

US EPA ARCHIVE DOCUMENT

**Public Comment Summary and Response Document**

*addressing*

**Economic Issues Associated With the Proposed Listing for Paint Production Wastes**

*in support of the*

**Paint Production Wastes Final Determination**

U.S. Environmental Protection Agency  
Office of Solid Waste  
Washington, D.C.

November 30, 2001

## ACKNOWLEDGMENTS

The Agency recognizes DPRA Incorporated (332 Minnesota Street, E-1500 First National Bank Building, St. Paul, Minnesota 55101) for compiling and summarizing all cost/economic related comments into the key substantive issues presented in this report. Mr. Lyn D. Luben, an economist with the U.S. Environmental Protection Agency, incorporated various updates, edits, and revisions. Mr. Luben also prepared the responses to each issue presented in this document.

## TABLE OF CONTENTS

1.0	INTRODUCTION AND PURPOSE .....	1-1
2.0	BACKGROUND .....	2-1
3.0	SUMMARY OF SUBSTANTIVE ISSUES AND AGENCY RESPONSE .....	3-1
3.1	Expansion of 40 CFR Part 261 Appendix VIII .....	3-1
3.2	Addition of Chemicals as UHCs .....	3-3
3.3	Addition of Chemicals to F039 .....	3-4
3.4	Analytical Issues .....	3-4
3.5	Cost Impacts on Remediation Wastes .....	3-7
3.6	Potential for Indirect Cost Impacts to Raw Materials Suppliers to Paint Manufacturers .....	3-7
3.7	Implementation Concerns .....	3-9
3.8	Scope Concerns .....	3-10
3.9	Baseline Requirements and Need for Final Rule .....	3-11
4.0	REFERENCES .....	4-1

**1.0 INTRODUCTION AND PURPOSE**

In February of 2001 we proposed to amend the regulations for hazardous waste management under the Resource Conservation and Recovery Act (RCRA). We proposed listing as hazardous certain solid and liquid wastes generated from the production of paint and coatings. The comment period lasted from February 13, 2001 through April 16, 2001. EPA received 44 comments in total (This count includes 2 comments received after the comment close date.), 20 of which included some type of comment on, or related to cost/economic issues. Fifteen of the commenter letters were from industry and five were from associations.

This document presents a summary of substantive economic issues presented by commenters, and our response to those issues. Public comments were presented on the following economic impact analyses conducted in support of the proposed listing: (1) *Economic Assessment for the Proposed Concentration-Based Listing of Wastewaters and Non-wastewaters from the Production of Paints and Coatings*, January 19, 2001, and, (2) *Regulatory Flexibility Screening Analysis for the Proposed Concentration-Based Listing of Wastewaters and Non-wastewaters from the Production of Paints and Coatings*, January 19, 2001.

The purpose of this comment response document is to capture and consolidate the major cost/economic issues in a concise manner, and to provide an efficient response. Where several commenters raised a similar issue, we consolidated the comments into a generic summary for that topic area. The table below presents a list of the industries and associations that provided cost/economic related comments.

<b>LIST OF COMMENTERS ON COST/ECONOMIC ISSUES</b>				
<b>Count</b>	<b>Document #</b>	<b>Name</b>	<b>Type</b>	<b>City &amp; State</b>
1	PMLP-00003	PPG Industries	Industry	Pittsburgh, PA
2	PMLP-00004	BF Goodrich Hilton Davis, Inc.	Industry	Cincinnati, OH
3	PMLP-00005	CDR Pigments and Dispersions	Industry	Elizabethtown, KY
4	PMLP-00008	Utility Solid Waste Activities Group	Association	Washington, D.C.
5	PMLP-00012	Synthetic Organic Chemical Manufacturers Association, Inc. (SOCMA)	Association	Washington, D.C.

