrate that their program will achieve the same emissions reductions as the NESHAP. They must then work with their State, local, or tribal air pollution control agency to submit an equivalency demonstration. This equivalency demonstration will be reviewed by the appropriate EPA Regional Office. The equivalency demonstration is approved as part of the operating permit approval process. For more information, please see the section 112(l) website at [http://www.epa.gov/ttn/atw/112\(l\)/112-lpg.html](http://www.epa.gov/ttn/atw/112(l)/112-lpg.html).

Comment: Two commenters (IV-D-17, IV-D-24) stated that the final rule should allow that if a facility can demonstrate that the emission rate, considering the materials used, add-on controls, and emission capture systems, is less than 50 percent of the applicable emission limit in

§63.3890, then the facility would be exempt from the monthly compliance demonstration, work practice standards in §63.3893, and all requirements in §§63.3960 through 63.3968.

Response: The proposed and final rule are in the format of lb HAP emitted per gallon of coating solids used and were not in the format of a percent HAP emission reduction. This format was chosen to ensure that compliance at different facilities was being compared on an equal basis relative to production levels. Even if a facility were able to demonstrate during a one-time test that emissions were substantially less than the emission limits, that does not assure future compliance because of changes that may occur in the types of materials that are used and the relative amount of materials that are used (e.g., an increase in the user of higher-HAP coatings or of HAP containing solvents that contain no solids). The compliance calculations included in the rule assure compliance at all times, even as an operation changes over time. Furthermore, monitoring is needed to assure that control devices continue to be operated as they were during the performance test. Therefore, the final rule does not include the simplified compliance demonstration suggested by the commenters.

11.0 COMPLIANCE DATES AND AVERAGING PERIOD

Comment: One commenter (IV-D-63) stated that the final rule should allow a 3-year compliance period for existing area sources that become major sources, rather than 1 year as proposed, because the level of effort needed for existing sources to comply is no different. The commenter cited the organic liquids distribution NESHAP (40 CFR part 63, subpart EEEE), which allows 3 years to comply. The commenter also supported a 3-year compliance period for existing sources.

Response: Existing area sources that become major sources have until the existing source compliance date of 3 years after the effective date of the final rule (date of promulgation) or 1 year after becoming a major source, whichever is later. The EPA expects that compliant coatings and lower-HAP coating technology will be more readily available as more new and existing sources must comply with the rule in the three years between the effective date and the existing source compliance date. Therefore, those area sources that become major sources after the existing source compliance date will have a greater range of compliant products and technologies at their disposal and will not need the three years to come into compliance that is needed by facilities that are currently existing major sources. Furthermore, an area source should know in advance that it plans to expand or make an operational change that will result in becoming a major source. This will allow additional time before it becomes a major source to plan its compliance strategy. The compliance periods included at proposal were retained in the final rule for facilities that become major sources.

Comment: One commenter (IV-D-08) supported the use of a 12-month rolling average period for determining compliance. Another commenter (IV-D-09) objected to the use of a 12-month rolling average for the emission limits, because this compliance metric can only be determined after the fact and, therefore, operators do not know what coating they can use for the

month. A third commenter (IV-D-37) recommended that the rule should have three optional averaging times for the emission limits.

- 12-month block average. Rolling averages transcend business and market cycles, and can affect the ability to respond to demand.
- Rolling quarterly average, for products with more predictable business cycles.
- 12-month rolling average.

Response: The final rule retains the 12-month rolling average as the basis for compliance. This format ensures that a facility will be in compliance with the emission limits at all times, while still allowing flexibility to accommodate periods where higher HAP content materials may be needed. We disagree that compliance can only be determined after the fact with this format, although compliance will require that a facility plan ahead with respect to the types and the relative amounts of coating materials that are used in each 12-month compliance period and may need to use a combination of lower-HAP and non-HAP materials to achieve compliance.

A 12-month block average (such as a calendar year) is not included in the final rule because it would reduce flexibility for facilities that may need to use higher emitting materials at the beginning or end of the 12-month period. A rolling-average allows a facility to offset excess emissions with earlier or subsequent periods of reduced emissions. Furthermore, with a 12-month block average, compliance could only be determined and reported once per year. The NESHAP and Title V programs require semiannual compliance demonstration reports. It benefits the source and the regulatory agency to have more frequent compliance calculations so that any problems are identified and can be addressed more promptly. With a rolling 12-month average, sources make calculations each month and can submit Title V semiannual compliance certifications with confidence. A quarterly rolling-average would not provide a substantial benefit in calculations and recordkeeping over a 12-month rolling-average. The shorter time period would reduce flexibility for operations whose coating use can fluctuate or that have seasonal changes in operation and would be inconsistent with recordkeeping and reporting already required by many sources as part of their State Title V operating permits.

Comment: Two commenters (IV-D-44, IV-D-52) expressed concern about compliance with the initial 12-month period. One commenter (IV-D-44) stated that EPA should clarify that the use of a 12-month rolling compliance period does not mean that a one-time exceedance becomes an automatic 12-month violation. One commenter (IV-D-44) suggests that the initial compliance period is 12 months and subsequent compliance periods are each month, as added onto the previous 11 months in the 12-month average. The other commenter (IV-D-52) noted that the preamble to the proposed rule (67 FR 52785) stated that if a source is not in compliance at the end of the initial compliance period, it is considered out of compliance for the whole period. The commenter (IV-D-52) stated that the noncompliance period should be limited to a single month or prorated based in the duration of the non-compliance. One commenter (IV-D-40) supported the concept that the initial compliance period for the 12-month rolling average begins on the applicable compliance date.

Response: Under the emission rate without add-on controls option and the emission rate with add-on controls option, compliance with the emission limits is based on a calculation of the emission rate for a 12-month compliance period. If the emission rate is greater than the emission limit, then it is considered to have deviated from the emission limit for the entire 12-month period. If a facility is using the compliant materials option, then a deviation from the emission limit would be for just the period during which the non-compliant materials were being used. If a facility is using the emission rate with add-on controls option, a deviation from the operating limits in §63.3892 or the work practice standards in §63.3893 would be also for just the period of the deviation and not for the 12-month compliance period.

Under all compliance options, the Agency to which enforcement is delegated would determine whether or not a deviation constitutes a violation of the emission limitations, the duration of the violation, and whether enforcement action is appropriate.

12.0 COMPLIANCE CALCULATIONS

Comment: One commenter (IV-D-65) suggested that HAP emissions from storage, mixing, conveying, and waste management of coatings, thinners, cleaning materials and associated wastes, should be explicitly excluded from the emission calculations in the rule. The commenter noted that it is difficult to directly quantify these emissions and that there is often a lack of general agreement on how to quantify such losses. The commenter also noted that EPA stated in the preamble to the proposed rule that we were not able to obtain data to adequately quantify HAP emissions from storage, mixing and waste handling (67 FR 52790).

Response: Under the compliant material option you must demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in §63.3890, and that each thinner, additive, and cleaning material used contains no organic HAP. The compliant material option focuses on the organic HAP content of coatings, thinners, additives and cleaning materials as received from the manufacturer or supplier and prior to any alteration. No separate or direct accounting of emissions from storage, mixing and conveying of coatings, thinners, additives, cleaning materials and associated wastes is required under the compliant material option. Such an accounting clearly is not needed when each coating is a compliant coating and each thinner, additive, and cleaning material contains no organic HAP.

Under the emission rate without add-on controls option and the emission rate with add-on controls option all of the organic HAP content of coatings, thinners, additives and cleaning materials is initially assumed to be emitted. (See calculation of the terms A, B and C in §63.3951(e).) Any emissions from storage, mixing and conveying of coatings, thinners, additives, cleaning materials and associated wastes are implicitly included in this assumption. The rule does include provisions which allow for reclaimed materials to be excluded from material usage. (See

introductory language to §63.3951.) The rule also includes provisions for the organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDf for treatment or disposal to be excluded from the total mass of organic HAP emissions. (See calculation of the term R_w in §63.3951(e).) No separate or direct accounting of emissions from storage, mixing and conveying of coatings, thinners, additives, cleaning materials and associated wastes is required under either the emission rate without add-on controls option or the emission rate with add-on controls option. Such an accounting clearly is not needed when all of the organic HAP content of coatings, thinners, additives and cleaning materials is initially assumed to be emitted and provisions are made to exclude reclaimed materials from material usage and to exclude organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDf for treatment or disposal to be excluded from the total mass of organic HAP emissions.

We agree that no separate or direct accounting of emissions from storage, mixing and conveying of coatings, thinners, additives, cleaning materials and associated wastes is required under this rule. We believe that this is sufficiently clear in the rule. We have not made any changes in the rule in regard to this comment.

Comment: One commenter (IV-D-65) requested that HAP from on-site production of coating be excluded from the compliance calculations. The commenter acknowledged that it has collocated facilities that manufacture coating and these operations will be covered by the NESHAP for Miscellaneous Organic Chemical Manufacturing (40 CFR 63 subpart FFFF) and the NESHAP for Miscellaneous Coating Manufacturing (40 CFR 63 subpart HHHHH).

Response: Coating manufacturing operations that are subject to the Miscellaneous Organic NESHAP will not be covered by the metal parts NESHAP. The emissions from coating manufacturing operations are not included in the compliance calculations for the final metal parts rule. However, the Miscellaneous Organic NESHAP does not apply to the mixing of coatings, thinners, and other additives to prepare a coating for application by a user who is coating metal parts or products, so these activities would be part of the affected source subject to the Miscellaneous Metal Parts and Products NESHAP.

Comment: One commenter (IV-D-44) supported the proposed method for mass-balance calculations, as well as the use of the default values for the HAP content of solvent blends. However, the commenter requested that EPA revise §63.3893(b)(2) to add that “the HAP

contained in spilled coatings, thinners, and cleaning materials is not included in the emission limitations set forth in §63.3890.” The commenter argued that such spills should constitute an unusual emission, which may require reporting under other CAA provisions or that constitute an upset or malfunction during which emission limits do not apply.

Response: In the compliance calculations in the proposed and final rule, all of the HAP that are contained in coatings used at a facility are assumed to be emitted and, therefore, are included in the compliance calculations. If spilled materials were not included in the emission calculations, spills could lead to deviations from the emission limitations that are not reflected in the emission calculations.

Facilities that use the emission rate with add-on controls option are required to develop a work practice plan that includes, among other things, elements to minimize spills of organic HAP containing coatings, thinners and/or additives, cleaning materials, and waste materials. Steps must be taken to minimize spills especially under this compliance option because it is often difficult to accurately determine whether the HAP emitted from spilled materials are captured and vented to the add-on control device.

Comment: One commenter (IV-D-19) stated that waste coating solids should be accounted for in the same manner as waste HAP. The commenter (IV-D-19) stated that the compliance calculations should be based on the solids actually applied by subtracting waste solids (e.g., dip tank sludge) from the solids input to the process.

Response: The compliance calculations in the final rule have not been revised to account for solids that are in waste materials, if a facility takes credit for the HAP in waste materials. Waste materials generally represent a substantially smaller fraction of the total solids than of total HAP used at surface coating facilities because additional HAP, but not solids, are often used in surface preparation and equipment cleaning. In addition, HAP from cleanup solvents, thinners, and additives are more likely to become waste materials than coating solids because of their lower cost relative to the cost of coating solids.

Comment: One commenter (IV-D-36) suggested that EPA expand the credit allowed for HAP contained in materials collected for recycling or disposal off-site to include HAP in recycled paints, cleaning and purge materials for facilities with add-on controls. The commenter suggested the following language for §63.3951(e)(4)(i):

(i) You may include in the determination only waste materials that are generated by coating operations for which you use Equation 1 of this section and that will be treated or disposed by a facility regulated as a TSDF under 40 CFR part 262, 264, 265, or 266 or by virtue of any other waste collection activity where the source maintains records of the materials collected.

The commenter also stated that credit should be given for materials that are collected and reused in the coating operations on-site without being recycled or treated through a TSDF as waste.

Response: Section 63.3951(e)(4)(i) has not been revised to allow alternative recordkeeping of waste treatment or disposal. The requirements in 40 CFR part 262, 264, 265, or 266 ensure a proper accounting for providing credit for the treatment and disposal of hazardous waste materials that would otherwise be included in the compliance calculations.

Section 63.3951 of the rule has been revised to indicate that if you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed. This change addresses the commenter's request for credit for materials that are collected and reused in the coating operations on-site without being recycled or treated through a TSDF as waste.

Comment: One commenter (IV-D-44) requested that the language in §§63.3941 and 63.3961 be consistent with respect to the recycling or reuse of solvents and coating materials. The commenter (IV-D-44) noted that §63.3961 appears to not have the term “on-site.” The commenter (IV-D-44) argued that materials that are recycled off-site should not be considered new material for purposes of determining HAP content, which could discourage recycling.

Response: Section 63.3951 of the rule has been revised to indicate that if a facility has documentation showing that they receive back the exact same material that is sent off-site for recycling, then the facility does not need to determine the HAP content of the material that is recycled and they may assume that it has the same HAP content as originally purchased. If the exact same material is received back after recycling, the recycled material does not represent a potential source of HAP being brought to the site and emitted from the site. If a material from a different site is substituted for the material sent out for recycling, then the new material could

contain a higher HAP content than the material that was originally sent out for recycling and that would otherwise be received back at the site after recycling.

Comment: One commenter (IV-D-52) requested that EPA clarify that the provision allowing a source to take credit for HAP contained in waste solvent collected for recycling or disposal should be optional because of the additional record keeping required.

Response: The compliance calculations using equation 1 in §63.3951(e) and §63.3961(h) in the final rule state that you may assign a value of zero to R_w (the total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal) if you do not wish to use this allowance.

Comment: One commenter (IV-D-52) asked how to include powder coatings in calculations to show compliance with the emission rate [without add-on controls] option. The equations are based on volume, which is not applicable for non-liquid coatings.

Response: The final rule includes a method for determining the volume of solids in powder coatings from their weight using ASTM Method D5965-02, “Standard Test Method for Specific Gravity of Coating Powders.” A facility can use this method to determine the film density of powder coatings (the density of the cured film after it is applied to a metal part) so that the volume of solids can be included in the denominator of compliance calculations in the emission rate [without add-on controls] option.

13.0 TEST METHODS

13.1 ASTM Methods

Comment: One commenter (IV-D-01) pointed out that several ASTM methods that are incorporated in the rule have been updated: D 2369-98 is now D 2369-01; D 4017-96a is now D 4017-02; D 4457-85 is now D 4457-02; D 4747-87 is now D 4747-02; and PS 9-94 has been withdrawn with no replacement. The commenter offered to explain the changes.

Response: The commenter offers ASTM standards that have been updated by ASTM since being listed in the proposal. Section 12(d) of the National Transfer Technology Transfer and Advancement Act (NTTAA) of 1995 (Public Law No. 104-113; 15 U.S.C. 272 note) directs the EPA to use voluntary consensus standards in their regulatory and procurement activities unless doing so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards developed or adopted by one or more voluntary consensus bodies. The EPA conducts searches to identify standards compatible with EPA Methods, in this case EPA Methods 24 and 311.

The methods ASTM D 2369-95, ASTM D 4017-96a, and ASTM D 4457-85 (Reapproved 91), among others, are incorporated by reference into EPA Method 24. The methods ASTM D 4747-87 and ASTM PS9-94, among others, are incorporated by reference in EPA Method 311. These standards are already acceptable procedures that were incorporated by reference in Method 24 and Method 311 as they were established at the time of EPA review.

However, the methods incorporated by reference cannot be changed to reflect the dates specified by the commenter. We cannot cite the new dates of the updated standards because we have not been able to determine if these updated versions are technically the same as the previously incorporated versions. If the updated versions of these methods were technically different from the previously incorporated versions, their use might change the applications of

the Methods. This might in turn affect the stringency of the emission limits that use Methods 24 and 311 to determine compliance.

13.2 Comparing Formulation Data and Default HAP Contents to EPA Test Methods

Comment: One commenter (IV-D-17) supported the use of manufacturer's formulation data for determining the HAP content of coatings. Another commenter (IV-D-21) requested that the final rule allow facilities to rely solely on the manufacturers' representations to demonstrate the HAP content of coatings. The second commenter cited, as an example, the fact that the Aerospace Manufacturing NESHAP does not apply to certain coatings that a facility determines to have HAP contents below 0.1 weight-percent for OSHA-defined carcinogens and 1.0 percent for all other HAP, based solely on the manufacturers' representations.

Two commenters (IV-D-17, IV-D-36) disagreed that EPA test methods should prevail in cases where there is disagreement with formulation data or the default values for the HAP content of solvent blends that are presented in Tables 3 and 4 in the proposed rule. One commenter (IV-D-17) cited several reasons: limitations of test methods; the wide range of test results that can be obtained by different laboratories; and the high cost of using testing as the sole basis. The commenter also noted that the standards are based on formulation data and State VOC rules that were not subject to any testing under Method 311. The commenter recommended modifying the rule to say that test data shall govern unless the source can demonstrate to the satisfaction of the enforcement agency that the formulation data were correct.

