The Advantages & Drawbacks of the EPA's Coating & Composites Coordinated Rule Development

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The U.S. EPA has been developing National Emission Standards for Hazardous Air Pollutants (NESHAPs) and Control Technique Guidelines (CTGs) at a brisk pace. Many of these regulations, including a number scheduled to be finalized by November of 2000, apply to the surface coating industry. In order to improve the efficiency of rule development, the EPA has established a coordinated rule development effort through the formation of the Coatings and Consumer Products Group. This paper discusses the resulting advantages for industry, the drawbacks of the approach, and how companies can get involved to get their concerns heard.

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Introduction

Under the 1990 Clean Air Act Amendments (CAAA), the U.S. EPA is required to regulate sources of hazardous air pollutants (HAPs). Primarily, HAP emissions are regulated through National Emission Standards for Hazardous Air Pollutants (NESHAPs), which are codified under Title 40 Code of Federal Regulations (CFR) Part 63. NESHAPs address HAP emissions from a particular process or industry such as metal can coating operations. Each NESHAP establishes the maximum available control technology (MACT) for that particular process based on the best performing twelve percent of existing sources.¹ Reductions are achieved through various means, such as product substitution, operating method changes, and pollution control equipment. As anyone who works at a facility that has recently had to comply with a NESHAP can attest, satisfying these requirements can be a major undertaking.

The CAAA also require the U.S. EPA to regulate the emissions of volatile organic compounds (VOC) from sources located in ozone nonattainment areas. In many cases, facilities that are or will be subject to a NESHAP are also significant sources of VOC emissions. As a result, the EPA will often establish controls of VOC emissions for the same industry type that has been identified for NESHAP applicability through the development of a Control Technique Guideline (CTG). A CTG is not a direct requirement for industry, but instead serves to establish minimum guidelines for state agencies for the development of Reasonably Available Control Technology (RACT) rules. These RACT rules then set the standards that must be met by industry.

The EPA is continuing to develop, with few exceptions, both NESHAPs and CTGs according to the source categories that were originally established in 1992. The EPA is required to issue the final "bin" of NESHAPs by November of 2000. Most if not all of the regulated source categories will then have three years before the onset of the compliance deadline for existing sources. Any new sources that are constructed after the new NESHAP is proposed, however, will have to comply upon startup.

Among the November 2000 bin of NESHAP source categories are a number of surface coating industries and operations. The U.S. EPA is undertaking a coordinated effort for the development of the NESHAPs and CTGs for the coatings and composites sources in this bin in an effort to ensure consistency in the industry.² The following sections

discuss the rule development process, the advantages the coordinated approach brings for industry, the drawbacks of the approach, and how companies can get involved to get their concerns heard

Coordinated Rule Development

The Coatings and Consumer Products Group (CCPG) of the U.S. EPA began the initial development of NESHAPs for a number of new industrial surface coating operations in 1997. The group has also begun the CTG development process for a portion of these source types. Table 1 lists the surface coating and composite source types that CCPG has either completed the issuance of regulations for or for which rules are currently in development.² The table also identifies the appropriate EPA contacts for each regulation that is under development.

Historically, little consideration has been given to whether one regulation was consistent to another since the types of facilities that would be subject were different. With the coating and composite industries, this is not the case. Placing more restrictive requirements on one coating operation type than on another could impact the ability of companies to compete.

Of potentially even greater concern, it is anticipated that many facilities will be subject to more than one NESHAP due to the various surface coating operations that are performed. For example, a large aerospace manufacturing facility will be subject to the Aerospace Manufacturing and Rework Industry NESHAP (Aerospace NESHAP). Due to a variety of exemptions, the painting of certain parts (e.g., aircraft interiors) is not subject to the coating standards.³ However, the painting of these parts will likely be subject to either the Miscellaneous Metal Parts and Products NESHAP or the Plastic Parts and Products NESHAP. If two paint booths at the same facility were subject to different monitoring and record keeping requirements, tracking compliance would be unreasonably difficult. Worse yet, it is possible that one booth could be used for both operations throughout the day. The resulting need to change back and forth between compliance demonstration methods would likely prove impossible.

Since the regulatory development process began, the CCPG has made a concerted effort to work together and with a variety of industry stakeholders to improve the consistency of the