<b>LIST OF COMMENTERS ON COST/ECONOMIC ISSUES</b>				
<b>Count</b>	<b>Document #</b>	<b>Name</b>	<b>Type</b>	<b>City &amp; State</b>
6	PMLP-00014	Star Bronze Company	Industry	Alliance, OH
7	PMLP-00015	American Petroleum Institute	Association	Washington, D.C.
8	PMLP-00018	Duron, Inc.	Industry	Beltsville, MD
9	PMLP-00024	Akzo Nobel	Industry	Louisville, KY
10	PMLP-00009 PMLP-00028	Kelley Technical Coatings, Inc.	Industry	Louisville, KY
11	PMLP-00026	Jamestown Paint Company	Industry	Jamestown, PA
12	PMLP-00030	American Chemistry Council	Association	Arlington, VA
13	PMLP-00031	Rohm and Haas	Industry	Philadelphia, PA
14	PMLP-00032	Eastman Chemical Co.	Industry	Kingsport, TN
15	PMLP-00033	National Paint & Coatings Association, Inc. (NPCA)	Association	Washington, D.C.
16	PMLP-00035	RPM, Inc.	Industry	Medina, OH
17	PMLP-00037	Kalcor Coatings Co.	Industry	Willoughby, OH
18	PMLP-00039	ICI Paints North America	Industry	Strongsville, OH
19	PMLP-00041	DuPont	Industry	Wilmington, DE
20	PMLP-00042	Adheron Coatings Corp.	Industry	Oak Forest, IL
<p><i>Note: This table is not a complete list of all commenters. It lists only those who made comments on cost, economic, or related issues.</i></p>				

## 2.0 BACKGROUND<sup>1</sup>

On February 13, 2001 (66 FR 10059-10140), we proposed to amend the regulations for hazardous waste management under the Resource Conservation and Recovery Act (RCRA) by listing as hazardous certain waste solids and liquids generated from the production of paint and coatings. We proposed a concentration-based listing approach for each of these wastes. Under this approach, the identified paint production wastes would have been hazardous if they contained any of the constituents of concern at concentrations that met or exceeded regulatory levels. Generators would have been responsible for this determination. If their wastes were found to be below regulatory levels for all constituents of concern, then these wastes would have been considered nonhazardous. In this action we also proposed a contingent management option for waste liquids. These wastes would not have been subject to the listing if they were stored or treated exclusively in tanks or containers prior to discharge to a publicly owned treatment works, or discharged under a Clean Water Act national pollutant discharge elimination system permit. Due to the uncertainties in our assessment of the management of paint manufacturing waste liquids in surface impoundments, we also considered an alternative proposal not to list paint manufacturing waste liquids.

If the targeted paint production wastes were listed as hazardous waste, then they would have been subject to stringent management and treatment standards under Subtitle C of RCRA. Additionally, the proposed action proposed to designate these wastes as hazardous substances subject to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and to adjust the one pound statutory reportable quantities (RQs) for these substances.

The proposal would have also added the toxic constituents n-butyl alcohol, ethyl benzene, methyl isobutyl ketone, styrene, and xylenes to the list of constituents that serves as the basis for classifying wastes as hazardous, and to establish treatment standards for the wastes. This action would have also added acrylamide and styrene to the treatment standards applicable to multisource leachate and designate styrene as an underlying hazardous constituent. As a result, a single waste code would continue to be applicable to multisource landfill leachates and residues of characteristic wastes would require treatment when styrene was present above the proposed land disposal standards.

Our final determination on this proposal is a no-list action. As a result, none of the above considerations apply to the generators of the previously targeted wastes of concern.

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<sup>1</sup> This background summary was slightly modified from <http://www.epa.gov/epaoswer/hazwaste/id/paint/>. A copy of the Federal Register Notice and the following supporting economic background documents can be obtained at this web address: (1) Economic Assessment for the Proposed Concentration-Based Listing of Wastewaters and Non-wastewaters from the Production of Paints and Coatings, and (2) Regulatory Flexibility Screening Analysis for the Proposed Concentration-Based Listing of Wastewaters and Non-wastewaters from the Production of Paints and Coatings.

### 3.0 SUMMARY OF SUBSTANTIVE ISSUES AND AGENCY RESPONSE

All of the comments on cost/economic issues were from companies potentially subject to the proposed regulatory requirements, or their industry associations. These commenters felt that we underestimated both direct and indirect impacts associated with the proposed rule. According to commenters, potentially significant direct costs not fully accounted for included: additional disposal costs, initial waste characterization and follow-up analytical costs, and waste management costs for facilities that currently handle all paint manufacturing wastes as nonhazardous. Key indirect costs not incorporated into the *Economic Assessment*, according to commenters, included: increased costs for monitoring, testing and analysis imposed on non-paint manufacturing facilities, increased costs associated with the addition of styrene to the UTS lists of chemicals, and the potential impacts of managing F003 and relevant U-code listings as a result of adding the proposed solvents. Three small paint manufacturing facilities stated that the increase in production costs associated with the rulemaking, as proposed, would significantly impact small paint businesses.