One commenter (IV-D-44) suggested that differences between vendor data (e.g., MSDS) and Method 311 results should not be viewed as deviations or exceedences, but should trigger a plan to more accurately determine the HAP content of coatings to be used in the future. The commenter stated that precision needs to be accounted for when comparing EPA Method 311 results to vendor data on HAP content and argued that if the exceedence of a vendor HAP content is within the error of the method, then the vendor's info should be presumed correct.

One commenter (IV-D-36) also argued that a source should be held harmless if they used in good faith the default values for solvent blends in Tables 3 and 4 of the rule and Method 311 test results showed higher HAP contents, or the source should be allowed to rebut the Method 311 test results. Otherwise, the commenter argued, sources will not be able to rely on

the default values for solvent blends and will need to perform expensive testing of coating materials.

Response: It is EPA's general regulatory approach for surface coating sources that the EPA test methods will prevail in a discrepancy between formulation data supplied by the coating supplier and test data, and the facility will be held responsible for deviations from the emission limits due to these inconsistencies. (The enforcement authority will determine if the deviation is a violation of the standard.) Facilities using formulation data for compliance demonstrations should only do so if they are comfortable that the formulation data supplied by the coating supplier are correct. For example, coatings manufacturers should use the appropriate test method or should have certified HAP content documentation provided to them by their raw material suppliers. It is to the benefit of the facility that the facility pursue a high degree of certainty in the formulation data they accept for use in compliance demonstrations.

In §63.3941(a) of the proposed rule, a facility could use either EPA Method 311, EPA Method 24, an alternative method's test results or manufacturers's formulation data to determine the HAP content of materials used in compliance demonstrations. A facility could use the default HAP contents for solvent blends in Tables 3 and 4. However, if a difference was present between the test results and manufacturers' data or the default values for solvent blends, the test method results would take precedence. As suggested by the commenters, a provision has been added to §63.3941(a) that in a disagreement between manufacturers' data or the default values, and the results of a test, the test method results will not take precedence if you demonstrate to the satisfaction of the enforcement agency that the formulation data or default values were correct. The demonstration could include, among other things, a showing that the formulation data or default values and test method data were within the precision or accuracy of the test method results and no significant difference exists between the two.

Comment: Two commenters (IV-D-17, IV-D-36) stated that the final rule should allow HAP concentrations to be based on the average of a range on an MSDS, adjusted to a maximum composition of 100 percent, where HAP content is reported as a range. According to the commenters, a single MSDS is often provided by the supplier with HAP contents expressed in ranges to represent a group of different colors of the same product. A third commenter (IV-D-24) stated that providing specific formulation data for each color would be burdensome with no

environmental benefit. One commenter (IV-D-36) suggested that using the average of the reported range would prevent a facility from having to determine the actual composition, and thus would be consistent with TRI reporting. The commenter (IV-D-36) argued that a requirement to use the upper limit of a range would lead to a gross overstatement of the HAP content of materials.

Response: If a range of organic HAP is presented, it is up to the user to determine the appropriate value. It is important to remember, however, that in the event of any inconsistency between formulation data and Method 311 analyses, the Method 311 data will take precedence unless the user can demonstrate to the satisfaction of the enforcement agency that the formulation data were correct.

Comment: One commenter (IV-D-36) requested that EPA include the following procedures to assure consistency in using EPA Method 311, or at least include language allowing a facility to rebut Method 311 test results:

- The facility should have the option to divide any sample collected by any agency that implements and enforces the MACT standard.
- The facility will provide to the applicable agency its determination of the proper test parameters to be used and the temperature at which the analysis should be performed; and
- Both the applicable control agency and the facility shall be authorized to be present while testing and/or sampling under Method 311 is being conducted.

Response: The final rule includes language allowing a facility to rebut the results of a Method 311 test of HAP content.

13.3 Using OSHA Reporting Cutoffs When Determining HAP Content

Comment: One commenter (IV-D-44) supports using the OSHA cutoffs for MSDS for evaluating HAP content.

Response: The EPA agrees that use of the OSHA levels is appropriate. The OSHA levels are common reporting thresholds that are already in use, are reflected on MSDS sheets for materials, and are familiar to material suppliers and users. The use of these thresholds will minimize the recordkeeping and reporting burden.

Comment: Two commenters (IV-D-28, IV-D-47) objected to the procedures for determining the HAP content of coatings, thinners, and cleaning solvent, particularly the interpretation of the term “no organic HAP.” According to the commenters, other surface coating NESHAP allow the facility to count only those HAP that are present above the minimum reporting threshold for SARA and OSHA used in MSDS (i.e., above 0.1 percent for carcinogens and above 1 percent for other organic HAP compounds). The commenters noted that the proposed metal parts rule allows these thresholds to apply only for certain options (i.e., where Method 311 is used and where manufacturers’ formulation data are used to determine HAP content) and the thresholds are not allowed where Method 24, an alternative test method, or the solvent blend tables are used. The commenters maintained that EPA has not explained why the procedure was excluded in some instances and recommended that the thresholds should apply in all cases.

Response: The same thresholds for determining and reporting total HAP content apply for all methods where HAP is determined, whether it is Method 311, an alternative method for determining HAP, the manufacturer’s formulation data for HAP, or where HAP is determined from the HAP content of solvent blends. However, where Method 24 is used to measure VOC as a surrogate for HAP, the method only measures total VOC content and does not measure individual species of VOC, so it is not practical to apply the same thresholds, unless the total VOC level is less than 1.0 percent by weight, which is unlikely for liquid coatings.

The final rule includes a definition of non-HAP coating, which means a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and no more than 1.0 percent by mass for any other individual HAP. Therefore, the final rule is more consistent with the use of the term “non-HAP” in other surface coating NESHAP and clarifies that non-HAP does not mean zero-HAP, as was implied by the language in the proposed rule.

Comment: One commenter (IV-D-52) requested that EPA clarify that the OSHA reporting thresholds for HAP (0.1 percent for carcinogens, 1.0 percent for all others) apply for all compliance options and not just for the compliant coating option.

Response: The methods for determining HAP and solids content of coatings listed in §63.3941 apply to all three compliance options and not just the compliant materials option.

Rather than repeating these provisions under each compliance option, the other compliance options reference this section for determining HAP and solids content of coatings. We believe that in cross referencing these provisions, they apply to the other compliance options in their entirety and no further clarification in the rule is needed.

13.4 Reactive Coatings

Comment: One commenter (IV-D-32) stated that the final rule should allow sources or materials suppliers to use alternatives to EPA Method 24 to determine the amount of HAP that is actually emitted from reactive adhesives as they are used. The proposed rule and associated test methods assumed that all HAP contained in coatings or additives are emitted. However, in reactive adhesives, some of the HAP species react with other ingredients to form solids and are not emitted to the atmosphere. Therefore, the amount of HAP emitted can be significantly less than the amount of HAP present in the liquid adhesive.

Response: An alternative method for determining the fraction of HAP emitted from reactive adhesives has been included in appendix A to subpart PPPP 40 CFR part 63. The final metal parts rules references this method. Sources using reactive adhesives may use this method for demonstrating compliance based on the organic HAP actually emitted, rather than using Method 311, Method 24, or composition data. The method relies on preparing a sample (of known weight) of the adhesive as it will be applied, allowing it to fully cure, baking the sample, and then weighing the cured adhesive to determine the weight loss. The weight loss represents the volatile fraction that is emitted from the adhesive.

13.5 Using VOC as Surrogate for HAP

Comment: One commenter (IV-D-66) stated that the final rule should allow facilities to use the VOC content of a coating, without any correction factor, as a surrogate for the HAP content for determining compliance, as long as all of the HAP in the coating are also VOCs. (That is, there is no potential for the HAP content to exceed the VOC content.) The commenter requested that this revision would reduce the recordkeeping burden on facilities that are currently complying with local VOC limits and would encourage the use of low VOC coatings.

Response: The rule allows sources to use EPA Method 24 to determine the mass fraction of nonaqueous volatile matter in coatings and to use that value as a substitute for mass fraction of organic HAP. Therefore, owners and operators wishing to rely on this surrogate approach have been provided with such an option.

14.0 MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

Comment: One commenter (IV-D-08) stated that the notification and recordkeeping provisions are burdensome, particularly for facilities that operate only with “compliant” coatings at or below the HAP content for General Use and/or High Performance coatings. The commenter (IV-D-08) asked EPA to develop recommended forms for notifications and recordkeeping to foster understanding and ease of compliance. Another commenter (IV-D-52) stated that §§63.3910(c)(4) - (10) (notification of compliance status) has very burdensome record keeping and reporting requirements.

Response: We have made efforts to explain the compliance demonstration and recordkeeping and reporting clearly in the rule. We also plan to develop implementation materials to further assist companies and enforcement agencies. The compliant materials option is provided as a simpler way of determining compliance than the emission rate calculation method. It requires calculation of the lb HAP/gal solids for each individual coating material used, but does not require calculation of the emission rate for the overall coating operation. The Notification of Compliance Status contains the minimum information EPA needs to determine that a source is in compliance. This includes a statement of the compliance option that is being used and whether a source is in compliance, and a description of any deviations from the emission limitations. We also require one example calculation for the lb HAP/gal solids for a coating material to be sure that the source is performing this calculation correctly. Similarly, if you are using one of the emission rate options, your calculation of the emission rate must be submitted. Because some of the calculations can be complex, the enforcement agency needs to be able to check the methodology used for the initial compliance demonstrations to verify that the source is in compliance and bring any misunderstandings or calculation problems to the source’s attention. In subsequent semiannual reports you do not need to submit the example calculations.

Comment: One commenter (IV-D-60) stated the final rule would impose a significant recordkeeping burden while not providing a significant emission reduction. The commenter added that the 250-gallon exemption would not provide any relief because of the recordkeeping needed to separate the coatings used on just the metal parts in order to claim the exemption. The commenter is a yacht manufacturer subject to the Boat Manufacturing NESHAP, and stated that most volume boat builders will probably use more than 250 gallons on metal parts in a year.

Response: The Miscellaneous Metal Parts and Products NESHAP is expected to result in a national HAP emissions reduction of over 25,000 tons per year, or a 48 percent reduction. In the final rule, we have clarified applicability to reduce the potential for overlap with other surface coating NESHAP. As explained in section 6.6 of this document, the final rule clarifies that the Miscellaneous Metal Parts and Products NESHAP does not apply to surface coating of boats or metal parts of boats (including, but not limited to the use of assembly adhesives) where the facility meets the applicability criteria for boat manufacturing facilities in the Boat Manufacturing NESHAP (40 CFR 63, subpart VVVV), except where the surface coating of the boat is a metal coating operation performed on personal watercraft or parts of personal watercraft. We have also retained the 250 gallon exemption cited by the commenter. For facilities with coating operations subject to the metal parts rule and other NESHAP, we have added the predominant activity alternative and the facility-specific emission limit alternative to facilitate compliance, as explained in chapter 6.

Comment: One commenter (IV-D-10) supports the provisions of the rule that do not require monitoring, record keeping, or reporting for materials that do not contain HAP.

Response: We appreciate the commenter's support and agree that the rule is not intended to regulate non-HAP coatings. However, we would like to point out that depending on the compliance option chosen, a source may need to keep records of non-HAP coatings. For example, if a facility is using the emission rate without add-on controls option and uses a mixture of high-HAP coatings non-HAP coatings, it will need to include the non-HAP coatings in its compliance demonstration calculations in order to meet the emission limits.

Comment: One commenter (IV-D-16, IV-D-46) stated that facilities should be allowed to use their current recordkeeping and reporting procedures for complying with RACT and their

Title V permits as an equivalent compliance provision to the proposed MACT compliance requirements.

Two commenters (IV-D-36, IV-D-44) stated that EPA should delete §63.3920(a)(4), which includes the requirement to report that no deviations occurred, and should defer to Title V requirements, specifically 40 CFR 70.6(a)(3)(iii)(A). At a minimum, the commenter (IV-D-36) stated that EPA should clarify that the statement is not a guarantee that there were no deviations because all certifications are based on information and belief formed after reasonable review of the monitoring information. The other commenter (IV-D-44) stated that the requirement should be deleted since sources must already report deviations. If no deviations are reported, the commenter (IV-D-44) believes it is implicit there were no deviations. The commenter (IV-D-44) also suggested that §63.3942(c) be revised to delete the requirement for an affirmative statement of compliance and that each thinner and solvent contained no HAP, since the commenter believes this provision is in conflict with Title V reporting. Alternatively, the commenter (IV-D-44) suggested the rule include language that compliance with Title V reporting constitutes compliance with the rule.

One commenter (IV-D-40) claims that the language of §63.3920(a)(2) precludes its intended purpose, which is to allow Title V deviation reports to satisfy the required deviation reporting for the metal parts NESHAP. The commenter (IV-D-40) suggested a revision such that any Title V deviation report for an affected source will suffice, regardless of the content as long as it meets the facility's Title V requirement. One commenter (IV-D-52) asked for confirmation that according to §63.3920(a)(2), semiannual compliance reports can be submitted with semiannual Title V reports even when the Title V reports are not on a calendar year schedule.

Response: Sources must comply with the emission limitations, monitoring, recordkeeping and reporting requirements of this NESHAP. The purpose of the NESHAP program is to set uniform national emission limitations (including numerical emission limits, operations limits, and work practice standards), and to establish the testing, monitoring, recordkeeping and reporting needed to demonstrate compliance with the emission limitations. The requirements of this NESHAP that apply to a source must be included in the source's Title V permit when the permit is issued, amended, or renewed. A state RACT program may not be equivalent to this NESHAP. However, one approach that you may use is the equivalency by

permit option in 40 CFR part 63, subpart E (§63.94), which is briefly summarized in other responses in this document.

We disagree with the commenter that the affirmative statements regarding the absence of certain deviations required by §63.3942(c) should be deleted due to conflicts with existing Title V programs. As 6-month monitoring reports are not required by part 70 or part 71 to contain such affirmative statements, there is no duplication in requiring such statements under this rule. Such affirmative statements allow a permitting authority to quickly ascertain whether a source has experienced certain deviations which in turn allows for the more efficient allocation of resources.

In terms of consolidating reports, the final rule, consistent with the proposed rule, allows for an affected source to submit its semiannual compliance report along with, or as part of, its 6-month monitoring report required by 40 CFR part 70 or part 71. The reports can be submitted on the same schedule as the Title V semiannual reports. See §63.3920(a)(1)(iv) and (a)(2) of the final rule.

Comment: One commenter (IV-D-17) recommended that facilities subject to this rule be exempted from initial notification requirements, because these facilities will have already notified EPA under the section 112(j) Part 1 application. Other commenters (IV-D-36, IV-D-44) recommended that EPA amend §63.3910 to exempt sources from the requirement to submit an initial notification if they have already submitted a §112(j) Part 1 application.

Response: The General Provisions specified in 40 CFR 63 Subpart A apply to all NESHAP source categories in Part 63. Under §63.9(b), the owner or operator of a facility subject to a NESHAP for a given source category must submit an initial, written notification to the EPA within the applicable time period identifying the facility and the specific NESHAP subpart to which the facility is subject. In this case, the owner or operator of a facility with metal parts and products surface coating operations subject to the NESHAP is required to prepare and submit an initial notification. Section 112(j) of the Act requires owners and operators of major sources within a source category to apply for a Title V permit should the EPA fail to promulgate emission standards for that source category by the date specified in the regulatory schedule established through Section 112(e) of the Act. The application requirements are specified under 40 CFR 63 Subpart B. Although the Subpart B application requirements include some of the

same information required for the Subpart A initial notification (e.g., facility name, address, brief description of source), the two documents serve different administrative purposes under the NESHAP program. Therefore, it is not appropriate to provide an exemption as requested by the commenter in the final rule.

Comment: One commenter (IV-D-24) asserted that the recordkeeping costs presented in the preamble are underestimated, considering the substrate tracking requirements, volumetric tracking, and recordkeeping for control devices. The extensive recordkeeping does not provide an added environmental benefit. According to the commenter (IV-D-24), the cost of recordkeeping is \$25,000 per facility compared to a cost of \$5,000 for material conversions to meet the standards. The commenter (IV-D-24) added that the MACT standard was not intended to be a recordkeeping standard, thereby imposing significant compliance costs on facilities with little or no environmental benefit.