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Source Category	NESHAP	CTG Source	Contact	Phone Number
	Source Type	Туре		
Auto and Light	Yes	Yes	Dave Salman	(919) 541-0859
Duty Truck				
Boat	Yes	Yes	Mark Morris	(919) 541-5416
Manufacturing				
Fabric Coating,	Yes	No	Vinson Hellwig	(919) 541-2317
Printing, and			C	
Dyeing				
Wood Building	Yes	Yes	Luis Lluberas	(919) 541-2659
Products				· · ·
Large Appliances	Yes	Yes	Mohamed Serageldin	(919) 541-2379
Metal Can	Yes	No	Paul Almodovar	(919) 541-0283
Metal Coil	Yes	No	Rhea Jones	(919) 541-2940
Metal Furniture	Yes	Yes	Mohamed Serageldin	(919) 541-2379
Miscellaneous	Ves	Ves	Bruce Moore	(919) 541-5460
Metal Parts and	105	103	Didee Moole	()1)) 541 5400
Products				
Paper and Other	Ves	Ves	Dan Brown	(919) 541-5305
Web (Film and	103	105	Dan Diown	()1)) 541-5505
Foil)				
Plastic Parts and	Vac	Vas	Kim Teel	(010) 541 5580
Products	105	105	Killi Teal	(919) 541-5580
Painforged Disstia	Vac	No	Kaith Parnatt	(010) 541 5606
Compositos	ies	INO	Kenn Barnett	(919) 341-3000
Monufacturing				
Manufacturing	Vee	Var	Line Services a	(010) 541 2452
Aerospace	res	res	Jim Szykman	(919) 541-2452
Manufacturing and				
Rework*	N	37	X · 1 XX ·	(010) 541 5250
Architectural	No	Yes	Linda Herring	(919) 541-5358
Coatings*				
Auto Refinishing*	No	Yes	Mark Morris	(919) 541-5416
Consumer	No	Yes	Bruce Moore	(919) 541-5460
Products*				
Shipbuilding and	Yes	Yes	Mohamed Serageldin	(919) 541-2379
Ship Repair*				
Wood Furniture*	Yes	Yes	Paul Almodovar	(919) 541-0283

 Table 1

 Coatings and Composites Source Categories

*This regulation has already been finalized by the U.S. EPA.

regulations. It is the intention of the group that the surface coating NESHAPs that are due this year reflect the similarities of the various industries and draw upon the lessons learned during the creation of previous regulations. The U.S. EPA also hopes that this approach, along with developing the CTGs at the same time as the NESHAP rules, will be more cost effective for both the agency and industry.

Information Gathering

In 1998 and 1999, the CCPG of the U.S. EPA completed the data gathering for the coating and composite regulations as a part of the initial phase of rule development. The group worked with various trade organizations, key industry representatives, and environmentalists to compile relevant facts about the processes that are to be regulated. The U.S. EPA also sent out Section 114 requests to specific facilities for each affected source type. These requests required the facilities to answer all questions and provide any relevant information. The goals of such requests include:

- ▲ Gaining an understanding of the coating process
- ▲ Identifying typical emissions and emission points
- ▲ Determining how the various source categories are related and/or overlap
- Establish the current emissions control methods being used
- ▲ Estimating the amount of emissions reductions that can be achieved through the application of MACT

Using the responses provided by each source type, the CCPG has created Preliminary Industry Characterization (PIC) documents. These in turn are being utilized to create the Background Information Documents (BID) that will serve to support the NESHAPs and CTGs that will be issued by the U.S. EPA. The PIC documents are also a key factor in setting the MACT floors for each source type (i.e., what kind of control options will be the minimum required to comply with a NESHAP).

The U.S. EPA has contacted likely stakeholders for each regulation based on their initial understanding of the source category. Generally, the agency will concentrate on working with major companies in a given source type and try to round out its findings by also working with any trade organizations that represent that group.

It may seem to someone that has not participated, either voluntarily or as the result of a

Section 114 request, in the information gathering process that it is too late to do so. This, however, is not the case. The agency is always open to learning more about a given operation, especially during the period before the rule is finalized, since it is much easier to change a proposed regulation than to amend a final one. This lesson has been learned from experience by both the agency and industry.

During the Aerospace NESHAP rule development, a wide variety of companies and organizations provided input to the U.S. EPA over a period of years. The NESHAP went through several cycles of proposal/comment periods before a rule was promulgated on September 1, 1995 in order to meet a court ordered deadline. The U.S. EPA immediately began working on a supplement for the Aerospace NESHAP in order to tie up any loose ends in the rule that was issued. Not until very late in the process did the maintenance operations for private aircraft lobby for the creation of a new subcategory known as "general aviation" in order to obtain separate coating content standards. As a result, the amendment to the Aerospace NESHAP establishing these higher limits was not finalized until the very day that existing sources had to begin demonstrating compliance with the regulation. Waiting any longer could easily have resulted in either non-compliance with the standard or delays in the completion of work at the general aviation facilities.