This section presents a consolidated summary of the substantive cost/economic issues raised by the commenters. After each summary, a brief response is provided within the context of our final no-list determination.

#### 3.1 Expansion of 40 CFR Part 261 Appendix VIII

##### Issue Summary:

The American Chemistry Council (ACC), American Petroleum Institute (API), Rohm and Haas, National Paint & Coating Association (NPCA), Eastman Chemical Company, and DuPont are concerned that by adding the xylenes, MIBK, ethyl benzene and n-butyl alcohol (and possibly methanol) to Appendix VIII of Part 261 it could cause confusion because regulators might believe that F003 (or the concomitant U-listed waste) would now be listed due to ignitability and toxicity (listing due to toxicity is defined based on the presence of constituents listed in Appendix VII of Part 261), instead of just ignitability, and the solvent would no longer be subject to the mixture rule exemption. The commenters indicated that, if regulators thought that F003 was no longer a characteristic waste solely as a result of ignitability concerns, these facilities would be significantly affected. The commenter facilities have taken action to ensure that materials listed for toxicity do not enter the wastewater treatment system, thereby rendering the bio-sludge hazardous. If the bio-sludge were to become hazardous waste, the off-site hazardous disposal costs would be excessive.

In addition, the American Chemistry Council notes that adding the proposed common solvents to Appendix VIII may nullify the benefits estimated for the Final HWIR Rule that reinstates mixture/derived from (M/DF) regulations. The commenter indicates that, in its



November 1999 HWIR proposed rule, EPA proposed an exemption from hazardous waste management for “mixtures and derivatives of wastes listed solely for the ignitability, corrosivity, and/or reactivity (ICR) characteristics which no longer exhibit any characteristic of hazardous waste. EPA states that the majority of the ICR wastes eligible for an exemption would be F003 wastes (spent xylene and other non-halogenated solvents). The economic impacts of the proposal were based strictly on the difference in costs for managing ICR waste treatment residues (combustion residues) as nonhazardous versus hazardous, and were estimated at \$4.29 to \$6.56 million per year, excluding offsetting costs of implementation. The Council’s concern that a toxicity “T” code might apply to F003 wastes in addition to its current “T” code for ignitability, if common solvents are added to Appendix VIII via this paints listing rule because of their toxicity, would eliminate any of the expected \$4-\$7 million savings in management costs associated with the this aspect of the HWIR proposal.

The American Chemistry Council commented that these solvents are so widely used and so ubiquitous in the environment at very low levels that many permitted facilities may be required to test for them as part of their groundwater monitoring and analysis program under Subparts F or O, or RCRA closure requirements. While there is no requirement for Appendix VIII sampling in 264.111(b), many states interpret the new listing provisions to require it. Therefore, ACC indicates that EPA needs to take into account the cost impacts on many facilities’ testing programs around the country, when adding constituents to Appendix VIII or to the UTS list.

Response:

As the American Chemistry Council noted correctly in its comments (see Section 4.1.2, pp. 4-4 though 4-5 for verbatim summary), the Agency’s proposed rule states that Appendix VII identifies the constituents which caused the Administrator to list the waste as. . . Toxic Waste (T). . .in §§261.31 and 261.32. Appendix VII does not list any constituent(s) as the basis for the listing of F003. Even though, as proposed, these solvents would have been added to Appendix VIII as toxic constituents, it would not have changed the F003 listing.

Although our final no-list determination makes this a mute issue, we want to make clear that the F003 listing would not have been effected even if these solvents were added to Appendix VIII. The Agency did not propose to change the regulatory structure for spent solvents previously listed solely for ignitability. Given that the Agency proposed no changes to the F003 listing, the estimated management cost savings resulting from any mixture/derived from rule exemption would still have been valid for any future HWIR ruling.

Finally, it was not our intent to expand the list of constituents included in groundwater monitoring and analysis programs under Subparts F or O, or RCRA closure requirements. States have the right to apply stricter interpretations of the regulations. Any cost impacts that may have resulted from states changing groundwater monitoring and analysis programs was not the intent of the paint listing, as proposed.