Response: Multiple compliance options are written in the final rule to allow flexibility. We anticipate that a facility will choose the most cost-effective compliance option that best fits the range of operations and organic HAP emissions typical for the facility. If a facility can demonstrate compliance using the compliant materials option, this will minimize the recordkeeping requirements for the facility. Most facilities will use coatings and other materials that can meet either the compliant materials or emission rate without add-on controls compliance demonstration options and will not use add-on control devices to comply with the rule, so few facilities will be required to perform control device monitoring and recordkeeping.

The records and reports required by the rule are the minimum needed to determine and document compliance for each compliance option. It should also be noted that the monitoring, reporting, and recordkeeping estimates referred to by the commenter are averages used to produce nationwide cost estimates. A particular facility could incur higher or lower costs depending on the number of process operations subject to standards, the compliance options chosen, and the sophistication of the process monitoring/recordkeeping system used by the facility. For example, a facility using a computerized recordkeeping and inventory systems to monitor coating materials use, production and/or add-on control equipment operation will have a centralized database of the materials used and process and control device operating parameters to support the compliance determination. A facility using such a system to monitor production

should incur less than the estimated average MRR costs, whereas a facility with a less sophisticated system might incur more than the estimated average MRR costs. The commenter has not provided specific data that would indicate that the burden has been underestimated. Therefore, the estimate of monitoring, reporting and recordkeeping costs has not been revised.

Comment: One commenter (IV-D-24) expressed that a facility should be able to establish ratios between products and produce a reasonable compliance plan. For example, a facility should be able to know that a certain mix of paint, reducer, and hardener should achieve compliance or that a certain ratio of cleaner to paint can achieve compliance. The commenter (IV-D-24) believes that recordkeeping should be focused on the high HAP products, as opposed to the whole universe, to encourage the use of more compliant materials.

Response: The EPA agrees that sources may be able to establish simplifying assumptions specific to their sources that they could use to plan for and ensure compliance with the requirements of this rule under each compliance option. However, the universe of such site-specific possibilities is beyond the scope of this rule-making. The final rule incorporates a range of compliance options that can be widely used by all facilities. Each source must retain the records required by the NESHAP for the compliance options they choose. Different compliance options can be used for different lines or coating operations within the same facility. For example, this facility may be able to use the emission rate without add-on controls option to demonstrate compliance for their high-HAP materials and enough low-HAP materials to achieve the emission rate limit, and show compliance for the remaining low-HAP materials using the simpler compliant materials option. For a facility that would like to use a unique site-specific approach for demonstrating compliance, another option is the equivalency by permit option in 40 CFR part 63, subpart E (§63.94), which is briefly summarized in other responses in this document.

Comment: One commenter (IV-D-24) recommended that the final rule allow for records to be available electronically as an alternative to having hard-copy records physically on site. Compliance records are becoming more complex and companies are using more centralized record locations with staff to maintain and interpret them. Another commenter (IV-D-63) recommended that the rule allow records to be “readily accessible” from the site, not stored on site. This would allow records to be stored electronically on off-site servers. The commenter

(IV-D-63) proposed alternative language for §63.3931(c). Another commenter (IV-D-37) recommended that the rule be modified to allow electronic recordkeeping and reporting systems, accessible over the web. This option would be available to facilities that have ISO 14000 or other Environmental Management Systems in place by the compliance date.

Response: The language in the rule is consistent with, and references, §63.10(b)(1) of the NESHAP General Provisions, and therefore, has not been revised. It should be noted that the rule requires that a source keep records in a form suitable and readily available for expeditious review. The records may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. This language would include centralized records that are readily accessible from a computer on site.

Comment: Two commenters (IV-D-24, IV-D-40) requested that EPA allow up to 60 days to submit periodic compliance reports (§§63.3920(a)(1)(i) and (iii)), given the amount of data that must be collected and analyzed for each report. This time frame matches other MACT standards to which the commenter (IV-D-40) must comply.

Response: The 30-day reporting period is consistent with other surface coating NESHAP and should be an adequate period of time for this source category. It has been retained in the final rule. However, if a particular source needs additional time or wishes to adjust the schedule, §§63.9(i) and 63.10 of the General Provisions specify procedures for requesting an alternative reporting schedule or postmark date or a waiver of recordkeeping and reporting requirements. Requests must be submitted to and approved by the Administrator (or their delegated representative, such as a state agency) as specified in the General Provisions.

Comment: One commenter (IV-D-44) stated that the certification requirements for semiannual reports in §63.3920(a)(3)(ii) should clearly be made the same as those for the Title V program by adding a reference to 40 CFR 70 or 71. The commenter (IV-D-44) believes the rule should state that Title V permitting agencies have the authority to consolidate reporting requirements and dates. Another commenter (IV-D-40) supported the option to consolidate the semiannual report into the Title V semiannual deviation report.

Response: In terms of consolidating reports, the rule allows for an affected source to submit its semiannual compliance report along with, or as part of, its 6-month monitoring report required by 40 CFR part 70 or part 71. See §63.3920(a)(1)(iv) and (a)(2) of the rule. However,

the report must contain the information requires by the Miscellaneous Metal Parts and Products NESHAP for reasons explained in previous responses in this chapter.

Comment: One commenter (IV-D-44) requested that EPA revise the requirements in §§63.3920(a)(5)(iv) and (a)(6)(iii) and elsewhere to be consistent with the applicable Title V permit program for “prompt” reporting of deviations. In some cases, deviations must be reported even before a cause can be determined. At a minimum, the commenter (IV-D-44) requested that the requirement be modified to require the reporting of the “suspected” cause of the deviation.

Response: We disagree with the comment that the rule should be revised so that the reporting of startup, shutdown, and malfunction events is consistent with the requirements of the applicable Title V permit conditions for “prompt” reporting of deviations. As stated in 40 CFR 70.6(a)(3)(iii)(B), a permitting authority is required to define “prompt” in relation to the degree and type of deviation likely to occur and the applicable requirements. Therefore, as required by this provision, applicable requirements, including those found in §63.3920(c) of the final rule and 40 CFR 63.10(d)(5), must be taken into account by a permitting authority when it defines “prompt.” Therefore, it is the responsibility of the part 70 permitting authority to determine whether the reporting requirements found in §63.3920(c) of the final rule and the NESHAP General Provisions in 40 CFR 63.10(d)(5) are sufficient to meet the permitting authority’s requirements for the prompt reporting of deviations. A permitting authority may decide for a particular source or source category, or as a general matter, to impose more stringent reporting requirements (such as type of report, content of report, and/or frequency of submission) than those specified in an applicable requirement. However, the requirements in §63.3920(c) of the final rule and §63.10(d)(5) are applicable requirements and must be met by a source which is subject to this rule.

The rule provides some flexibility for the Administrator (i.e., the EPA Administrator or their authorized representative, which may be a state agency) to alter the timing of the immediate deviation reports. Section 63.3920(c)(ii) says you must submit the letter within 7 working days after the end of the event unless you have made alternative arrangements with the Administrator as specified in §63.10(d)(5)(ii) of the General Provisions. Section 63.10(d)(5)(ii), as recently amended in 2003, states that “after the effective date of an approved permit program in the state in which the affected source is located, the owner or operator may make alternative reporting

arrangements, in advance, with the permitting authority in that state. Procedures governing the arrangement of alternative reporting requirements under this paragraph (d)(5)(ii) are specified in §63.9(i).”

We do not believe that changes to the rule are needed to require sources to report the “suspected cause” for each deviation versus the “cause” for each deviation. Reporting based on the best information that is available at the time is all that is required whether the rule refers to the “cause” or the “suspected cause” for a deviation. Moreover, certifications of truth, accuracy, and completeness under 40 CFR 70.5(d) and 71.5(d) are to be based on information and belief formed after reasonable inquiry. Therefore, there is no conflict between this rule and State Title V programs. However, new information regarding the cause of a deviation must be reported to a permitting authority when it becomes known.

Comment: One commenter (IV-D-52) stated that §§63.3920(a)(3)(v) and (a)(8)(ii) should be consistent—the notification of compliance status should require no more information than the semiannual compliance reports. Currently, the notification of compliance status requires the calculation of the total HAP emissions and volume solids for each month, and the 12-month organic HAP emission rate. The semiannual compliance reports require only the emission rate for each 12-month period. The commenter (IV-D-52) requested that only results should be submitted and that calculations should be maintained and made available if requested.

Response: The purpose of requiring that the calculations be submitted in the Notification of Compliance status is to allow the regulatory agency to verify up-front that the source understands the calculation procedures, is implementing them correctly, and is in compliance. Because the compliance calculations can be fairly complex, it will benefit the source as well as the regulatory agency to submit the calculations the first time so that any problems or misunderstandings can be identified and corrected. To reduce the reporting burden, we are not requiring the calculations to be submitted in each subsequent semiannual report. The source will continue to use the same types of calculations and procedures that were submitted in the Notification of Compliance Status and reviewed by the regulatory agency, so it is not necessary to submit the detailed calculations in each semiannual report. However, records of the calculations must be retained on site and made available to the enforcement agency if requested.

Comment: One commenter (IV-D-44) earlier suggested that EPA remove the requirement under the compliant materials option that all cleaning solvents and thinners contain no HAP. (See section 10.2 of this document). As a follow-up, the same commenter requested that EPA remove from the requirements for reporting deviations the provision in §63.3920(a)(5)(i) that the facility identify each thinner and solvent that contained HAP.

Response: For the reasons discussed under section 10.2, the EPA has not removed the requirement under the compliant materials compliance option that all solvents and thinners contain no HAP. However, EPA has clarified that “no HAP” solvents and thinners was not meant to mean zero HAP. A definition of non-HAP that is consistent with established OSHA reporting thresholds has been added to the final rule. If you are using the compliant materials option, it would be a deviation to use solvents and thinners to contain HAP (above the reporting thresholds in the definition), and that deviation must be included in semi-annual compliance reports.

Comment: One commenter (IV-D-44) requested that EPA clarify the statement in the first column of page 52788 of the preamble under “Initial Notifications” that sources need to send a notification of planned construction or reconstruction of a source subject to the rule and apply for approval to construct or reconstruct. The commenter (IV-D-44) believes that the requirement is within the current permit program in each State and does not represent a separate requirement.

Response: We disagree with this commenter. The requirements to which the commenter refers in the referenced preamble statement can be found in §63.9 of the NESHAP General Provisions, which addresses notification requirements, and §63.5(d) which addresses applications for approval of construction or reconstruction. These requirements from the General Provisions apply to affected sources under part 63 and both requirements apply to affected sources under this rule as described in Table 2 to the final rule. However, §63.9(a)(3) provides that if a State requires a notice that contains all of the information required in a notification under §63.9, then the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of §63.9. Copies of such notifications would need to be submitted at the times specified in §63.9.

Comment: One commenter (IV-D-44) requested that EPA revise §63.3891 to delete the requirement that sources include in their next semiannual report that they have switched compliance options. The commenter argued that the source should only be required to document the switch. According to the commenter (IV-D-44), most semiannual reports are done on State forms that do not have space to report actions that do not result in a deviation. The commenter (IV-D-44) stated that EPA should delete all requirements to report all actions that do not result in a deviation.

Response: We disagree with the change suggested by the commenter. In order for the regulatory authority responsible for compliance to evaluate the semiannual compliance report required by §63.3920(a), it is imperative to know which compliance determination method the source is using. Many metal parts and products surface coating facilities are very complex with many coating application and cleaning operations, and the final rule allows several different methods of compliance for each of these operations. In order for the regulatory authority to understand how such a facility demonstrated compliance, the compliance options must be known. The information that must be submitted to demonstrate continuing compliance differs depending on which compliance option is chosen. Moreover, there is no conflict with this requirement and a Title V permitting program, as a permitting authority must know what compliance options a source is operating under in order to ascertain whether the source is in compliance with its applicable requirements.

Comment: The commenter (IV-D-52) asked EPA to clarify the term “usage” and whether purchase quantities can be used in place of actual amount used in compliance calculations. The commenter (IV-D-52) noted that usage is especially hard to track for coatings with low usage rates and most facilities have purchase data, but not accurate usage data.

Response: In many cases, a facility can use purchase records and make the assumption that all the coating materials that are purchased are used in their coating operation in order to simplify compliance calculations. However, in some cases, purchase records would not be sufficient. For example, if a facility is using the same coatings for different surface coating operations that are subject to different emission limits, or if the facility has elected to use different compliance demonstration options for different coating lines or operations within the facility, then the facility will need to track coating usage in their different coating operations.

Comment: One commenter (IV-D-52) requested that §63.3931(b) be revised to require that records be kept for only three years and not five. Due to the increased amount of recordkeeping, the commenter believes five years is unnecessarily long.

Response: The minimum record retention periods required for all source category NESHAP are specified in the General Provisions specified in 40 CFR 63 Subpart A. An owner or operator is required to retain all records for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records for the most recent 2 years must be retained on-site; records for the remaining 3 years may be retained off-site but must still be readily available for review. The files can be retained on microfilm, microfiche, a computer, or magnetic disks. There are no special circumstances that justify shortening these minimum record retention periods for the metal parts and products surface coating source category. Furthermore, the 5-year record retention period is consistent with Title V permit program requirements.

Comment: One commenter (IV-D-59) noted that the quantity of HAPs used during a deviation are required to be used in compliance calculations as though they were used on an uncontrolled coating operation; however, no records are required as documentation. The commenter (IV-D-59) requested that §63.3930(j) be revised to read, “You must keep records of the date, time, and duration, of each deviation and the volume of coating, thinners, and cleaning material used during each deviation.”

Response: We do not agree that the change suggested by the commenter is needed. Section 63.3961(h)(4) of the rule specifies how to calculate the mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used in controlled coating operations during deviations using Equation 1D of that section. Section 63.3930(c)(4)(iii) specifies that you must keep records for the calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of §63.3961 and Equations 2, 3, and 3A through 3C of §63.3961. Therefore, these provisions already require you to keep the records suggested by the commenter.

Comment: One commenter (IV-D-63) stated that if the compliant materials option is used, the final rule should not require records of the volume of compliant materials used. This

information would serve no purpose. The commenter has proposed alternative language for §63.3930(d) with new text underlined:

(d) A record of the name ~~and volume~~ of each coating, thinner, and cleaning material used during each compliance period regardless of the compliance option used by the source. In addition, a record of the volume of each coating, thinner, and cleaning material used during each compliance period unless the compliant material option is used by the source.

Response: The EPA agrees that these records are not needed if a source is using the compliant materials option for all coating operations and plans to do so at all times in the future. However, EPA disagrees that this information would serve no purpose and is maintaining this requirement in the final rule for the following reasons. Keeping a record of the volume of each coating used allows verification that all coating materials used (except those that qualify for the low volume exemption) have been accounted for and included in the compliance demonstration. If a source is using the compliant materials option for some coating operations and the emission rate without add-on controls or the emission rate with add-on controls option for other coating operations, the source will need records of the amount of coating used in each operation under each compliance option to account for all materials subject to this rule. Similarly, if a source switches from the compliant materials option to another option, the source will need to demonstrate that it is in compliance based on the past 12 months of data and consumption data would be needed for that demonstration. Finally, other air programs under the Act and other environmental programs frequently require reporting of environmental releases (such as the Toxic Release Inventory) that must be calculated from consumption data, so it is likely that these records are already maintained by those sources that will be subject to this rule. As described in a previous response, many sources may use purchase records which they already have available to determine usage.

Comment: One commenter (IV-D-52) requested that EPA revise §§63.3930(h) and 63.3951(e)(4) to delete the requirement to keep a statement of which subparts under 40 CFR 262, 264, 265, and 266 apply to the facility. The commenter (IV-D-52) stated this requirement is redundant of records already required under those subparts.

Response: We have retained this requirement in the final rule because we believe it is necessary to ensure compliance with the Miscellaneous Metal Parts and Products NESHAP. In calculating the emission rate, metal parts coating facilities are allowed to take credit for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSD facility that is regulated under 40 CFR part 262, 264, 265, or 266. In order to be sure that the credit claimed by a metal parts coating facility is allowable, we need to know that the waste is being sent to a regulated TSD facility. The requirement to keep records of the TSD facility name and the subpart under which it is regulated are needed to allow verification that the source is eligible to take credit for the waste materials.

Comment: One commenter (IV-D-63) stated that EPA does not have Clean Air Act authority to require record keeping and reporting of surface coating material waste disposal because waste disposal is regulated under the Resource Conservation and Recovery Act (RCRA). The commenter (IV-D-63) stated that records of waste disposal, including quantities, are already required by RCRA and that maintaining separate records to comply with this rule is unnecessary. If this information were needed for an enforcement action, the commenter (IV-D-63) believes EPA has authority under RCRA to inspect these records. The commenter (IV-D-63) recommended deleting §63.3930(h)(1) and proposed alternative language for §63.3930(h)(2).

