

July 24, 2017

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Office of Pollution Prevention and Toxics
Environmental Protection Agency
1200 Pennsylvania Avenue N.W.
Washington, D.C. 20460-0001

Attn. Docket No. EPA-HQ-TRI-2017-0057

Re: Information Collection Request for Toxic Chemical Release Reporting and Renewals of Form R, Form A, and Form R Schedule 1 and Identified by EPA ICR No. 1363.26 and OMB Control No. 2025-0009

Dear Sir or Madam:

I am writing on behalf of the Color Pigments Manufacturers Association, Inc. ("CPMA") in response to the Notice of Availability and Request for Comment on the Information Collection Request pursuant to the Paperwork Reduction Act, 44 U.S.C. 3506(c)(2)(A), entitled Toxic Chemical Release Inventory Reporting ("TRI") and Renewals of Form R, Form A, and Form R Schedule 1 and identified by EPA ICR No. 1363.26 and OMB Control No. 2025-0009 (the "ICR").¹

CPMA is an industry trade association representing small, medium and large color pigments manufacturing companies. In addition, the Association represents color pigments manufacturers that sell pigments and certain colored products and suppliers of intermediates and other chemicals products that serve color pigments manufacturers. The Association provides advocacy programs in support of the color pigments industry on matters pertaining to the environment, health, safety issues and trade. Color pigments are widely used in product compositions of all kinds, including paints, inks, plastics, glass, synthetic fibers, ceramics, color cement products, textiles, cosmetics and artists' colors.

Introduction

CPMA defines pigments as colored, organic or inorganic solids, which usually are insoluble in, and essentially physically and chemically unaffected by, the vehicle or substrate in which they are incorporated. Pigments retain a crystalline or particulate structure and impart color by selective absorption or by scattering of light. The primary difference between pigments and dyes is that pigments are insoluble in the substrate during the application process, while dyes are soluble in the substrate.

¹ 82 Fed. Reg. 11086 (May 30, 2017).

As required by the Paperwork Reduction Act (PRA),² EPA solicits comments on its continued information gathering under the ICR to enable EPA to:

1. Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility.
2. Evaluate the accuracy of the Agency's estimates of the burden of the proposed collection of information, including the validity of the methodology and assumptions used.
3. Enhance the quality, utility, and clarity of the information to be collected.
4. Minimize the burden of the collection of information on those who are to respond³

In the following comments, CPMA:

- Explains that many substances, particularly metal-containing pigments, do not present hazards or exposures meeting the statutory standard for TRI reporting because, in actual uses, the metals have no bioavailability.
- Recommends that EPA evaluate the presence of such substances on the TRI list and initiate a rulemaking to delete them from the list.
- Urges EPA once again to actively work with industry to reduce unnecessary reporting.

Unnecessary Reporting on the TRI

Title III of the Superfund Amendments and Reauthorization Act established the TRI as a program for collecting information on chemical releases that “can reasonably be anticipated to cause . . . a significant adverse effect” on human health or the environment.⁴ EPA could further all of the goals cited above by renewing its efforts to focus the TRI on genuinely hazardous substances which pose an actual significant risk of adverse effects based up their use in commerce. Many of the chemicals reported on the TRI do not present a hazard or exposure of concern to the general public. By focusing on chemicals that meet the standard established by the authorizing statute and delisting chemicals from the TRI list which do not, EPA would add greatly to the utility and accuracy of the information and data derived from TRI reporting and would greatly reduce the burdens of such reporting.

Since the mid-1990s, EPA has not approved or encouraged delisting petitions from industry, nor has EPA taken steps to review the TRI list and remove substances and individual substances within categories such as “metals and compounds.”⁵ To the contrary, EPA has

² See 44 U.S.C. § 3506(c)(2)(A).

³ 82 Fed. Reg. 11086.

⁴ See 42 U.S.C. § 11023(d)(2).

⁵ See Supporting Statement for a Request for OMB Review under the Paperwork Reduction Act, EPA-HQ-TRI-2017-0057-0012 (“Supporting Statement”), p. 47.

added three chemicals to the reporting list in the past three years.⁶ The efficiency of the TRI reporting program would be greatly improved if EPA began to critically evaluate the existing chemicals on the TRI list, focusing in particular on the bioavailability of metals in actual uses, and encourage reasonable delisting petitions from industry.