Any cost/economic impacts potentially associated with this issue had no influence on our final no-list determination.

### 3.2 Addition of Chemicals as UHCs

#### *Issue Summary:*

The American Chemistry Council, American Petroleum Institute, and Eastman Chemical Corporation commented that there are collateral effects of adding styrene to the Universal Treatment Standards. By including styrene as one of the constituents for which paint manufacturing waste liquids are listed, as proposed, styrene will be included in other aspects of the RCRA program. The primary concern is the collateral effects of including styrene in the Universal Treatment Standards (UTS) table in § 268.48 without an associated exception in § 268.2(i) and § 268.49(d). The addition of styrene to the UTS table has the direct effect of designating styrene as:

- An Underlying Hazardous Constituent (UHC) within the Land Disposal Restrictions (LDR) requirements for certain characteristic hazardous wastes, and
- A Constituent Subject to Treatment (CST) under the alternative LDR standards for contaminated soil.

The commenters noted that generators of characteristic hazardous wastes for which § 268.9(a), § 268.40, or § 268.9 require determination of UHCs or CSTs would have to determine whether styrene was present in the waste, if unable to use process knowledge. If present above the corresponding UTS levels, they would have to ensure treatment to below those levels (or 10 times the UTS level in the case of contaminated soils) prior to land disposal. Since generators are not currently required to evaluate their waste streams for styrene, these impacts and associated burdens on current waste management and remediation activities have not been included in EPA's economic impact analyses.

In addition, Eastman Chemical Company commented that adding constituents to Appendix VIII impacts groundwater monitoring and analysis, incinerator trial burn tests and RCRA closure costs, at a minimum.

The commenters asked that EPA avoid these collateral effects by providing an exception for styrene under § 268.2(i) and § 268.49(d), as it has for fluoride, sulfides, vanadium and zinc. These constituents are not regulated as UHCs because that are not listed in 40 CFR Part 261 Appendix VIII.

Response:

Had we finalized a listing, an indirect impact of designating styrene as an underlying hazardous constituent would have been that residues of characteristic wastes (e.g., ignitable, corrosive, or reactive) may have required LDR treatment if styrene were present above the proposed land disposal treatment standards. However, this issue should be eliminated as a point of concern due to our final no-list determination for all previously targeted paint manufacturing wastes.

The cost/economic concerns potentially associated with this issue had no influence on our final no-list determination.

### **3.3 Addition of Chemicals to F039**

Issue Summary:

The American Petroleum Institute (API) commented that if styrene is added as a constituent subject to treatment in F039, many generators might have the additional burden of evaluating their waste for styrene if unable to use process knowledge. Facilities which treat or dispose of wastes containing styrene, would also have to analyze for styrene. This change would have to be included in a facility's waste analysis plan and could result in an obligation to submit a permit modification. Based on the potential burden of adding styrene to F039, API strongly suggested that EPA reconsider its addition and instead, implement an exception for styrene as it has for several constituents under the RCRA program.

Response:

Any cost/economic impacts potentially associated with this issue are no longer relevant to this action due to our final no-list determination. The cost/economic concerns potentially associated with this issue had no influence on our final no-list determination.

### **3.4 Analytical Issues**

Issue Summary:

The National Paint and Coatings Association (NPCA) suggests that some of the proposed constituents, especially monomers, are unlikely to be present, if at all, at concentrations of concern.

NPCA expressed further concern that the paint manufacturing industry would be forced to complete unnecessary and burdensome analytical procedures to prove that waste constituents are well below EPA's concentration based listing levels, as proposed. BF Goodrich and CDR Pigments and Dispersions also believe that the costs of analysis to prove continuously that each batch of discharged water complies with the non-hazardous designation of the Proposed Rule may be expensive, redundant, and unnecessary.

In addition to the above, NPCA, ICI Paints, Valspar Corporation, and DuPont remarked that EPA did not appropriately address the analytical methods necessary to implement a concentration-based listing. They state that, "EPA did not perform any sampling and analysis of paint wastes in developing the Proposed Rule." According to these commenters, NPCA and member company research has discovered that some of the COCs in the Proposed Rule can not accurately be tested for, and others can not be tested for at the proposed levels of concern. The commenters suggested that EPA can not regulate constituents unless commonly, economically, available analytical technology has been reliably demonstrated to accurately identify those constituents in a matrix, and at the appropriate levels of concern.