Response: We have authority to require the records and reports that are needed to determine compliance with and enforce the NESHAP. The Miscellaneous Metal Parts and Products NESHAP allows sources complying with the emission rate option to take credit for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSD facility. To take credit, these waste materials must be from an operation at the metal parts coating facility that is subject to the miscellaneous metal parts and products NESHAP and is using the emission rate (with or without add-on controls) compliance option. To verify the mass of HAP that are credited (i.e. subtracted from the emission rate calculation) in determining compliance with the emission rate limit, we need records of which metal parts coating operations generated the waste, the amount of waste from the metal parts coating operation that are sent or designated for shipment, and the amount of HAP contained in the waste. A facility may use records that it is required to keep under RCRA as part of this documentation. However, the RCRA documentation may not satisfy all the requirements of the

NESHAP. For example, the RCRA documentation might give the total amount of waste and HAP content for all waste shipped off-site, but if only a portion of that waste is from a metal parts coating operation that is using the emission rate compliance option, then the facility must keep records showing the amount of waste and the associated mass of HAP from that particular coating operation. Because these records are clearly needed to determine compliance with the emission limit in the metal parts rule, they have been retained in the final rule.

15.0 ADD-ON CONTROLS

15.1 General Comments

Comment: Three commenters (IV-D-12, IV-D-28, IV-D-47) maintained that the compliance requirements for capture systems and add-on controls are excessive and unreasonable. One commenter (IV-D-12) argued it will be expensive to conduct testing and to develop a work practice plan and start-up, shutdown, and malfunction (SSM) plans for all of the situations that are likely to arise. Two commenters (IV-D-28, IV-D-47) objected that (1) the rule requires far more reporting than is specified in the General Provisions and (2) the extra requirements are excessive and unnecessary, particularly the reporting requirements for deviations. The commenters claimed that the rule requires reporting of every change to a continuous parameter monitoring system, coating operation, emission capture system and add-on control device simply because there has been a single deviation in a reporting period. The commenters recommended that the rule conform to the requirements of the General Provisions.

Response: The monitoring, recordkeeping, and reporting requirements of the rule are consistent with those found in the General Provisions and are the minimum necessary to demonstrate that the source is achieving the emission limitations at all times, as required by the General Provisions. The reporting requirements for deviations are consistent with the minimum reporting required by the General Provisions. Table 2 to subpart MMMM compares the requirements of this rule to those of the General Provisions. Inspection of Table 2 will reveal that only those parts of the General Provisions that are relevant to compliance with this NESHAP apply and that no substantive additional requirements have been added.

15.2 Performance Testing Requirements

Comment: One commenter (IV-D-24) requested that EPA allow a one-time demonstration of capture and control efficiency. The commenter stated that §63.3960 should be revised such that sources with a control device will have to make only a one-time demonstration that the combined capture and control efficiency will reduce the emission rate from all materials to a level equivalent to the limits in the rule. This should require no additional compliance calculations. The commenter believes that the proposed recordkeeping would dissuade facilities from using add-on controls. Since the rule is technology-based and not an annual emission limit, sources should be able to use a superior technology without additional recordkeeping.

The same commenter (IV-D-24) also suggested that §63.3960 should be revised such that sources with add-on controls that achieve an emission rate equal to 50 percent or less of the rule limits should be exempt from usage tracking and control system parameter monitoring.

Response: This rule is a numerical emission limit in terms of lb of HAP emitted per gallon of coating solids used. It is not in the format of a percent emission reduction. Since the amount of the different types of coatings and additives used, and their HAP and solids contents, can affect the emission rate from a facility, they must be included in the compliance calculations in order to ensure a facility is achieving the numerical emission limits. The commenter provided no information to show how a one-time compliance demonstration or a one-time demonstration that the source was achieving an emission rate equal to 50 percent or less of the rule limits would ensure that a source is achieving the numerical emission limit on a continuous basis. Therefore, the final rule retains the requirement that sources with add-on controls perform the monthly compliance calculations.

Comment: One commenter (IV-D-24) believes §63.3960 should be revised such that existing control devices should be grandfathered in as far as demonstration of control efficiencies and establishment of compliance parameter monitoring conditions.

Response: Given the variable performance of existing control devices and the monitoring requirements associated with them, it is not feasible to grant a blanket provision that existing controls and monitoring conditions will constitute compliance with the control and monitoring provisions of this NESHAP. Existing control and monitoring requirements were established at sources for different reasons associated with different air pollution control

programs and stringency levels, and may not be adequate to determine continuous compliance with the NESHAP.

Comment: Three commenters (IV-D-28, IV-D-40, IV-D-47) objected to the requirement that the performance test for existing sources must be conducted at the compliance date, rather than 180 days after the compliance date (as specified in the NESHAP General Provisions). One commenter (IV-D-40) noted that §63.3960(b)(1) states that existing sources must conduct a performance test no later than the compliance date and suggested that this means the actual compliance period is less than 3 years after promulgation. The commenter requested the performance test be conducted no later than 180 days after the compliance date so that existing and new sources have an equal compliance burden. Two commenters (IV-D-28, IV-D-47) maintained that the timing does not allow for sufficient shake-down of control and monitoring devices and may require that testing be performed in cold weather, which raises safety issues. The commenters stated that EPA provided no rationale for overriding the General Provisions.

Response: We believe that the date specified in the proposed rule for completing performance tests at existing sources allows sufficient time to install emission capture systems and add-on controls, if a source chooses to use them, and complete the performance test. By completing the performance test before the compliance date and establishing operating limits based on the test data, EPA has a greater assurance that existing sources are in compliance at all times during the initial compliance period.

Since the compliance date for new sources is their startup date, it is not feasible to conduct a compliance test prior to the compliance date. Therefore, the compliance test must be performed no later than 180 after the compliance date. This difference from the requirements for existing sources reflects the inherent difference between new and existing sources that is also reflected in other parts of the rule.

Comment: One commenter (IV-D-13) argued that a facility should be allowed to use previous tests of capture system efficiency and control device destruction efficiency to demonstrate compliance. The commenter (IV-D13) suggested adding the same language found in §63.5160(a) of the metal coil coating MACT to establish requirements for data from previous tests:

- (1) The control device is equipped with continuous emission monitors [CEM] for determining total organic volatile matter concentration, and capture efficiency has been determined in accordance with the requirements of this subpart; and the continuous emission monitors are used to demonstrate continuous compliance in accordance with § 63.5150(a)(2); or
- (2) You have received a waiver of performance testing under § 63.7(h); or
- (3) The control device is a solvent recovery system and you choose to comply by means of a monthly liquid-liquid material balance.

Response: We agree that the most recent test data can be used to demonstrate compliance and to establish the operating limits required by this rule, as long as the previous test data meets the performance test requirements detailed in the final rule. However, depending on the actual timing and methodology of the most recent performance test, you would need to discuss the need for new test data with your enforcement authority and include such information in your initial notification.

The waiver of performance testing for a control device equipped with a CEM in the metal coil rule would only apply to sources in the metal parts source category if the CEM measured both inlet and outlet concentration to determine destruction efficiency. However, since the metal parts rule requires that a source determine control device destruction efficiency, a facility using a CEM as specified in the metal coil rule would be fulfilling (at least in part) the testing requirements in the metal parts rule if they obtained permission to use an alternative method under §63.7(f) of the General Provisions.

Waivers of performance testing as specified by the General Provisions in §63.7(h) are granted on a case-by-case basis must be applied for as specified in §63.7(h). The final rule cross references this provision which clarifies the conditions under which a waiver may be granted.

Sources that are using a solvent recovery system and performing a liquid-liquid material balance are already exempt from many of the performance testing requirements in the final rule.

Comment: One commenter (IV-D-13) requested that EPA revise the rule to replace the measurement of TVH with the more familiar total organic compounds (TOC) as determined by EPA Method 25 or 25A (25 measures TOC without methane for sources controlled by combustion devices using natural gas as fuel). The commenter (IV-D-13) argued that this would

be more consistent with other NESHAP that require performance tests to measure TOC excluding methane and ethane.

Response: We do not agree with the commenters' concern and believe the definition for total volatile hydrocarbon (TVH) is appropriate for the intended use in the test methods. Methods 204 A through F are the correct methods for determining capture efficiency. All of these methods rely on the use of a flame ionization analyzer (FIA) as the analytical technique. This rule does not change or modify the methods except to change the terminology of the compounds measured by the (FIA) from "VOC" to "TVH." If the commenter is not concerned with the terminology but, in fact, believes that Methods 204A through F are not the appropriate methods for determining capture efficiency (or wishes to modify the methods in some way), the owner/operator can apply for the use of an alternative method under the provisions of §63.3965(e).

Comment: One commenter (IV-D-11) expressed support for the alternative capture efficiency protocol of §63.3965(e). Another commenter (IV-D-19) requested that the final rule should allow sources to request alternative requirements for measuring capture efficiency from permanent total enclosures and partial enclosures. One commenter (IV-D-36) stated that EPA should allow sources to develop and use other capture system efficiency measurement protocols appropriate for the shape and size of their parts and coatings that would be approved by the EPA or delegated agency. According to the commenter, alternative protocols should not have to meet the data quality objective (DQO) or lower confidence limit (LCL) approach in Appendix A to 40 CFR 63 subpart K, as required by proposed §63.3965(e).

Response: Section 63.3965 of the rule provides the procedures and test methods for determining the emission capture system efficiency. The rule does not require 100 percent capture efficiency, but provides an option for assuming 100-percent capture efficiency if the capture system is designed and operated to meet the PTE criteria of Method 204. You can use a partial enclosure (an enclosure that does not meet the PTE criteria) and measure the capture efficiency of the system using the procedures in Method 204 and 204 A through F (§§63.3965(b-d)). Furthermore, §63.3965(e) specifically allows you to use an alternative protocol to determine the capture efficiency of the system. These alternative protocols can be designed to be most appropriate for the coatings and the shape and size of the parts at a facility, as requested by

commenter IV-D-36, but the DQO and LCL criteria will assure that the protocol accurately measures the efficiency of the capture system.

Comment: One commenter (IV-D-13) requested that EPA allow capture efficiency test runs shorter than 3 hours if they are representative of VOC capture system performance.

Response: The EPA Methods 204 and 204A through F specify that each capture efficiency test run should be 3 hours or the duration of a production run, whichever is longer, up to a maximum of 8 hours per run. Sources can apply for approval to use a shorter period under §63.7(f) of the General Provisions or apply for approval of an alternative protocol meeting the DQO or LCL criteria in Appendix A to 40 CFR 63 subpart K.

Comment: One commenter (IV-D-13) asked for clarification on whether capture efficiency tests are required when only part of the coating line (e.g., booth, flash-off area, or drying and curing oven) is enclosed by a PTE. The commenter noted that on some coating lines, only the booth or oven emissions, but not both are captured.

Response: If only part of the coating operation is enclosed in a PTE, such as a spray booth, then the capture efficiency of the entire coating operation must still be determined. However, if part of the coating operation is a PTE, then a facility may be able to simplify the capture efficiency determination by having to construct a temporary total enclosure only around the part of the coating operation that is not enclosed by the PTE.

Comment: Two commenters (IV-D-28, IV-D-47) stated that the requirements for measuring capture efficiency are not feasible for rubber-to-metal operations. The commenters explained that neither total permanent enclosures nor temporary total enclosures are practical for rubber-to-metal operations. Therefore, the commenters predicted that many rubber-to-metal bonding facilities would need to rely on 63.3965(e) to develop an alternative protocol for measuring capture efficiency. The commenters asked EPA to review 63.3965(e) to ensure that it allows sources to develop an alternative test method of measuring capture efficiency based on the HAP content of the material applied, volume of material applied as determined by material balance, and the inlet and outlet HAP concentrations as determined by stack testing.

The second commenter (IV-D-47) stated that the compliance testing costs are unreasonable for adhesive coating operations for rubber-to-metal bonding. First, the commenter stated that permanent total enclosures are not always feasible for these processes. Second, where

a PTE cannot be used, Method 204 must be used to demonstrate the performance for capture systems. According to the commenter, Method 204 is a complicated and expensive procedure because the air flow rate from the temporary total enclosure must be carefully regulated so as not to interfere with the proper operation of the permanent capture system, and the emissions from the permanent capture system and the temporary enclosure must both be both measured simultaneously to determine capture efficiency.

Response: Section 63.3965(e) allows a source to use any alternative method that meets the data quality objectives (DQO) or lower confidence limits (LCL) as described in Appendix A to 40 CFR 63, subpart KK. This appendix establishes statistical criteria for determining capture efficiency based on a mass balance of the HAP introduced to a capture system and the amount of HAP measured at the exit of the capture system or the inlet to the add-on control device. Therefore, this provision can be used by sources to develop an alternative test method of measuring capture efficiency based on the HAP content of the material applied, volume of material applied as determined by material balance, and the inlet and outlet HAP concentrations as determined by stack testing, as suggested by the commenter.

Comment: One commenter (IV-D-47) stated that the rule is unclear about the physical extent of the coating process that must be enclosed for the Method 204 capture system efficiency determination. After a coated part has passed through the final process equipment, a small amount of residual organic HAP material may be present on the coated product after it goes to storage. The commenter suggested that the final rule specify that the coating process ends at the point that the coated part exits out of the final oven, and emissions beyond this point need not be considered in determining capture efficiency.

Response: As defined in §63.3981, a “coating operation” always includes at least the point at which a given quantity of coating or cleaning material is applied to a given part and all subsequent points in the affected source where organic HAP are emitted from the specific quantity of coating or cleaning material on the specific part. Therefore, all process equipment in which coating application and curing occurs must be enclosed for the Method 204 capture efficiency determination. If HAP are emitted after a part leaves the emission capture system (such as the final drying and curing oven) then these emissions must be accounted for in determining capture efficiency and the facility cannot assume that all emissions are captured.

Comment: One commenter (IV-D-37) stated that the test methods in §63.3966(c) are not appropriate because in some regenerative thermal oxidizer (RTO) designs, the exhaust from the concentrator returns to the process without venting to the atmosphere. These cases require that the concentration be measured separately, making the proposed test methods inappropriate. The correct approach is to measure the capture efficiency of the building enclosure using Method 204E and the efficiency of the thermal oxidizer using Method 25A.

Response: The commenter is correct. Section 63.3966(c) specifies that if two or more add-on control devices are used for the same emission stream (such as a concentrator and thermal oxidizer used in series with each having an outlet to the atmosphere), then you must measure emissions at the outlet to the atmosphere of each device. If, as in the commenters example, the concentrator exhaust is returned to a building enclosure that qualifies as a PTE (or for which capture efficiency is measured using Method 204 or 204A through F), then it does not need to be measured since it will not be emitted until a portion of it is passed through the thermal oxidizer. Therefore, only the efficiency of the thermal oxidizer needs to be measured.

Comment: One commenter (IV-D-37) requested that the rule should include measurement methods in place of EPA Method 25A that exclude methane from the total hydrocarbon measurements to determine reduction efficiency. The commenter noted that methane is the principal component of natural gas and natural gas-fired heaters are used in some painting operations and for desorbing some concentrators. According to the commenter, the methane in the exhaust from these heaters will be measured as a hydrocarbon by Method 25A and will lead to an incorrect and lower measurement of reduction efficiency. The commenter reported that in California, Bay Area AQMD Method ST-7 and South Coast AQMD Method 25.1 are both validated methods for measuring total gaseous non-methane organic (TGNMO) compounds.

Response: The commenter is correct that a natural gas-fired combustion source upstream of the measurement point may introduce enough methane into the emission stream from unburned natural gas that it could affect the removal efficiency measurements using Method 25A to the detriment of the facility demonstrating compliance. Section 63.3966(b) of the rule instructed sources to measure total gaseous organic mass emissions as carbon at the inlet and

outlet of the add-on control device simultaneously, using either Method 25 or 25A of appendix A to 40 CFR part 60:

(1) Use Method 25 if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be more than 50 parts per million (ppm) at the control device outlet.

(2) Use Method 25A if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.

(3) Use Method 25A if the add-on control device is not an oxidizer.

Under §63.7(f) of the General Provisions, a facility may apply for permission to use Method 25 or an alternative method to measure TGNMO instead of total volatile hydrocarbons using Method 25A.

Comment: One commenter (IV-D-59) requested that the test data required in §63.3967(c)(1) [the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each regeneration cycle, and the carbon bed temperature after each carbon bed regeneration and cooling cycle] for carbon adsorbers be monitored and recorded after each test run instead of after each test to give three data points from which to select the minimum or maximum value. This interpretation is reinforced by use of the plural elsewhere in §63.3967(c).

Response: For carbon adsorbers, the carbon beds are often desorbed and regenerated only once per day during periods of non-production or only once every several hours. Since the performance test requires three runs lasting only 1 hour each, it is likely that the test would be completed between desorbing and regeneration cycles. Therefore, it is not practical to collect the desorbing gas mass flow and carbon bed temperature after each run.