As a part of the development of the remaining NESHAPs and CTGs related to surface coating and composite operations, the members of the CCPG are working together to learn from the experiences for each rule and to avoid inconsistencies between them. The members of the team meet weekly to discuss the status and recent concerns for each upcoming rule. The leads for each regulation are also in contact with the major trade organizations on a monthly basis. The ongoing outreach efforts are being supplemented through the periodic use of a variety of means, including:

- ▲ Conference calls
- ▲ Face-to-face meetings with industry stakeholders
- ▲ Video conferences via satellite broadcasts
- ▲ Extensive discussion, document availability, and links through the CCCR internet website (www.epa.gov/ttn/uatw/coat/coat.html)

Current Status

According to the U.S. EPA, they do not currently expect to meet the November 2000 deadline for all of the surface coating and composite NESHAPs. In fact, of the rules that have not yet been promulgated, the CCPG only anticipates meeting the deadline for the following rules:

- ▲ Large Appliances Coating
- ▲ Metal Coil Coating
- ▲ Metal Furniture Coating
- A Paper and Other Web (Film and Foil)

The remainder of the outstanding regulations should be finalized in 2001. It may appear that, for these categories, existing sources that will be subject to a given NESHAP are getting additional time to operate under the status quo. This is true for existing sources that do not make any modifications to the affected operations that would significantly increase emissions. In such cases, or in the case of the construction of a new source, the modified or new operations will be required to comply with MACT standards through permitting with the appropriate state agency on a case-by-case basis. This basis of such a determination will be the PIC documents that the U.S. EPA has prepared for each of the surface coating and composites source categories. This approach is referred to as Presumptive MACT.

Overview of Advantages & Drawbacks

In the case of the coordinated efforts of the CCPG for surface coating and composites rule development, the pros generally outweigh the cons. Having a cohesive team that can work together as needed helps to provide consistency between NESHAPs and related CTGs as well as among the rules for the different source types. Having multiple surface coating regulations in the works simultaneously should also help to keep different industry groups from having to argue the same points due to cross-pollination of ideas. In addition, industries that might otherwise be seen as small players have the opportunity to work together to provide a stronger voice for the surface coating industry as a whole. Basically, this approach is common sense, although its implementation is not so simple.

On the downside, the coordinated approach is still susceptible to having the resulting standards be skewed towards the methods and controls used at large facilities since information is still only gathered from a limited cross-section of each source type. If a smaller operation has an approach or system that is unique for that industry, it may be impossible for that facility to comply according to the standards in the rule that is developed. In addition, a more generalized "cookie cutter" approach to setting the standards may not work for all of the categories being handled by the CCPG. For example, the specifications for paints used on aluminum aircraft parts are much more stringent than for those used on soda cans. It is important that each industry work closely with the U.S. EPA to help to avoid these problems.

Why Get Involved?

Understandably, many companies do not want to provide any information to the U.S. EPA relating to their operations due to concerns about confidentiality as well as the impression that you will be "giving them the rope to hang you with." As a result of the Clean Air Act Amendments, the agency is required to develop the NESHAPs and CTGs that will apply to the various source categories discussed herein. This process will continue regardless of how freely information is provided. Based on compliance efforts of facilities that have already passed their regulatory compliance deadline, it is in industry's benefit to communicate with the U.S. EPA as much as possible.

Companies should always keep in mind that they have a better understanding of what they do than any agency can have. If you do not work to clearly communicate information about your operations, methods, and equipment, it is likely that the final rule will miss something that is key to your business. For example, the original Aerospace NESHAP included requirements that the water pump rate be monitored for water-wash paint booths. However, it was later discovered that some water-wash booths do not use pumps at all. The final rule had to be amended to account for the different methods. The process took additional effort from both industry and the agency that might have been avoided if the issue had been addressed during the draft rule development.

Getting involved during the rule drafting stage also gives your company a step up on what will need to be done to comply in the future. This includes providing information up front on how your operation works, as well as reviewing rule proposals and providing detailed comments. As a result of these efforts, the responsible personnel at a company or facility will be able to have a better understanding of what is required when the time comes. The possibility of spending money on new equipment that will be unable to comply with a regulation once it is issued will also be reduced.

Conclusions

The U.S. EPA is using a coordinated method for the development of NESHAPs and CTGs applicable to a variety surface coating and composite industries. The CCPG has been working together and with a variety of industry stakeholders to create the regulations that are due by November 2000. Although this approach makes sense and should help to avoid inconsistencies among the various regulations, the input of a wide variety of facilities is needed to ensure that the resulting standards are not skewed towards the methods used by the largest companies.

As was stated earlier, it is not too late to get involved. Companies should take the time to look through the internet website to see what the current status is of the rule or rules that you think will apply to your company. Then contact any trade organizations that you belong to and ask what they are doing to support your company in the NESHAP and CTG development process. Finally, if you feel that your interests are not being addressed, call the U.S. EPA contact for the regulation and express your concerns along with your interest in making sure that the agency develops a standard that you can live with.

References

- U.S. EPA's Unified Air Toxics Website for Coatings and Composites Coordinated Rule Development (CCCR) (www.epa.gov/ttn/uatw/coat/coat.html)
- 2. National Emission Standards for Hazardous Air Pollutants: General Provisions, Title 40 Code of Federal Regulations, Part 63 Subpart A
- National Emission Standards for Hazardous Air Pollutants: Aerospace Manufacturing and Rework Industry, Title 40 Code of Federal Regulations, Part 63 Subpart GG