Furthermore, commenters indicated that it should not be the burden of industry to demonstrate what analytical methods do or do not work, and at what level(s). In addition, commenters note that the Proposed Rule does not list specific testing methods, and EPA suggested methods are identified by commenters as not applicable to the analyte/matrix combinations listed. The commenters state that it will require a significant research effort on the part of industry to find, develop, or modify a method, which would provide usable data for the variety of matrices possible. DuPont believes that unless the Agency can sufficiently demonstrate that reliable testing methods exist in order to implement a concentration-based listing, it should withdraw its proposal to list paint manufacturing wastes as hazardous. At the very least, DuPont believes that acrylamide should be removed from the list of constituents of concern.

USWAG commented that overly conservative numbers or an overly broad list of constituents would negate the benefit of the approach by requiring generators to expend resources on costly and time-consuming sampling and analysis to demonstrate that their waste streams are not hazardous.

Severn Trent Laboratories Inc. commented via a cost quote through DuPont that in order to demonstrate laboratory capability to analyze the analytes of concern in the required matrices at the levels of concern, a method detection limit study and an initial demonstration of capability (IDOC) study on each major matrix type (emission control dusts/coatings, wash water cleaning liquid and waterborne paint) would be required. Severn indicated that the MDL comprises 7 replicates at a level anticipated to be 3-5 times the detection limit. The IDOC comprises 4 replicates spiked at around the mid-point of the calibration range.

Severn's total price estimate for SW 846 Method 8260 test capability analysis for acrylonitrile, methylene chloride (aqueous only), ethyl benzene (aqueous only) methyl isobutyl ketone, methyl methacrylate, n-butyl alcohol (aqueous only), styrene (aqueous only), toluene (aqueous only) and xylene (aqueous only) is \$8,775. The total price estimate for SW 846 Method 8315 test capability analysis for formaldehyde was indicated to be \$7,800. The total for 6010 test capability analysis for antimony was estimated at \$1,300. The total price estimate for LC/MS/MS test capability analysis for acrylamide was \$24,125. The total price of report preparation was estimated at \$5,000. The estimated total method development cost was \$47,000.

Lancaster Laboratories also commented via a price quote through DuPont that a capability analysis needs to be conducted. DuPont, using Lancaster Laboratories price quotes, estimates the cost to potentially generate statistically significant data at \$13,680-\$20,520, for each paint waste solid matrix, and \$26,680-\$40,020 for each paint waste liquid matrix. DuPont further states that this estimate excludes costs to determine which method may be viable for acrylamide analysis (i.e., \$5,000), and the method validation costs that would follow, should any of the methods be determined to be viable.

NPCA remarked that the initial and follow-up waste characterization analytical costs are substantial under the proposed rule. NPCA assumes for waste characterization purposes that 100 percent of the facilities will test solid wastes on a quarterly basis in the initial year and semi-annually in subsequent years due to changeovers in formulations and raw materials. Similarly, NPCA assumes that 25 percent of the facilities will select to test liquid wastes, instead of using generator knowledge, on this frequency. In addition, NPCA commented that industry would need to incur the additional cost of demonstrating testing method reliability (i.e., method development and validation). NPCA is concerned that four samples for initial waste characterization may not be representative. DuPont commented that there should be no prescribed frequency of re-analysis given the variability and other characteristics of the waste stream should largely determine how frequently follow-up sampling and analysis should be conducted.

Duron expressed concern about analytical costs with this proposed rulemaking, how to properly test waste streams, and determining commercial laboratories that can perform analyses.

Response:

Because we have made a final no-list determination, all analytical issues potentially associated with the proposed rule are no longer germane to this action. As such, we are not responding to comments on this issue. Furthermore, no cost/economic concerns potentially associated with this issue had any influence on our final no-list determination.