Comment: One commenter (IV-D-59) suggested that the word “simultaneous” be added to the end of the first and last sentences of §63.3966(c). The commenter noted that measurement of the efficiency of add-on controls requires the simultaneous measurement of VOC at the inlet and outlet of the control device. Section 63.3966(c) requires the testing of each outlet if more than one control device is used for the same emission stream but does not require simultaneous measurement of multiple outlets.

Response: The commenter is correct that the measurements of multiple outlets should be simultaneous and this change has been made to the final rule.

Comment: One commenter (IV-D-63) suggested that the final rule should allow the use of Method 18 as an alternative for testing add-on controls. Methods 25 and 25A do not differentiate between HAP and non-HAP organic material, and therefore are inappropriate when a coating contains a mixture of HAP and non-HAPs.

Response: We have not included Method 18 as a compliance test method in the final rule. We recognize that Method 18 also is an appropriate method for determining compliance in many instances. However, in some cases, (such as when the emission stream includes many species of HAP) the use of Method 18 becomes difficult to apply. If the owner or operator believes Method 18 is an appropriate (or preferred) method for demonstrating compliance, the owner or operator can request the use of Method 18 under the provisions for using an alternative test procedure (40 CFR 63.7(f)).

15.3 Work Practices Requirements

Comment: One commenter (IV-D-33) requested that EPA remove the waste handling requirements from the work practice standards in §63.39893 associated with add-on controls and require that it is done in accordance with RCRA. Waste is covered by RCRA regulations and these do not increase emission reductions more than RCRA.

Response: The intent of the work practice standards is to have a complete plan for minimizing air emissions from raw materials storage and handling through materials use and waste handling, because all of these areas are potential sources of emissions from the coating operation covered by the metal parts coating rule. The final rule includes the waste handling requirements in the work practice standards in §63.3893. This section requires that a facility develop a work practices plan which specifies that, among other things, waste materials be stored in closed containers, spills of waste must be minimized, and waste must be conveyed in closed containers or pipes. The commenter provided no supporting data or information that complying with these requirements would present an additional burden or conflict with the RCRA requirements.

Comment: One commenter (IV-D-36) objected to the requirement in §63.3963 that the facility document that the work practices plan for sources with add-on controls continually

minimizes emissions. The commenter believes it is common sense that it will reduce emissions if the plan is continually followed.

Response: Section 63.3963 contains no requirement that the source document that the work practices plan continually minimizes emissions. Section 63.3963(e) requires you to demonstrate continuous compliance with the work practice standards in §63.3893. That is, you must demonstrate that the procedures you specified in you plan have been followed.

Comment: One commenter (IV-D-36) stated that if the final rule includes the HAP from cleaning materials in the emission limit compliance calculations, rather than adopting work practice standards for cleaning operations, then the requirement for a work practice plan for sources with add-on controls should be eliminated since it would be overly burdensome for facilities with add-on controls.

Response: The final rule includes the HAP from cleaning materials in the emission limit compliance calculations and also retains the requirement for a work practice plan for sources with add-on controls. The rationale for including the HAP from cleaning materials in the emission limit compliance calculations is provided in section 3.2 of this document. The work practice plan requirements are retained in the final rule because these requirements are intended to minimize emissions from material handling operations, including emissions from mixing and storage containers and from spills, that would not be captured by the emission capture system and vented to the add-on control device. In the other compliance options in the final rule, all HAP contained in coating materials, including cleaning materials, are assumed to be emitted, whether that occurs during mixing, storage, application, or accidentally through spills.

15.4 Operating Limits and Monitoring for Emission Capture Systems

Comment: One commenter (IV-D-16) suggested the operating requirements for locked bypass lines are dangerous to worker and process safety, since bypass lines should be available for safety venting. The commenter also argued that monitoring a bypass line flow control position indicator every 15 minutes is unreasonably costly and that monitoring once per shift would be sufficient to ensure that add-on controls are not being circumvented.

Response: The rule includes four options for bypass line monitoring to provide flexibility to sources. Not all of the options present the issues cited by the commenters and different sources can choose different options to suit their particular situation.

Comment: One commenter (IV-D-37) requested that EPA either remove or explain the requirement in §63.3968(g)(1)(i) for a flow sensor in each duct from the building enclosure to the control device, since the requirement appears to serve no compliance purpose.

Response: Emission capture systems that are not PTE as defined in §63.3965(a) must monitor flow rate and comply with a flow rate operating limit (specifically, see line 7 of Table 1 for emission captures systems that are not permanent total enclosures). The requirement specified in §63.3968 (g)(1)(i) is applicable only to emission capture systems that must comply with the operating limits specified in Line 7 of Table 1 to subpart M MMM. For these types of emission capture systems, flow rate is monitored to ensure that the emission capture system is maintaining the same capture efficiency as during the original performance test.

Comment: One commenter (IV-D-59) requested that the final rule explain why flow control position indicators are the only bypass monitoring devices in §63.3968(b)(1) that do not require a monthly inspection to verify that it will detect a diversion.

Response: The flow control position indicators specified in §63.3968(b)(1)(i) do not require a monthly inspection because they are required to create a record every 15 minutes of whether flow is directed to or diverted from the add-on control device, as well as a record of every time the flow direction is changed.

Comment: One commenter (IV-D-40) requested the final rule change the semiannual calibration of flow measurement required in §63.3968(g)(1)(iii) to annual to be consistent with other rules in 40 CFR part 63 such as subparts GGG, MMM.

Response: For purposes of enforcement, we believe that semiannual calibration and compliance reports are the minimum necessary to ensure that compliance is being achieved on a continuous basis. Therefore, no change in the frequency of these reports has been made in the final rule.

Comment: One commenter (IV-D-40) requested the final rule should not require the use of a manometer to check pressure gauge calibration because a manometer is not a practical instrument to be moving around an operating area. The commenter stated that it is more

practical to check a pressure gauge in the field with a digital instrument that is calibrated against a manometer in the shop. The commenter also requested the term “gauge” be changed to the more correct term of “pressure transmitter.”

Response: The final rule does not require the use of a manometer to check the calibration of pressure sensors. The final rule requires you to perform an initial calibration of the sensor according to the manufacturer’s requirements and to conduct a validation check before initial operation or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources. The final rule uses the term “pressure sensor” instead of “pressure gauge.”

15.5 Operating Limits and Monitoring for Add-on Controls

Comment: Several commenters (IV-D-16, IV-D-29, IV-D-44) stated that the operating limits for add-on controls should be established as allowable ranges. One commenter (IV-D-44) stated that, as proposed, the procedures establish an average operating value measured during a test as the minimum allowable value for subsequent operation. For example, under §63.3967(a), a thermal oxidizer system operating at its normal level will be out of compliance 50 percent of the time because the average is now the minimum, according to the commenter. The commenter stated that operating parameter limits established this way will not be achievable in practice.

The commenter (IV-D-44) suggested that the operating limits need to include a compliance margin for each operating parameter to account for normal operating variation and variation in the accuracy of the measurement equipment. Otherwise, altering the operating parameters during the test to establish achievable emission limits will affect the proper operation of both the coating system and the control device. The commenter recommended that the rule allow units to operate within a certain percentage of the value measured during the test to account for variability in normal operation. The commenter also recommended that EPA collect information on variability in normal operation so that non-compliance is really based on improper operation, rather than on normal variation.

Response: Establishing the add-on control device operating limit at the level demonstrated during the performance test is appropriate. The operating limit is based on a 3-

hour average (rather than an instantaneous or 15-minute value, for example) to accommodate normal variation during operation. In general, selection of the representative operating parameters for both the process and the control device for conducting the performance test is an important, and sometimes complex, task.

The facility does have the option of operating control devices, such as thermal oxidizers, at a lower set-point during the performance test in order to provide a greater compliance margin during normal operation. For example, assume the facility normally operates the thermal oxidizer at 1600° F (i.e., the auxiliary burner set point is 1600° F) but decided to lower the set point to 1580° F during the performance test, resulting in an 3-hour average temperature of 1575° F. The operating limit is 1575° F. After the performance test, the facility chooses to reset the incinerator operating set point to 1600° F to provide a compliance margin. There is nothing to prevent the facility from resetting the set point to the lower value for the next performance test, thereby maintaining the same operating conditions as previously demonstrated. Furthermore, under this regulation, the facility could establish a new, lower operating limit by conducting future (or additional) performance tests which demonstrate control device efficiency at lower operating temperatures. Of course, if a performance test is going to be conducted at a temperature lower than the existing operating limit, it is prudent to assure that this is clearly noted in the test plan submitted to the permitting agency and their approval is obtained.

Comment: One commenter (IV-D-44) stated that facilities should be able to test over a range of operating conditions, so that if there is a deviation from an operating limit, the source can estimate control efficiency during the deviation rather than having to assume zero-percent efficiency in the compliance calculations.

Response: If the monitored parameter deviates from the acceptable range and in the absence of any supporting data for the performance of the control unit at the conditions under which the deviation occurred, the facility must assume zero-percent control efficiency for all HAP emission calculations associated with the duration of the deviation. This language is consistent with other surface coating rules with similar emission sources and control devices. However, in response to comments, we have written the final rule to allow the use of test data to indicate the efficiency of the control device during deviations, as long as the use of these data is approved by the regulatory agency. Sources can opt to run performance tests at various

conditions (e.g., lower temperatures) to have such information available to support a lower HAP removal efficiency that could be used for deviations in the calculations for determining the 12-month rolling average HAP emission rate.

Comment: Two commenters (IV-D-28) stated that it is unrealistic to require compliance with the operating limits starting on the date that the performance test is completed [§63.3960(a)(4)]. According to the commenters, an additional 60 days is needed after the test to obtain test results, complete calculations, and develop the operating parameters.

Response: The operating limits are developed from data that are collected during and after the performance test for each emission capture system and add-on control device. The collection system for these data should be capable of reducing and displaying the data in the format required by the operating limits (e.g., 3-hour block averages for thermal oxidizer temperature). Therefore, there is no need to wait 60 days to obtain test results, complete calculations, and develop operating parameters. Sources can begin complying with those operating limits immediately upon completion of the performance test while assuming that the results of the performance test will show that the source is in compliance.

Comment: One commenter (IV-D-44) requested that EPA provide more justification for the frequency of inspections and preventive maintenance that is required for add-on control monitoring systems. A cost-benefit analysis should be done for less frequent inspections and maintenance. EPA should work with the affected industries to collect the information needed if it is not already available. The rule should give the source owner the option to reduce the frequency of maintenance and inspections after the owner has enough experience with the equipment to know that frequency can be reduced without a loss in reliability.

Response: The EPA believes that the inspection and maintenance requirements for add-on control devices are the minimum needed to ensure that the controls are operated and maintained in a manner consistent with good air pollution control practices. A source owner or operator has the option under §63.8(f) of the General Provisions to seek approval for alternative monitoring, including an alternative inspection and maintenance program for the monitoring systems.

Comment: Two commenters (IV-D-16, IV-D-29) disagreed with the requirement to maintain spare parts for routine repairs of monitoring equipment and add-on controls and

suggested this would require a source to have a disassembled spare monitor and add-on control device in their inventory.

Response: The EPA disagrees with the commenters' assertion that the rule requires a source to maintain a complete inventory of spare parts for monitoring systems and add-on controls. Section 63.3968(a)(4) only requires that you "have available necessary parts for routine repairs." This would include only those parts that could be reasonably expected to be serviced by plant personnel, such as a temperature probe or pressure sensor, rather than by the equipment manufacturer or other trained technicians.

Comment: One commenter (IV-D-33) recommended that EPA add provisions to address non-regenerative carbon adsorbers in the same way as the Aerospace Manufacturing NESHAP (40 CFR 63 subpart GG). The commenter argued that this would allow a facility to determine efficiency through engineering analysis or testing and would allow breakthrough detection using a CEM or portable device.

Another commenter (IV-D-19) observed that the rule has no monitoring provisions specific to non-regenerative carbon adsorption systems and that the provisions specific to regenerative carbon adsorption would not be applicable. The commenter noted that some plants may have non-regenerative carbon adsorption systems for odorous or highly toxic organic HAP. The commenter did not advocate for or against monitoring requirements for non-regenerative adsorbers.

Response: The metal parts database includes three sources with carbon adsorbers and all of these are regenerative carbon adsorbers. Because of the limited pollution control capacity of non-regenerative carbon adsorbers, it is unlikely that a major source metal parts surface coating operation would use one in order to comply with this rule. In the unlikely event that a source chooses to use a non-regenerative carbon adsorber, they could apply to the EPA for approval of alternative monitoring under §63.8(f) of the General Provisions.

Comment: One commenter (IV-D-37) stated that the monitoring desorption temperature of concentrators and the pressure drop across beds of rotary concentrators serves no compliance purpose and are non-critical parameters that do not relate to reduction efficiencies. The commenter suggested this requirement of §63.3968(f) should be dropped or explained, or other options made available.

Response: Desorption temperature is monitored to ensure that the desorption gas stream is sufficiently heated to ensure that the carbon or zeolite adsorbent is properly desorbed and regenerated for future adsorption. Pressure drop is monitored to ensure that the seals around rotary carbon or zeolite beds are adequate to prevent gasses from bypassing the adsorbent. In systems using multiple beds, monitoring pressure drop ensures that the valves that shift beds between adsorption and desorption cycles are functioning properly and exhaust is not bypassing the bed that is in the adsorption cycle. These requirements have been retained in the final rule.

Comment: One commenter (IV-D-40) requested the final rule revise the requirement for daily inspection of the pressure tap for pressure gauges required in §63.3968(f)(2)(iv) and (g)(2)(iii). The commenter (IV-D-40) believes the pressure tap meets the definition of an instrumentation system (§§63.161 and 63.1001) which requires inspection every 5 years or after evidence of a leak.

Response: The final rule does not require daily inspection of the pressure tap in pressure gauges or sensors. You are required to conduct accuracy audits every quarter and after every deviation; perform monthly leak checks on pressure connections; and perform a visual inspection of the sensor at least monthly if there is no redundant sensor.

Comment: One commenter (IV-D-40) requested the final rule clarify the method required for monthly leak checks of mechanical connections for sensors of pressure drop across rotary concentrator and emission capture systems. The commenter (IV-D-40) stated if Method 21 is required, then monthly checks are excessive and should be every 5 years to match Subparts H and TT (§§63.169 and 63.1010). If the intent was a pressure test, the monthly checks are still excessive. The commenter (IV-D-40) suggested the leak checks be as often as the integrity check.

Response: These requirements in the final rule have been revised since proposal to specify that the monthly leak checks on pressure connections must ensure that a pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds. We feel that monthly leak checks are needed to ensure that the pressure monitoring devices are operating properly. Less frequent checks could lead to excess emissions over a prolonged period because of faulty readings for pressure drop on emission capture systems or add-on control devices.

Comment: One commenter (IV-D-40) requested changing the averaging time for continuous temperature monitoring from a 3-hour average to a one hour average for consistency with other MACT standards.

Response: The averaging period should be short enough to observe significant changes in control device performance, and to allow early detection of problems so that timely corrective action is possible. At the same time, averaging periods should not be so short that minor perturbations as a result of normal variations result in a deviation. We believe a 3-hour period is a sufficient amount of time to allow for normal variations in control device parameters such as temperature. The 3-hour average is consistent with the demonstration of performance during the three 1-hour performance test runs. Furthermore, the 3-hour period is consistent with averaging times for other surface coating rules with similar emission sources and control devices.

Comment: One commenter (IV-D-40) requested the final rule change the semiannual electronic calibration of temperature monitoring devices to annual. The commenter believed semi-annual calibration is unnecessary because the temperature monitoring devices are stable once initially calibrated and to calibrate requires the thermal oxidizer to be shut down. The commenter noted that other rules in 40 CFR part 63 (e.g., subpart GGG, MMM) require only annual calibration.

Response: The final rule requires a validation check for temperature sensors before using the sensor for the first time or when relocating or replacing the sensor, by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature. The final rule also requires an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor output to redundant temperature sensors, to calibrated temperature measurement devices, or to temperature simulation devices. These procedures do not require that a thermal oxidizer be shut down. The provisions for temperature sensors in the final rule are consistent with the provisions for temperature sensors in other surface coating rules with similar emission sources and control devices.

Comment: One commenter (IV-D-40) requested that the final rule remove the monthly electrical connection and integrity checks required in §§63.3968 (c)(3)(vii), (f)(2)(vii), (g)(2)(vi). The commenter stated that it is unclear on what “all electrical connections” include and believes

monthly checks would compromise the electrical connections and possibly create new problems like corrosion inside a junction box and cause equipment to be off-line while performing these checks. The commenter recommended the manufacturer's operating and maintenance recommendations be used as a substitute.

Response: The final rule does not include the proposed requirements for monthly electrical connection and integrity checks. We agree with the commenter that these checks could themselves compromise the integrity of the electrical connections. The final rule includes provisions that require monthly inspections of each continuous parameter monitoring system sensor only if there is not a redundant sensor. The final requirements are adequate to assure compliance and are consistent with in other surface coating rules with similar emission sources and control devices.

Comment: One commenter (IV-D-63) recommended that the final rule state that a deviation resulting from a monitoring non-availability is not a violation of the standard. The commenter argued that a deviation from monitoring requirements should not be a violation as long as the monitoring equipment has been properly maintained and the monitoring failure was not reasonably preventable.

In addition, the commenter (IV-D-63) recommended that the operating limits in Table 1 be deleted because operating limits are only indicators of compliance and do not establish compliance. The commenter argued that exceeding an operating limit does not necessarily mean that the emission limit was exceeded. For example, a performance test rarely demonstrates the lower limit of performance, so operating parameters outside of the range used in the performance may in fact still achieve the required control efficiency. Deviations should not be considered to be violations of the standard, according to the commenter. The commenter argued that by turning an operating condition established during the performance test into an operating limit, EPA is, in effect, imposing a more stringent standard.

Response: We are using the term deviation to standardize the regulatory language used in NESHAP and to avoid any confusion that might be caused by using multiple, related terms such as excess emissions, exceedence, excursion, and deviation in the same regulatory program. The definition of deviation is consistent with the use of the term deviation in the Title V operating permit program. The definition of deviation clarifies that any failure to meet an

emission limitation (including an operating limit or work practice standard) is a deviation, regardless of whether such a failure is specifically excused, or occurs at times when the emission limitation does not apply, for example, such as during startup, shutdown, and malfunction. All deviations, therefore, are not necessarily violations. The enforcement authority determines violations. All deviations from emission limitations (including operating limits and work practice standards) are required to be reported, regardless of whether or not they constitute violations.

Operating limits for emission capture systems and add-on control devices are needed to ensure that they are achieving the same level of performance as during the initial performance test and compliance demonstration. As noted in the previous paragraph, a deviation from the operating limits for the emission capture system and add-on control device is not necessarily considered a violation of the emission limits, but must be reported so the enforcement agency can determine whether a violation occurred.

Comment: One commenter (IV-D-63) stated that a number of performance specifications for add-on controls listed in §63.3968(c), (f), and (g) should be deleted because they are vague, unnecessary, out-dated, and cannot be certified under Title V. Specifically, the commenter (IV-D-63) recommended that the following provisions be deleted: §§63.3968(c)(3)(iii), (v), and (vii); (f)(2)(ii), (iv), (v), (vi), and (vii); (g)(1)(ii) and (iv); and (g)(2)(ii), (iii), (iv) and (vi).

Response: As indicated in the responses to several other comments in this section, many of the requirements in §63.3968 have been revised since proposal, including those cited by the commenter. The final provisions in this section are substantially more concise and specific than those contained in the proposed rule.

15.6 Add-on Control Failures, Bypasses, and Deviations

Comment: One commenter (IV-D-19) requested that EPA clarify how add-on control equipment failures should be included in limits and how sources should account for add-on control bypasses when they use low-HAP materials that do not need to be directed to the add-on control device to comply.

Response: If a source experiences an add-on control device failure or bypass, then the source must assume that the coating operations performed during that failure or bypass are

“uncontrolled” and all HAP contained in those coatings that would otherwise be controlled are emitted to the atmosphere. The final rule has been revised to clarify how these periods should be handled in demonstrating compliance and the compliance calculations. If a source uses a low-HAP material that does not need to be directed to the add-on control device to comply, then the source may either do a separate compliance demonstration for that material, using either the compliant material option or the emission rate without add-on control option, or include those coatings in the add-on control device compliance calculations and assume that they were uncontrolled and all HAP were emitted and not captured by the add-on control.

Comment: Several commenters (IV-D-13, IV-D-36, IV-D-52, IV-D-63, IV-D-65) objected to the requirement that emissions calculations during deviation periods must assume that the capture system and control device are achieving zero-percent efficiency.

According to one commenter (IV-D-65), any quantitative data on emissions should be allowed to be considered if agreed to by the enforcing agency. Another commenter (IV-D-52) suggested that efficiency should be prorated to reflect actual conditions and not arbitrarily set at zero. One commenter (IV-D-63) suggested that the established control efficiency should continue to be used during periods of data non-availability, as long as no other information suggests that controls are not performing.

One commenter (IV-D-13) requested that EPA revise §63.3961(h) to allow a facility to estimate capture or destruction efficiency during deviations, based on design data or test data. The commenter maintained that deviations due to missing operating parameter data or a malfunctioning monitoring device should not be treated as zero emission reduction.

Another commenter (IV-D-36) expressed that it is an unreasonable burden to require sources to perform an incremental calculation representing several hours of operation when compliance is based on a 12-month rolling average. The commenter believes the SSM plan would limit the amount of time a source could operate during a deviation so it would not represent a large percentage of total operating time.

Two commenters (IV-D-36, IV-D-63) stated that if the zero-efficiency assumption is in the final rule, it should be refutable if the source can demonstrate through monitoring of other parameters, compliance with standard procedures, or other means (such as fuel consumption or manual temperature recordings) that some or all of the emissions were controlled.

Response: If a source has manually collected parameter data indicating that an emission capture system or control device was operating normally during a parameter monitoring system malfunction, these data could be used to support and document a different control efficiency, and the source would not have to assume zero-percent efficiency.

If a source has data indicating the actual performance of an add-on emission capture system and control device (e.g., percent capture measured at a reduced flow rates or percent destruction efficiency measured at reduced thermal oxidizer temperatures) during a deviation from operating limits, then the source may use the actual performance in determining compliance, provided the use of these data are approved by the Administrator (i.e., the EPA or delegated State agency). The final rule has been revised to clarify that such data may be used rather than assuming that the efficiency is zero. The final rule does not allow a source to otherwise estimate the efficiency of a capture system or control device during a deviation because this would provide no assurance of the quality of the data used in the compliance calculation.

Comment: One commenter (IV-D-37) suggested that the capture system bypass provisions of §63.3968(b) be revised to account for planned daily bypasses during non-production periods when maintenance personnel work on the booth and applicators will require ventilation air flow. The commenter noted that car-seal or lock-and-key valve closures specified by §63.3968(b)(1)(ii) would not be acceptable when daily bypasses are performed during maintenance, but other options, including valve closure monitoring specified in §63.3968(b)(1)(iii) would be possible if the system is equipped with programmable logic controls.

The same commenter (IV-D-37) also noted that the rule needs to clarify what parts of a “coating system” must be shut down if a bypass occurs. The commenter argued that it is reasonable to shut down the application coaters, but not the conveyor or curing oven, which would cause significant loss of ruined parts that had been coated prior to the bypass condition.

Response: The provisions of the metal parts rule do not apply when metal parts and products surface coating operations are not being performed. Therefore, it is not necessary to revise the capture system bypass provisions to account for planned daily bypasses during non-production periods. We agree with the commenter that not all of the bypass monitoring

alternatives could be adopted by sources with daily bypasses for coating system maintenance. For this reason, the proposed and final rule includes several different bypass monitoring alternatives so that a facility can choose the alternative best suited to their operation.

We agree with the commenter that in the case of a control device malfunction that leads to a bypass, it is reasonable to shut down the application coaters, but not the conveyor or curing oven so that parts that are already coated can be fully processed and are not wasted. Once the coating has been applied, the HAP from that coating will be emitted. If the parts could not be fully processed and were ruined, additional emissions may occur as replacement parts are coated after the control device function is restored. The parts of a coating operation that will be shutdown during a control device malfunction should be specified in the SSM plan required by §63.3900(d).

Comment: One commenter (IV-D-44) requested that EPA revise the deviation reporting requirements in §§63.3963(b) and (f) to allow sources to comply with applicable Title V permit requirements and sources must comply with these sections only if they do not have Title V permits.

Response: Title V of the Act establishes the minimum requirements for State operating permit programs. Under Title V, sources subject to a NESHAP must also have an approved permit to operate that meets the requirements in 40 CFR part 70. However, many sources that are not subject to a NESHAP are required to have an approved operating permit that meets the requirements in 40 CFR part 70. In developing the Miscellaneous Metal Parts and Products NESHAP, we recognize the potential for regulatory overlap of this rule with certain requirements for sources subject to the Title V permitting requirements. Therefore, the recordkeeping requirements in the rule were selected to fulfill all obligations we must meet under Section 112 yet, to the maximum extent practicable and consistent with Act provisions, avoid duplication or overlap with recordkeeping requirements under Title V. Although these provisions address many potential overlap situations that can be anticipated, special or unique site-specific situations do still exist in which a surface coating operation is subject to requirements under both the NESHAP and Title V. Whenever the information required by a Title V permit is the same as that required by the NESHAP, duplicate records are not required. The same is true for reporting requirements in which the information needed is the same.

15.7 Compliance During Start-up, Shutdown, and Malfunction Periods

Comment: One commenter (IV-D-65) suggested that the final rule clarify that emissions during start-up, shutdown, and malfunction (SSM) periods will be excluded from the compliance calculations, if the start-up, shutdown, malfunction is managed according to the required SSM plan.

Response: You must include in the compliance calculations in §63.3961(h) the coating materials used during SSM periods and other periods when there is a deviation from the operating limits for emission capture systems and add-on controls.

The final rule and §63.6(f)(1) of the General Provisions states that standards apply at all times, except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. However, other parts of the General Provisions, specifically §63.6(e)(1)(i), require that a source be operated during SSM periods in a manner consistent with good air pollution control practices for minimizing emissions to the levels required by the relevant standards by either meeting the emission standard or complying with the SSM plan. The emission calculations that include the SSM period and the information collected by the facility according to their SSM plan will be used by the enforcement agency to determine compliance.

Comment: One commenter (IV-D-36) stated that EPA should not require reporting of every period of startup, shut down, and malfunction (SSM) as a deviation and should delete paragraph (3) of the definition of deviation. Paragraph (3) states that a deviation includes any instance when a source “fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.” The commenter argued the following:

- The General Provisions already require facilities to report SSM periods so the requirement created by paragraph (3) is redundant.
- It is inconsistent with §503(b)(2) of the Clean Air Act, which requires facilities to report deviations from permit requirements. If the source is not required to comply with an emission limit during SSM periods, then it cannot be deviating from a permit requirement when it is operating according to the SSM plan.

Response: This paragraph has been retained in the final rule because EPA and other enforcement agencies need to confirm whether or not the deviation was actually during a SSM period and, if not, whether that deviation constitutes a violation. A report of a deviation that occurs during a SSM period is needed to perform this analysis of whether that deviation actually constitutes a violation.

Comment: One commenter (IV-D-17) objected to defining and reporting as a deviation any failure to meet emission control requirements during periods of start-up, shutdown, and malfunction (SSM). The commenter claimed that SSM periods are exempted from compliance under the rule and that operations followed in accordance with the SSM plan should not be considered as deviations from the rule.

Response: We are using the term “deviation” to standardize the regulatory language used in each NESHAP and to avoid any confusion that might be caused by using multiple, related terms such as excess emissions, exceedance, excursion, and deviation in the same regulatory program. The definition of “deviation” is consistent with the use of the term “deviation” in the Title V operating permit program. The definition of “deviation” clarifies that any failure to meet an emission limitation (including an operating limit or work practice standard) is a deviation, regardless of whether such a failure is specifically excused, or occurs at times when the emission limitation does not apply, such as during startup, shutdown, and malfunction. All deviations, therefore, are not necessarily violations. The enforcement authority determines violations. All deviations from emission limitations (including operating limits and work practice standards) are required to be reported, regardless of whether or not they constitute violations, in accordance with the provisions in §63.3920(a)(7) and (c) of the final rule for reporting.

Comment: One commenter (IV-D-44) requested that §63.3920(c) be revised to clarify when SSM reports must be submitted to State permitting authorities versus EPA.

Response: We disagree with the comment that the rule needs to be clarified as to whether reports, particularly reports of startup, shutdown, and malfunction events discussed in §63.3920(c) of the final rule, need to be submitted to a State permitting authority or to EPA. Consistent with 40 CFR 63.12 (which is listed in Table 2 to the final rule) and §63.3980 of the final rule, whether EPA or a State, local, or tribal agency should receive reports required under

this rule is determined by the delegation status of the rule. As discussed in §63.3980(a) of the final rule, a source should contact its EPA Regional Office to find out if implementation and enforcement of the final rule has been delegated to its State, local, or tribal agency.

Comment: One commenter (IV-D-63) objected to the requirement in §63.3963(h) for a source to demonstrate that the SSM plan was followed. The final rule should state that a source operating in accordance with its SSM plan is presumed to be in compliance unless demonstrated to the contrary following a request by EPA to demonstrate compliance with the SSM plan. Otherwise, the final rule will discourage sources from shutting down to decrease the risk of non-compliance, and energy and materials will be wasted by sources operating continuously. One commenter (IV-D-36) stated that EPA should revise §63.3963(h) so that it is assumed the source has operated according to the SSM plan during a deviation and that a deviation is a violation only if EPA can demonstrate otherwise. According to the commenter, the SSM reporting in §63.3920(c) already requires sources to document activities during SSM periods and no additional burden should be put on the source.

Response: Section 63.3963(h) has been deleted from the final rule since SSM plans are not approved by EPA or permitting authorities. Therefore, compliance with a SSM plan is not an assurance that a facility has taken all steps necessary to minimize emissions consistent with good air pollution control practices, as required by §63.6(e) of the General Provisions. The EPA or permitting authority must still evaluate the actions taken during a SSM period and relevant emissions data to determine if a source was in compliance and it is not presumed that a source is in compliance if the SSM plan was followed.

Section 63.3920(c) of the final rule requires you to submit a semiannual startup, shutdown, and malfunction report documenting that you followed the procedures in your plan, or if the plan was not followed, documenting what actions were taken. (An immediate report is also required if you do not follow your plan.) A separate semiannual startup, shutdown, and malfunction report is not required if you include the information in your semiannual compliance report. Hence, you can include an explanation of actions taken to minimize HAP emissions during any startup, shutdown or malfunction occurring during the semiannual reporting period. The report is submitted to your delegated State agency, who will determine if a deviation constitutes a violation. Malfunctions which are addressed by following the SSM plan would

likely not be considered a violation of the standard. The commenter has provided no data or evidence to support the claim that these provisions, without a presumption of compliance, will discourage sources from shutting down to decrease the risk of non-compliance.

15.8 Miscellaneous Comments on Add-On Control Device Provisions

Comment: One commenter (IV-D-19) recommended that sources using a solvent recovery device and performing a mass balance to demonstrate compliance be required to speciate the recovered HAPs to better estimate HAP recovery efficiency and the HAP to solids ratio. The commenter noted that recovery systems may selectively recover some volatiles more efficiently than others and the ratio of recovered to employed volatiles should not be automatically used as HAP efficiency for demonstrating compliance.

Response: Those facilities using a solvent recovery device are more likely to use a limited number of different solvents with fewer HAP species than facilities using other types of add-on controls or relying on reformulated coatings to comply. Therefore, overall volatile collection efficiency with a solvent recovery device should be a reliable indicator of collection efficiency for total HAP and each specific HAP. Speciating the recovered HAP would not result in any added environmental benefit or increased assurance of compliance.

Comment: One commenter (IV-D-40) stated that the “manufacturer’s specified maximum operating [temperature or pressure] range” is not the correct parameter for determining when sensors need to be replaced or recalibrated [§§63.3968(c)(3)(vi), (f)(2)(vi), and (g)(2)(v)]. The commenter (IV-D-40) suggested revisions to reflect that the sensors need to be replaced or recalibrated any time the sensor exceeds the manufacturer’s specified maximum “safe design operating range.”

Response: We agree with the comments made concerning this section of the proposed rule, and we revised this section to reduce the monitoring burden. The final requirements are adequate to assure compliance and are consistent with existing rules such as the printing and publishing NESHAP (40 CFR part 63, subpart KK) as requested by the commenters. For example, §63.3968(c)(3)(ii) of the final rule specifies that the temperature sensor tolerance must have an accuracy of ± 1 percent of the temperature being monitored or $\pm 5^\circ$ F, whichever is greater.” If you wish to monitor an alternative parameter for an oxidizer, then you must apply for

and receive approval of an alternative monitoring method under § 63.8(f) of the General Provisions. Through this procedure, you have the option of selecting monitoring appropriate to your specific facility that is the most efficient for your needs while still assuring that continuous compliance is maintained.

Comment: One commenter (IV-D-36) requested that sources in the automobile and light duty truck industry be allowed to substitute the “Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light Duty Truck Topcoat Operations,” EPA-450/3-88-018, for many of the proposed monitoring, recordkeeping, and reporting requirements for sources with add-on controls. The commenter provided several reasons to allow the alternative protocol.