### 3.5 Cost Impacts on Remediation Wastes

#### Issue Summary:

Akzo Nobel and NPCA expressed concerns about remediation wastes. Akzo Nobel claimed that adequate regulatory controls already exist for remediation wastes, and additional requirements simply add burden without benefit. NPCA expressed concern that the Proposed Rule is silent on the topic of remediation waste. NPCA said they expressed this concern to the EPA at a March 14, 2001 meeting with the Agency, where EPA stated that remediation wastes would be covered should the listing determination go forward for K179 and K180 wastes. NPCA suggested that EPA exempt the Subtitle C regulation of previously disposed K179 and K180 paint manufacturing wastes on the following bases:

- No additional environmental protectiveness would be offered by such regulation
- mere chance could determine the availability of documentation that would require classification as K179 and/or K180
- Potentially significant economic burden may be imposed indiscriminately
- Regulation could lead to remedy selection that would be less effective or less protective

#### Response:

Because we have made a final no-list determination, all remediation waste issues potentially associated with the proposed rule are no longer germane to this action. As such, we are not responding to comments on this issue. Furthermore, no cost/economic concerns potentially associated with this issue had any influence on our final no-list determination.

### 3.6 Potential for Indirect Cost Impacts Occurring to Companies Supplying Raw Materials to Paint Manufacturers

#### Issue Summary:

Rohm and Haas commented that if the paint formulator is required to reduce the monomer levels below the proposed levels, the only option available to the formulator is to ask the supplier to reduce the level of residual monomer. The commenter stated that the economic analysis performed by EPA is inadequate because it fails to include this upstream effect on suppliers. The American Petroleum Institute (API) expressed further concern that EPA was trying to regulate the production process and not hazardous wastes. They claimed that EPA does not have the authority under RCRA to regulate product management. API wishes that EPA leave it to the generators to decide the best method to address concentration-based listings.



Response:

We recognize that, had the Proposed Rule been finalized, the paint manufacturing industry response would likely have varied significantly. Some facilities may have chosen to change input requirements. However, we did not anticipate there would have been significant impacts on upstream suppliers. We further note that other commenters on the proposed rule stated that the monomer levels would typically not exceed the level prescribed by the concentration based listing.<sup>2</sup>

In our *Economic Assessment* the industry response modeled was management of the impacted waste as hazardous. We recognize that, had this listing gone final, there may have been other possible responses. Manufacturers may have sought to reduce the levels of the constituents of concern by the most economic means possible, with the end result being that waste generated would not be hazardous. To the extent the response may have been to change inputs, upstream suppliers may have been impacted, and the costs of waste management (to paints facilities) would be reduced from what was estimated. This may be considered a transfer cost, resulting in little overall change in aggregate nationwide impact.

It is possible that, over a period of years, input changes may have completely eliminated current monomers. Recently, paint products have been formulated with a castor oil-based monomer, for example.<sup>3</sup> While the Agency recognizes these alternative possibilities, we anticipate that managing waste as hazardous would have been the dominant response of the industry, and hence the response the Agency modeled for the Proposed Rule.

Commenters on this issue should recognize that it was not our intent to prescribe production processes that the paint manufacturing industry must follow. The Agency only prescribed how the impacted waste generated by the paint and coatings industry would have had to be managed. When monomer and other constituents of concern exceeded the concentration specified in the proposed listing, the industry would have had to take appropriate management steps. As noted above, the industry may choose to change production practices, based on economic and other incentives. This possibility was noted in background section of the proposed rule.

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<sup>2</sup> See for example: Methacrylate Producers Association, Inc. 4/16/2001. "Hazardous Waste Management System; Paint Production Wastes; Proposed Rule (66 FR 10060, February 13, 2001)." EPA Docket MLMP-00025; PPG Industries. 4/13/2001. "Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Proposed Rule." EPA Docket MLMP-0003; National Paint and Coatings Association, Inc. 4/16/2001. "Hazardous Waste Management System; Paint Production Wastes; Proposed Rule (66 FR 10060, February 13, 2001)." EPA Docket MLMP-00033; Emulsion Polymers council. 4/16/2001. "Hazardous Waste Management System; Paint Production Wastes; Proposed Rule (66 FR 10060, February 13, 2001)." EPA Docket MLMP-00017.

<sup>3</sup> PaintExpo Insider News. 29 May 2001. "Pollution Free" Paint Developed.

Because we have made a final no-list determination, all potential indirect cost impacts to suppliers potentially associated with the proposed rule are no longer germane to this action. Furthermore, no cost/economic concerns potentially associated with this issue had any influence on our final no-list determination.