- Sources, State agencies, and EPA are already familiar with these provisions and they have been included in new source and State operating permits.
- The protocols address most of the monitoring contained in the proposed metal parts rule, including capture and transfer efficiency.
- At some facilities, the automobile and metal parts surface coating operations are controlled by the same equipment, so it does not make sense to impose two separate sets of requirements on the equipment.
- The commenter provided a table comparing the similarities and differences between the protocol to the proposed metal parts MRR requirements.

Response: The final rule simplifies compliance for metal parts surface coating operations that are collocated with automobile and light duty truck manufacturing and surface coating operations. If you perform surface coating of metal parts or products that meet the applicability criteria for both the Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII (under development)) and the Miscellaneous Metal Parts and Products NESHAP, then you may comply with the requirements of the Automobiles and Light-Duty Trucks NESHAP for the surface coating of all your metal parts used in automobile or light-duty truck manufacturing in lieu of complying with each subpart separately. Since this change has been made, it is not necessary to allow these sources to substitute the “Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light Duty Truck Topcoat Operations” for the monitoring, recordkeeping, and reporting requirements in this rule.

16.0 MAGNET WIRE

Comment: Several commenters (IV-D-11, IV-D-41, IV-D-65) from the magnet wire industry argued that the testing and monitoring provisions for sources with add-on controls were not applicable to magnet wire coating machines. The commenters noted that magnet wire coating machines require an oven to cure the coating that is applied to the wire as it passes through the machine. The heat used to maintain the temperature of the oven is provided by the combustion of the solvents that are evaporated from the coating. Although a supplemental burner or heater is used to heat the oven at startup, once the oven is running, the temperature is maintained only by combustion of the solvent vapors. Combustion is maintained in modern ovens by a bed of catalyst that is located in the recirculating gas stream within the oven. In some older ovens, a burner tube is used in place of the catalyst bed to maintain temperature, although the solvent vapors are still the primary source of fuel for the oven. Air is re-circulated from an evaporative zone in the oven, through the catalyst bed or burner tube, and back to the evaporative zone. A fraction of the air is vented to the atmosphere after combustion and replaced with air drawn in through the openings in the oven to maintain oxygen levels inside the oven.

According to the commenters (IV-D-11, IV-D-41, IV-D-65), magnet wire ovens are different from other surface coating sources in several ways. First, the coating is applied by an automated machine that runs continuously until the product on that machine is changed. Second, the curing oven is essentially a narrow tube and is different from a spray booth or other type of enclosure used in other coating operations. Third, the catalyst bed or burner tube in the curing oven is integral to the curing oven and it must function properly to make a salable product. If the curing oven, catalyst bed, or burner tube malfunction, the machine cannot make a product, regardless of the air quality impacts of the malfunction. Therefore, proper operation of the machine is inherently consistent with good air pollution control practices.

The commenters (IV-D-11, IV-D-41, IV-D-65) argued that these differences make the testing and monitoring requirements for sources with add-on controls inappropriate for magnet wire coating machines. In particular, emissions at the inlet of the burner tube or catalyst bed cannot be measured in order to determine destruction efficiency across the burner tube or catalyst bed. Two commenters (IV-D-11, IV-D-41) proposed an alternative equation for determining total inlet mass of organic HAP emissions. The commenters maintained that this approach has been approved by States for demonstrating compliance. The commenters added that measuring destruction efficiency is also complicated by the fact that the oven recirculates emissions before a portion of the flow is vented to the atmosphere.

The commenters (IV-D-11, IV-D-41, IV-D-65) also noted that since magnet wire ovens are different from spray booths and other types of enclosures, the capture efficiency monitoring provisions are inappropriate. Since workers must access the wire inlets and outlets of the ovens while the machines are operating, it would be difficult to maintain the operating limits specified for enclosures used with add-on controls. Worker access would also prevent many ovens from meeting the criteria for permanent total enclosures.

Finally, the commenters (IV-D-11, IV-D-41, IV-D-65) noted that many magnet wire facilities have dozens, and occasionally hundreds, of magnet wire coating machines and that each machine has its own oven and burner tube or catalyst bed. Therefore, it would be overly burdensome to require emission testing of each magnet wire coating machine as part of an initial compliance demonstration and to require continuous parameter monitoring to demonstrate ongoing compliance. The commenters proposed changes that included alternative emission testing and monitoring provisions that reflected the practices already adopted by magnet wire facilities and incorporated into their State operating permits.

Response: We agree with the commenters that magnet wire facilities are substantially different from other surface coating sources with conventional capture systems and add-on controls, and these differences were not reflected in the proposed rule. The final rule incorporates emission testing and parameter monitoring provisions that reflect the practical constraints of this industry.

The final rule includes alternative procedures for capture efficiency and destruction efficiency measurement where the control device is internal and integral to the oven so that it is

difficult or infeasible to make gas measurements at the inlet to the control device. These alternative procedures for the magnet wire industry have been consolidated into appendix A to the final rule.

The alternative procedures determine the organic carbon content of the volatile matter entering the control device based on the quantity of coating used, the carbon content of the volatile portion of the coating, and the efficiency of the capture system. The organic carbon content of the control device outlet (oven exhaust for ovens without an external afterburner) is determined using Method 25 or 25A. You do not need to test every magnet wire coating machine. Instead, with approval you may test a single unit that represents identical or very similar magnet wire coating machines. We agree with the commenters that identical or very similar magnet wire coating machines achieve very similar capture and control device efficiencies, and it would be overly burdensome to test every machine at a facility. However, it is important to note that every untested magnet wire coating machine must comply with the operating limits that are established during the performance test of the representative unit.

If the capture system for a magnet wire coating machine meets the definition of a permanent total enclosure, then you may assume capture efficiency is 100 percent and no measure of capture efficiency is needed. Otherwise, capture efficiency can be measured using a liquid-to-uncaptured-gas protocol using a temporary total enclosure, or an alternative capture efficiency protocol meeting data quality objectives or lower confidence limits as described in appendix A to the National Emission Standards for the Printing and Publishing Industry (40 CFR part 63, subpart KK). These approaches are more appropriate when it is difficult or infeasible to make gas measurements at the inlet to the control device for measuring capture efficiency with a gas-to-gas protocol. As indicated by the commenters, these alternatives have already been adopted by some facilities in the magnet wire industry to demonstrate compliance under State operating permit programs.

Capture efficiency of each magnet wire coating machine will be monitored by requiring each oven to be fitted with an interlock that will stop the coating process or with an alarm that will sound if a fan becomes inoperable or if the oven begins to overheat. Overheating is an indirect indicator that a fan in the oven is inoperable. Each oven must also be checked once every 6 months with a smoke stick to ensure that air is being pulled into the oven.

An alternative procedure for monitoring catalytic oxidizers on magnet wire coating machines is provided in appendix A of the final rule. This alternative allows you to develop and implement an inspection and maintenance plan as described in appendix A of the final rule and to measure the temperature either before or after the catalyst bed and compare the measured temperature to the operating limit. In addition to the inspection and maintenance plan, you must either perform periodic catalyst activity checks, or check the concentration of organic compounds in the oven exhaust.

Comment: Two commenters (IV-D-11, IV-D-41) argued that annual sampling of catalyst activity in §63.3967(b)(4)(i) as proposed is too frequent and would cause excessive downtime and unreasonable costs to remove and sample the catalyst for the magnet wire industry. The commenters noted that catalyst beds routinely perform at compliance levels for 2 or more years. The commenters believed that the final rule should require periodic sampling following the manufacturer's and catalyst supplier's recommended schedule and procedures and dictated by unit operation and maintenance records. In addition, the commenters stated that it is not necessary to conduct a performance test whenever the catalyst is replaced. Replacing the catalyst in itself ensures compliance, as long as the operating limits specified in Table 1 of the rule as proposed are achieved.

Response: We agree with the commenters that periodic sampling and analysis of the catalyst activity is sufficient for the magnet wire industry because the catalyst bed is integral to the proper functioning of the oven and the coating process. Therefore, for the magnet wire industry, periodic sampling and analysis consistent with the catalyst suppliers recommendations and the warranty period for the catalyst bed are sufficient. We also agree that replacement of the catalyst bed generally does not require a new performance test. Therefore, the final rule does not require a new test as long as the catalyst is similar to the old catalyst in kind and quality. Otherwise, a new test will be required.

Comment: Two commenters (IV-D-11, IV-D-41) contended that the proposed requirements in §63.3967(b)(4)(ii) and (iii) to perform monthly inspections of catalytic oxidizers are not practical or necessary for magnet wire coating machines because the burners and catalyst beds are inside the machine and integral to the proper functioning of the coating process. The commenters suggested a monthly external inspection and an annual internal inspection.

Response: We agree with the commenters that the proposed provisions were not practical or necessary for magnet wire sources. The final rule requires a monthly external inspection and an annual internal inspection. The annual internal inspection is not required for internal catalysts which cannot be accessed without disassembling the oven.

Comment: One commenter (IV-D-11) noted that, regarding operating limits for catalytic oxidizers in §63.3967(b)(4), there is redundancy among section paragraphs (b)(4)(i), (ii) and (iii) regarding annual and monthly requirements. The commenter (IV-D-11) provided revised rule language.

Response: We agree with the commenters that these sections contained some redundant requirements and they have been revised as suggested by the commenter.

Comment: One commenter (IV-D-65) believes that the economic impacts projected by EPA are too low. The commenter stated that potential costs for the magnet wire industry alone could be in the millions of dollars, and referred to comment letter IV-D-11. Commenter IV-D-11 cited high costs if magnet wire coating operations that have multiple ovens with integral hydrocarbon capture and destruction devices were required to follow the same design and monitoring specifications as other types of coating operations with add-on emissions capture and control systems. Commenter IV-D-11 recommended changes to the control device monitoring requirements for magnet wire coating operations that would reduce the monitoring costs while retaining emissions control.

Response: The final rule provides alternative testing and monitoring requirements for magnet wire coating operations that will reduce the cost of the compliance demonstration while still assuring compliance with the emission limits. We recognize that magnet wire facilities are substantially different from other surface coating sources, and these differences were not reflected in the proposed rule. The final rule incorporates emission testing and parameter monitoring provisions that reflect the practical constraints of this industry. Because of these changes in the final rule, the high costs estimated by the commenters to comply with the proposed rule are no longer relevant. The commenter did not provide any specific information to indicate that EPA has underestimated costs for any other source categories.

17.0 DEFINITIONS

Comment: One commenter (IV-D-19) suggested defining the term “affected source” as used in Tables 2 and 3 of the preamble because the term “coating operation” is confusing since it includes surface preparation and cleanup emission units. The commenter suggested that “affected source” be defined as it is in section III.C. of the preamble (67 FR 52789).

Response: The preamble to the final rule summarizes and describes the meaning of the term “affected source” in section II.C, and the term affected source is also used in the emission limit Tables 2 and 3 in section II.D of the preamble. However, the reader should refer to the regulatory language in §63.3882(b) for the actual definition of affected source that is used in determining applicability of the Miscellaneous Metal Parts and Products NESHAP. The definition in the rule lists the types of operations, equipment and items included in the affected source.

Comment: One commenter (IV-D-19) requested clarification of the definition of “controlled coating operation.” The commenter (IV-D-19) claimed the definition is confusing because of the inclusion of surface preparation and cleaning in the operations subject to the emission limits.

Response: Coating operations that use emissions capture and control systems may comply with the emission limits using the Emission Rate with Add-on Controls compliance option. A controlled coating operation, as defined in the final rule, is “a coating operation from which some or all of the organic HAP emissions are routed through an emissions capture system and add-on control device.” “Coating operation” is defined to include equipment used to apply cleaning materials to prepare a substrate for coating (surface preparation), to apply coating, to dry or cure the coating, or to clean coating operation equipment (equipment cleaning). Some facilities collect and control emissions from all phases of the coating operation. Others may

collect emissions from only a portion of the operation, such as just the application of coating, or just the dryer. The equations, test methods and procedures in §§63.3961 through 63.3966 explain how to calculate the mass of HAP emissions from the coating operation before add-on controls, determine capture efficiency, determine control efficiency, calculate organic HAP emission reductions, and calculate the overall emission rate achieved. The capture efficiency determination accounts for the portion of the coating operation from which emissions are captured and the effectiveness of the capture system. The overall emission rate calculation includes uncontrolled emissions for any portion of the coating operation from which emissions are not collected, as well as controlled emissions from portions of the coating operation from which emissions are collected and routed to a control device.

Comment: One commenter (IV-D-36) stated that the definition of “deviation” is overly broad and should be consistent with the definition in the Title V program (40 CFR 70).

- EPA should state that this definition is intended to define “a deviation from permit requirements” and that meeting the obligation to report deviations under this definition is sufficient to meet the obligation to report deviations under Title V.
- EPA should explicitly state that a deviation is not necessarily a violation, consistent with 40 CFR 71.6(a)(3)(iii)(C).
- EPA should clarify that operations outside the indicator monitoring ranges are not deviations provided the source meets the requirements to investigate and take corrective action. This is implied by paragraph (2) of the definition of deviation, but it should be revised as follows:

(2) Fails to meet any ~~term or condition~~ *permit requirements* that ~~is~~ *have been* adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

Response: We are using the term “deviation” to standardize the regulatory language used in NESHAP, and to avoid any confusion that might be caused by using multiple, related terms such as excess emission, exceedence, excursion, and deviation in the same regulatory program. The definition of deviation is consistent with the use of the term deviation in the Title V operating permit program. The definition of deviation clarifies that any failure to meet an

emission limitation (including an operating limit or work practice standard) is a deviation, regardless of whether such a failure is specifically excused, or occurs at times when the emission limitation does not apply, for example, such as during startup, shutdown, and malfunction. All deviations, therefore, are not necessarily violations. The enforcement authority determines violations. All deviations from emission limitations (including operating limits and work practice standards) are required to be reported, regardless of whether or not they constitute violations, in accordance with the provisions in §63.3920, “What reports must I submit?” Operating limits and deviations from them are discussed in §63.3892(b).

Comment: One commenter (IV-D-44) suggested that EPA revise §63.3981 (Definitions) to clarify that the term “Administrator” means the Administrator of the EPA, as represented by the appropriate Regional Office or the State or local agency which has been delegated authority. Alternatively, the rule could be revised so that all reports must be consistent with the requirements of Title V.

Response: The meaning of “Administrator” is given in §63.2 of the NESHAP General Provisions. The definitions in the General Provisions were referenced in the final Miscellaneous Metal Parts and Products NESHAP (see §63.3981), and apply to this rule. Administrator means the Administrator of the EPA or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of the NESHAP.)

Comment: One commenter (IV-D-52) requested that EPA define the terms “contiguous area” and “under common control” as used in the definition of major source.

Response: Section 112 of the CAA defines major source using the terms “contiguous area” and under “common control”. There has been a long history of interpretation of these terms under the Section 112 program, and they often require case-by-case determination due to the various site-specific issues involved in determining contiguous and the various business relationships that can determine common control. It is beyond the scope of this rule to write a definition of these terms. Note that a source can be contiguous even if it is bisected by a road or right of way. In making common control decisions, joint ownership, voting interest, contracts, liability, managerial hierarchy, and dependency (i.e., process, products, support) are screening tools that can be used. Specific questions about a given situation should be addressed to your state permitting authority or the appropriate EPA regional office.

18.0 IMPLEMENTATION

Comment: One commenter (IV-D-65) objected to the number of authorities within the rule that will not be delegated to state, local, or tribal agencies. The withheld authorities are compliance demonstration provisions. The commenter believes that these agencies need more, not less, freedom to enforce unique compliance demonstration philosophies due to the diverse nature of the miscellaneous metal parts sector. Another commenter (IV-D-36) stated that EPA should delegate all enforcement of the rule to the states rather than reserving approval of alternatives to work practice standards, and major changes to test methods, monitoring, record keeping and reporting. The commenter (IV-D-36) argued that determining what constitutes a “major” alternative could lead to confusion. If EPA disagrees with this suggestion, the commenter suggested EPA delegate MRR and work practices to states and reserve authority to approve major alternatives to test methods.

Response: The EPA typically delegates the administration of this and other MACT standards to State, local, or tribal agencies. With that delegation, these agencies may administer the program in a manner that is flexible and workable yet no less stringent than prescribed by Federal standards. These agencies would then have primacy in most aspects of the NESHAP implementation process. The final rule indicates authorities retained by the U.S. EPA (in §63.3980), including approval of major alternatives to work practice standards, test methods, monitoring, and recordkeeping and reporting requirements.

The NESHAP program is meant to set consistent national HAP emission standards, and EPA retains authority to approve major alternatives in order to ensure that the standards are implemented consistently and that state, local and tribal programs are at least as stringent as the NESHAP. For this reason, EPA retains authority to approve any alternatives to the applicability of the rule in §§63.3881 through 63.3883 and the emission limitations in §§63.3890 through 63.3893. Emission limitations include the numerical emission limits as well as operating limits

and work practice standards. Approval of alternatives to these sections could affect the basic stringency of the standards and set a national precedent, so it is not appropriate to delegate this authority.

It is EPA policy to retain authority to approve major alternatives to test methods, monitoring, recordkeeping, and reporting. For definitions of major alternatives, the delegation section of the final Miscellaneous Metal Parts and Products NESHAP refers to the NESHAP general provisions (§§63.7(e), 63.7(f), 63.8(f), and 63.10(f) of 40 CFR 63 subpart A) and to §63.90 of subpart E - Approval of State Programs and Delegation of Federal Authorities. Definitions of “major change to monitoring”, “major change to recordkeeping/reporting”, and “major change to test method” are contained in §63.90. Major changes to monitoring and test methods are defined to mean a modification to a federally enforceable monitoring requirement or test method that uses unproven technology or procedures (not generally accepted by the scientific community) or an entirely new method. Several examples are given in the definitions. Major changes to test methods or monitoring requirements often set a national precedent. As such, it is appropriate for EPA to retain approval of these changes and not delegate this authority. Similarly, §63.90 defines major changes to reporting/recordkeeping to include modifications that may decrease the stringency of the required compliance and enforcement measures, may have national significance (e.g. might affect implementation of the applicable regulation for other affected sources, might set a national precedent), or is not site-specific. Again, it is appropriate for EPA to retain authority to approve alternatives that may have national significance in the implementation and enforcement of this NESHAP. Section 63.90 also defines intermediate changes and minor changes. The reader is referred to the cited sections of 40 CFR part 63, subparts A and E to gain an understanding of what constitutes a major change for which authority is retained by EPA and what constitutes a minor or intermediate change that may be approved by the delegated state, local, or tribal agency.

Comment: One commenter (IV-D-19) stated that the final rule should include a list of organic HAP to aid the regulated community. The same commenter submitted a second comment (IV-D-53) stating that the term organic is used to designate chemical compositions that contain carbon, and that organic coatings are based on a resin that has the element carbon in its composition. Inorganic coatings typically have silicate or phosphate binders. The commenter

(IV-D-53) also stated that most coatings are organic, but a few in ceramics are inorganic in nature.

Response: While the rule does not specifically list organic HAP, there is a complete list of HAP in section 112 of the CAA. The metal parts rule regulates those HAP on the list which are organic compounds, a commonly understood chemistry term. Basically, organic compounds are compounds which contain carbon. The great majority of coatings used in miscellaneous metal parts and products contain only organic HAP and no inorganic HAP, so in most cases, all of the HAP contained in the coatings would be counted in determining organic HAP content, as long as they are present at levels above 0.1 percent for HAP that are OSHA-defined carcinogens or above 1.0 percent for any other individual HAP. Manufacturers' specifications, such as MSDS, should list the organic HAP contained in coatings purchased by affected sources. The final rule compliance determination sections specify how to determine organic HAP content using test methods or manufacturers' formulation data. One area of confusion has been the organic HAP content of solvent blends, where manufacturers' information may not list the individual organic HAP. The final rule includes tables with default organic HAP contents of commonly used solvent blends.

Comment: One commenter (IV-D-19) stated that it is not clear from section II.A of the preamble (67 FR 52783, August 13, 2002) how facilities should determine if they need limits on PtE to establish area source status.

Response: The procedures that a facility may use to demonstrate that it is an area source of HAP through a limit on its PtE are found in each State's program to implement Title V of the Act and in 40 CFR 70 and 71. As such, they are beyond the scope of this rulemaking and cannot be fully explained within the scope of this document.

19.0 CLARIFICATIONS

Comment: One commenter (IV-D-11) noted a drafting error in Table 1 of the rule, column 3: “6.i collecting the direction of air flow, and either the *facial velocity of air through all natural draft openings* according to §63.3968(g)(1) or the ~~according to enclosure, and~~ pressure drop across the *enclosure* according to §63.3968(g)(2); and”

Response: The drafting error has been corrected and the language suggested by the commenter is contained in Table 1 of the final rule.

Comment: Three commenters (IV-D-11, IV-D-28, IV-D-59) noted an extra comma §63.3881: “Remove comma between magnet and wire.”

Response: The extra comment has been removed in the final rule.

Comment: Four commenters (IV-D-11, IV-D-15, IV-D-28, IV-D-40) noted a drafting error in §63.3961(h). The second H_c in the explanation of terms in the equation should be A_c . One commenter (IV-D-59) requested clarification of equation 1 of §63.3961 in its use of upper and lower case “c” for the subscript of the term H_c in Equation 1 and the definition of terms section for Equation 1. The commenter (IV-D-59) questioned whether both should be uppercase.

Response: These drafting errors has been corrected. Upper case subscripts are used in both the equation and the definition of terms, and the term A_c is defined in the final rule.

Comment: One commenter (IV-D-28) submitted a number of suggested drafting corrections to the rule, contained in Attachment 1 to the comment letter. Many of these suggestions dealt with punctuation or format mistakes in Table 1 of the proposed rule, which made the relationship among requirements unclear. The commenter also noted that in Table 1, pressure drop limit for concentrators is presented as a minimum, whereas in §63.3967(e)(4) of the proposed rule, it was presented as a maximum.

Response: We reviewed each of the commenter’s suggested corrections and addressed them in writing the final rule. The punctuation and wording of Table 1 of the final rule have

been corrected so the requirements and their relationships are clear. In the final rule, both §63.3967(e)(4) and Table 1 correctly express the pressure drop for concentrators as a minimum operating limit.

Comment: Three commenters (IV-D-15, IV-D-30, IV-D-31) requested the final rule clarify §63.3881(c), which currently states that this subpart does not apply to surface coating that “meets the criteria of paragraphs (c)(1) through (5) of this section.” This could be read to mean that a source would have to meet all of the enumerated criteria in order to be exempt from the rule. The commenter believed that EPA did not intend this result and sought clarification that this subpart does not apply to operations that “meet any of the criteria of paragraphs (c)(1) through (3) of this section.”

Response: Surface coating activities or operations that meet any of the exemption criteria in the final rule, are not subject to the Miscellaneous Metal Parts and Products NESHAP. This has been clarified in the introductory wording in §63.3881(c) of the final rule.

Comment: One commenter (IV-D-16) supports the use of a 12-month rolling average, but requests that the rule clarify when the first year of the initial 12-month average begins.

Response: The final rule, §63.3940, contains a clarification of the initial 12-month compliance period. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of the month, then the initial compliance period extends through that month plus the next 12 months.

Comment: One commenter (IV-D-44) stated that the first sentence of §63.3891 should clearly state that the materials to be accounted for are those “coatings, thinners, and cleaning materials *used for the manufacture of miscellaneous metal parts and products.*”

Response: Section 63.3891 of the rule directs you to “include all coatings, thinners, and cleaning materials used in the affected source” in your compliance demonstration. Because the affected source necessarily includes only those operations used for surface coating of miscellaneous metal parts and products (see §63.3882(b) of the rule), only the coatings, thinners, and cleaning materials used for the manufacture of miscellaneous metal parts and products would be included. Thus, the additional language requested by the commenter would be redundant, and we did not make the change in the final rule.

The only times that coatings, thinners, and cleaning materials not used on miscellaneous metal parts and products must be included in the compliance demonstration are when a facility elects to use the predominant activity or facility-specific emission limit approach. If a facility is using the predominant activity approach to demonstrate compliance for surface coating subject to other NESHAP in addition to the Miscellaneous Metal Parts and Products NESHAP, then the facility must demonstrate compliance for all of the coating operations included in the predominant activity determination. Similarly, in demonstrating compliance with the facility-specific emission limit, you must include all of the coating operations included in the calculation of the facility-specific emission limit. This point is clarified in §63.3881(e)(2) and (3) and in the introductory text within §§63.3941, 63.3951, and 63.3961 of the final rule.

Comment: One commenter (IV-D-44) asks that revisions be made to §63.3893(b)(1) so that materials are stored in *normally* closed containers. Materials must have some means to enter the container.

Response: We believe the intent of the language in the proposed rule is clear and doubt there would be any misunderstanding in practice, so we have not revised this paragraph in the final rule.

Comment: One commenter (IV-D-59) states that the definition of $H_{HAP,y}$ in Equation 5 of §63.3961 is missing the unit of measure. This definition should be changed from “organic HAP emission rate for month, y ...” to “organic HAP emission rate for month, y, kg...”.

Response: This correction has been made, and the final rule specifies the units of measure as kg.

Comment: The commenter (IV-D-61) suggested inserting the word “organic” before HAP when emission limits are stated in the rule.

Response: Both the proposed and final rule use the term “organic HAP” in stating the emission limits in §63.3890. The compliance demonstration procedures and equations used in the final rule also make it clear that only organic HAP are considered in determining compliance with the rule.

Comment: The commenter (IV-D-61) asked that Tables 2 and 3 in the preamble be incorporated into the rule. According to the commenter, the tables are more clear than the equations and text in §63.3890.

Response: The emission limits in §63.3890 of the final rule are presented in paragraph rather than tabular format. There is a separate numbered paragraph presenting the emission limit for each subcategory of new and existing sources. The applicability, units of measure, and compliance period are clearly specified in the text of each paragraph. We do not agree that a tabular format would be more clear.

20.0 GENERAL COMMENTS

Comment: One commenter (IV-D-17) objected to the conclusions that the economic impacts of the proposed standards are not significant. According to the commenter, the costs to the manufacturers for reformulation and testing will be significant. The commenter did not provide any cost data.

Response: At proposal, EPA estimated the costs to comply with the rule by using reformulated coatings, thinners, and cleaning materials. Compliance costs were estimated as the incremental cost difference between the materials currently used and complying materials. We developed five model plants representing the range of sizes and coating materials found throughout the source category. Each model plant was assumed to comply by switching to non-HAP adhesives, surface preparation materials, and cleaning materials and reducing the HAP content of coatings and thinners. Annual costs for reformulated materials ranged from \$2,635 to \$114,500 for the various model plants. The costs for each model plant were multiplied by the number of facilities represented by each model to determine national costs for using complying coatings. We also estimated the cost of monitoring, recordkeeping, and reporting. We estimated costs for new sources assuming an industry growth rate of 3% per year for the next 5 years. Total nationwide annual compliance costs were estimated to be \$47.5 million for existing plants and \$9.8 million for new sources in the fifth year. As described in the preambles to the proposed and final rules, EPA conducted an economic impact analysis to determine whether the compliance costs would have a significant economic impact. We expect the economic impacts to be minimal, with little or no change in market prices and production. We found that the compliance costs would represent a very small percent of company sales and net income, and would not cause producers to cease or significantly alter their operations. Hence, no firms or facilities are expected to be at risk or closure because of the final rule. The commenter has not provided any specific data, information, or analyses to show that EPA's estimates of costs or

economic impacts are not accurate or to suggest specific revisions to the cost estimates.

Therefore, we have not changed the cost estimate between proposal and promulgation, and we believe the economic impact assessment to be valid.

Comment: The commenter (IV-D-17) believes that the compliance costs for custom RV paint operations are significantly underestimated since no low-HAP formulations are available and facilities would be forced to install add-on controls. They stated that add-on control equipment and recordkeeping costs are grossly underestimated, but did not provide any cost data.

Response: Custom RV paint operations will not be regulated by the final metal parts rule, but will be covered under the limits for assembled on road vehicle coating operations in the NESHAP for plastic parts and products surface coating operations (40 CFR 63 subpart PPPP). These limits were developed from data specifically for custom RV paint operations, so these limits are more readily achievable for these sources without the expense of add-on controls.

Comment: One commenter (IV-D-52) states that the EPA's cost analysis included incorrect cost assumptions:

- The cost of low-HAP coatings is significantly higher than the cost of current non-complying coatings. The commenter provided data for four classes of facilities; the cost increase ranged from \$1.50 to \$10.00 per gallon.
- The cost to switch to reformulated solvents is higher than the \$0.20 per pound of solvent assumed by EPA. The cost to switch from xylene to butyl acetate would be about \$1.20 per gallon. Reduced solvency may lead to a 50 to 60% increase in solvent usage.
- The cost for testing and evaluating new coatings was not included in the cost estimate. The commenter estimated the cost for a coating supplier to reformulate coatings to be about \$6,000 to \$7,500 per coating. The cost for facilities to test new materials at an outside lab to get approval to use new materials could be \$16,000 to \$29,000 for example facilities. The cost to change over each coating is about \$35,000 per coating at each facility.

The commenter estimated that the cost per facility is \$120,000 to \$257,000 and is at least 77% higher than EPA's estimate. These costs do not include costs to re-qualify coatings, costs to contractors that do coating off-site, and specialty coatings that cannot be reformulated. If add-

on controls are required, the commenter stated costs could range from \$1.2 to 9 million, but did not provide any supporting details.

Response: It is very difficult to estimate the cost impact of a proposed rule and the cost impacts presented at proposal are estimated averages that apply to a broad spectrum of facilities. It is to be expected that the cost impact will be higher than estimated for some facilities and lower than estimated for others. Many metal parts facilities are already using, and many suppliers are already offering low-HAP and non-HAP coating formulations and cleaning solvents. So, it is likely many operations could switch to an already available coating or solvent that has been demonstrated in a similar application without incurring high reformulation or testing costs. Other facilities with more specialized coating requirements may have higher costs for reformulation and testing.

The proposed and final emission limits in the rule are based on the MACT floor for each coating subcategory. In setting the emission limits at the MACT floor, the EPA cannot consider cost since this is the minimum stringency allowed by the Act. The final rule also includes several compliance provisions in order to provide the most flexibility to affected facilities to minimize the compliance costs of the rule.

The commenter did not provide any detailed data or actual case studies that supported the cost estimates provided in their comment letter, so the EPA cannot determine whether they would be typical for the range of sources and coating technologies in the metal parts source category or particular subcategories. Given that the emission limits are equivalent to the MACT floor and it is not clear how the commenter's cost estimates were developed, no changes have been made to the cost impacts since proposal.

Comment: The commenter (IV-D-44) supported a national rule, rather than case by case MACT under 112(j) and encouraged EPA to promulgate the rule as soon as possible.

Response: EPA has promulgated the rule as quickly as possible.

Comment: One commenter (IV-D-13) requested that responses to these comments be put into the preamble to the final rule to provide guidance to industry and State/local air agencies.

Response: The responses to significant comments, especially those that result in a change in the rule, will be published in the preamble to the final rule. A summary of all

comments and responses to all comments are included in this document, which can be readily accessed and used as guidance in interpreting, complying with, and enforcing this rule.

Comment: The commenter (IV-D-19) asked whether ICR 2056.01 should account for the burden of each source determining whether it is an area or major source and for area sources to obtain federally enforceable limits on PtE to become exempt from the NESHAP, or whether this burden was estimated under the ICR for subpart A. The commenter noted that the number of potentially affected area sources is considerably larger than the number of major sources subject to the rule. The commenter also sent this question to the EPA Collection Strategies Division.

Response: The burden estimate includes the compliance costs for sources that are subject to the rule. Only major sources are subject to the rule. Sources should have already made a determination of whether they are major or area sources, because the Title V permit program has been in effect for several years, and has required major sources to obtain operating permits. Many sources that would be major sources based on their uncontrolled PtE have already applied for and obtained operating permits that limit their materials usage and emissions to levels and make them synthetic area sources rather than major sources. This rule does not impose new or unique requirements to obtain permits. Furthermore, our analysis assumed that all sources that are currently major sources based on their PtE will comply with the emission limits and the monitoring, recordkeeping and reporting requirements of the Miscellaneous Metal Parts and Products NESHAP. To the extent that some of the sources considered major sources in the metal parts and products database opt to obtain a federally enforceable permit limiting their emissions to area source levels instead of complying with the NESHAP, we have overestimated the compliance burden.

Comment: The commenter (IV-D-37) supports the comments of the Aluminum Extruders Council (IV-D-16)

Response: We note the commenter's support for these comments. See other chapters of this document for summaries of specific comments made by commenter IV-D-16 and our responses to these comments.

Comment: The commenter (IV-D-49) supported the comments of the Aerospace Industries Association (IV-D-31) on NESHAP applicability.

Response: We note the commenter's support for these comments. See section 6.2 of this document for summaries of the NESHAP applicability comments made by commenter IV-D-31 and our responses to these comments.

Comment: The commenter (IV-D-54) has determined that the metal parts NESHAP is consistent with the Florida Coastal Management Program.

Response: We appreciate the findings of this commenter.

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(please read instructions on the reverse before completing)

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