### **3.7 Implementation Concerns (and related)**

#### *Issue Summary:*

The American Chemistry Council, NPCA, ICI, DuPont, and PPG indicated that the proposed two-tiered threshold approach creates an additional burden for industry without realizing any actual benefit to the environment. They believe all generators could rely on process knowledge or testing (if necessary) of the waste, regardless of the volume of waste generated annually. SOCMA believes facilities that generate relatively lower volumes of listed wastes also have economic and other resource constraints that may impact their ability to test. SOCMA considers it an appropriate option to allow these entities to rely on process knowledge rather than mandate testing.

Commenters summarized the three options for which the Agency requested comment, that address the specific definitions for distinguishing paint manufacturing waste liquids and solids. The three options were: (1) define paint manufacturing waste solids as those wastes containing 15% or more solids, by weight (2) use the Paint Filter Liquids Test to determine if the waste is a liquid or solid and (3) use the existing LDR definitions of wastewater (liquid) and nonwastewater (solid). ICI Paints and PPG supported adoption of the Paint Filter Liquids Test for use on distinguishing between paint production waste liquids and solids.

One commenter indicated that adding styrene as an UHC may result in additional administrative requirements. Eastman Chemical Company commented that adding constituents to Appendix VIII impacts incinerator trial burn tests requiring permit modifications.

DuPont supports self-implementation without prior agency notification review and approval because it represents a more appropriate use of limited resources by the overseeing agencies.

Three small businesses, Star Bronze, Kelly Technical Coatings, Kalcor Coatings, and Adheron Coatings, commented that the listing, as proposed, would significantly impact their businesses. Increased requirements would include additional personnel, additional analytical and reporting requirements, and additional equipment requirements.



NPCA commented that there are considerable waste management expenses associated with managing waste as hazardous, as opposed to non-hazardous. These expenses include facility modifications related to storage area, additional tanks, etc. NPCA also indicated that there would be additional personnel expenses related to training, documentation, recordkeeping, sampling, etc. NPCA assumes that facilities would need to install at least \$10,000 in capital improvements and incur at least \$5,000 per year in additional personnel expenses. NPCA indicated that their estimate may be low considering that many small businesses will either change from conditionally exempt or small quantity generators to large quantity generators as a result of this rulemaking and will be subject to additional reporting and transportation requirements. SOCMA noted that for small companies, an obligation to test to qualify for an exemption can make claiming the exemption cost-prohibitive.

Response:

Because we have made a final no-list determination, all potential implementation concerns potentially associated with the proposed rule are no longer germane to this action. Furthermore, no cost/economic concerns potentially associated with this issue had any influence on our final no-list determination.

However, we wish to make clear that , as stated in the proposed rule, paint manufacturers would have been able to apply process knowledge to make an initial determination as to whether any of the regulated constituents are present in the waste. If it was determined that none of the constituents are present in the wastes at the point of generation, then there would have been no further obligations for determining whether or not the wastes are K179 or K180 listed hazardous wastes, as proposed. If it was determined that any of the constituents of concern would have been present in the waste, manufacturers could use either a two-tiered approach to determine whether the constituent concentrations in the waste are below the concentration levels, or assume that wastes are hazardous at the point of generation. As stated in the proposed rule, this system was designed to minimize the burden on small generators, while ensuring that larger quantities of wastes would have been tested to confirm their status.

### **3.8 Scope Concerns**

Issue Summary:

ICI Paints North America and NPCA commented that EPA must clearly define what facilities would be considered “paint manufacturing facilities” under any final rule. They expressed concern that warehouses and research and development (R&D) facilities may be inadvertently subject to the rulemaking. R&D facilities may produce paints, but would be limited to small-scale operations

specifically for research and development purposes. R&D facilities should not be subject to the listing. The commenters stated that EPA should not limit the exclusion to facilities that just prepare paint products for sale since these facilities may adjust tint base prior to distribution, not just for sale to end users. The commenters indicated that EPA should change the definition of paint manufacturing facility to exclude any facility that does not manufacture paint.

ICI and NPCA also commented that the Proposed Rule does not address paint residues (e.g. clean-up residues and solvents, tank and drum bottoms, distillates and bottoms from solvent distillation). The commenters indicated that the Proposed Rule allows reuse of unused paint, but does not address the reuse of residues. According to commenters, there are a variety of reasons why the rulemaking, as proposed, should not interfere with current and future efforts of the industry to recycle and reuse paint residues. Namely, residues, like unused pure product are compatible with products they are used in and contain the same ingredients. They are also used as substitutes for raw materials, and they reduce the need for petroleum-based solvents. In addition, recovery of these materials and subsequent reuse is not limited to substitution of an ingredient. For example, reclamation allows for the legitimate sale of recovered solvent for use in other manufacturing processes. In order to eliminate confusion the commenters recommend that EPA make it clear in any final rule that the recycling or beneficial reuse of paint production wastes could continue under the current regulatory definition of solid waste and its exclusions.

Response:

Because we have made a final no-list determination, all potential scope concerns potentially associated with the proposed rule are no longer germane to this action. Furthermore, no cost/economic concerns potentially associated with this issue had any influence on our final no-list determination.

As a follow-up to the above issue, we want to make clear that nothing in the proposed rule was intended to interfere with current and future industry efforts to recycle and reuse paint residues. In fact the Agency encourages the recycle and reuse of these materials. The Agency also understands that paint formulations are fairly exacting, making it unlikely that a manufacturer could successfully rework paint containing significant quantities of constituents that are not useful paint ingredients. Typically, this type of reuse of a commercial product (when legitimate) is not regulated as waste management, even if it involves reclamation, as in the case of some of the residue examples the commenter cited.

### 3.9 Baseline Requirements and Need for Final Rule

#### Issue Summary:

Some commenters indicated that current and/or anticipated Federal and State regulatory actions may mitigate or eliminate many of the concerns addressed by the paint waste proposed rule. RPM, Inc., Jamestown Paint Company, and the National Paint & Coatings Association (NPCA) state that EPA did not consider existing or soon to be promulgated Federal and State regulations that, “will appropriately address potential risks to human health and the environment from paint production wastes.” In particular, these commenters indicated that EPA did not consider how the National Volatile Organic Compound Emissions Standards for Architectural Coatings and Industrial maintenance Coatings (AIM) rule will impact the concentration of VOC’s in paint production wastes. Commenters indicated that, “if the use of VOC’s are limited in the final paint product as a result of these regulations, VOC’s will also be reduced in the paint production waste as well.” Commenters indicated that many states, including California and other ozone non-attainment areas, have and probably will develop much more stringent VOC regulations than the National AIM Rule.

Furthermore, commenters indicated that EPA did not take into consideration the 14 major National Emission Standards for Hazardous Air Pollutants (NESHAP). These actions include surface coatings categories with Maximum Achievable Control Technology (MACT) (hereinafter referred to as “Surface Coating MACTs”) standards that have, or will be finalized within the next year. Commenters stated that these Surface Coating MACTs would significantly reduce the concentrations of the paint production waste listing constituents of concern.

Another MACT rule currently being drafted is the Miscellaneous Organic NESHAP (MON MACT). This rule is designed to reduce the potential risks specifically associated with paint production wastes via air and waste water pathways. The rule will require covers and controls on process tanks, require wastewater to be shipped off-site for treatment, control emissions from storage tanks and transfer operations, and require leak detection and repair programs for equipment. Commenters indicated that, instead of installing expensive control equipment, many paint manufacturers will reduce the amount of HAPs in their products, and thereby reduce the amount of HAPs in their paint production wastes as well.

#### Response:

Because we have made a final no-list determination, all potential baseline concerns potentially associated with the proposed rule are no longer germane to this action. Furthermore, no cost/economic concerns potentially associated with this issue had any influence on our final no-list determination.

#### 4.0 REFERENCES

1. Comments on the February 13, 2001 Proposed Rule, Docket Number F-2001-PMLP-FFFFF
2. U.S. EPA, 40 CFR Parts 148, et al., *Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Paint Production Wastes; Proposed Rule*, February 13, 2001.
3. U.S. EPA, Economic Assessment for the Proposed Concentration-Based Listing of Wastewaters and Non-wastewaters from the Production of Paints and Coatings, January 19, 2001.
4. U.S. EPA, Regulatory Flexibility Screening Analysis for the Proposed Concentration-Based Listing of Wastewaters and Non-wastewaters from the Production of Paints and Coatings, January 19, 2001.