EPA's prior guidance statements on delisting petitions are unnecessarily cumbersome and disregard the bioavailability of metals in actual uses, such that TRI reports continue to be required for products and processes that do not involve any actual human or environmental exposures. EPA's statement of policy on petition requirements for TRI delisting states:

There are a number of factors which must be considered in determining availability of the metal ion. These factors are listed below:

- Hydrolysis at various pHs
- Solubilization in the environment at various pHs
- Photolysis
- Aerobic transformations - abiotic and biotic
- Anaerobic transformations - abiotic and biotic
- Biological transformation, ...
- Bioavailability of the ion when the compound is ingested
- Bioavailability of the ion when the compound is inhaled
- Bio-accumulation and subsequent food chain magnification⁷

For substances and products without exposure which by definition have no bioavailability, EPA can and should use this ICR process to prompt a rulemaking to eliminate TRI reporting for such substances. This would save regulated entities the unnecessary, potentially prohibitive cost of the existing formal delisting petition process.

Numerous substances and products warrant further assessment for delisting from TRI requirements based the absence of any exposure by receptors. For example, trivalent forms of chromium used in insoluble complex inorganic color pigments encapsulated in resins of paint and plastic or used to color glass should not be reported on the TRI as chromium compounds. In general, complex inorganic color pigments consisting of synthetic, gemstone type mineral structures such as titanates, spinels and corundums do not yield a bioavailable exposure to metals sufficient to warrant TRI reporting.

Complex inorganic color pigments are made by calcination (strong heating in air) of blends of metal oxides and/or oxide precursors such as metal salts, hydrates, and carbonates. Calcination temperatures typically range from 650 degrees to 1300 degrees centigrade. All of the raw ingredients decompose to form metal oxides that are reactive at higher temperatures. Metal and oxide ions become mobile and interdiffuse in such cases to create a homogeneous solid. The ions in the solid then rearrange to a stable crystalline structure that is determined by the metals present, the oxide to metal ratio, and the calcining temperature. This new structure is the color pigment. In creating the pigment, the metal constituents lose completely their individual characteristics and assume the characteristics of the larger, unified product.⁸

⁶ See Supporting Statement, p. 45.

⁷ 56 Fed. Reg. 23703 (May 23, 1991).

⁸ See "High Performance Pigments," Completely Revised and Extended Edition, edited by Edwin

EPA proposes to request that facilities now distinguish between trivalent and hexavalent forms of chromium for the following reason:

This change would help assess the health risk of chromium. Hexavalent chromium has a unit risk estimate (chronic inhalation risk) for cancer whereas trivalent chromium does not. Knowing whether hexavalent chromium is present in an air release enables data users to model chromium releases more accurately.⁹

Trivalent forms of chromium encapsulated in products such as ink, paint, plastic and glass do not warrant reporting under the TRI, much less speciation by valence.

Prior to EPA's change of policy regarding delistings in the mid-1990s, CPMA successfully worked with EPA to delist phthalocyanine pigments and barium sulfate. The TRI list shows a footnote excluding phthalocyanine pigments substituted with only hydrogen, bromine and chlorine from the categorical listing "copper and compounds containing copper." Also, as a result of CPMA's petition, the current TRI list contains a footnote excluding barium sulfate from the "barium and compounds containing barium" categorical listing. These changes in the Toxic Release Inventory have saved the EPA, many manufacturers and hundreds of processors of these pigments thousands of hours and significant resources.

EPA should review the TRI list for other inorganic color pigments and initiate a rulemaking to remove them from the list. CPMA would be happy to work with EPA to identify these pigments and to help substantiate the case for their removal.

Chrome Antimony Titanate Petition

In June of 1998, CPMA submitted its most recent TRI delisting petition, involving C.I. Pigment Brown 24, also known as Chrome Antimony Titanate. EPA indicated in telephone calls through 2006 that EPA had unresolved concerns with the bioavailability of trivalent chromium. EPA never issued a final response to the Chrome Antimony Titanate petition. In order to maintain the option of supplementing the existing petition under review at EPA, CPMA did not insist on a final disposition of the pending Chrome Antimony Titanate petition. CPMA is planning to update and resubmit the petition for C.I. Pigment Brown 24 with more information summarized in the European Union Registration Evaluation Authorization and Restriction of Chemicals registration Dossier for C.I. Pigment Brown 24, the Organization for Economic Cooperation and Development Screening Information Dataset Dossier for C.I. Pigment Brown 24 and the EPA Framework for Metals Assessment. That additional information will further document that C.I. Pigment Brown 24 does not meet the standard for reporting established by SARA Title III due to the lack of exposure to chromium as contained in the pigment.

B. Faulkner and Russell J. Schwarz, Wiley VCH, Weinheim, Germany (2d. ed. 2009), Chapter 5, p.44, on Complex Inorganic Color Pigments, written by James White, Ph.D. of Shepherd Color Company.

⁹ Supporting Statement, p.19.

Disproportionate Impact on Small Business


EPA assumes that each submission of a Form R for the TRI will require 35.71 hours to complete, for a total of 3.56 million hours for 76,034 responses.¹⁰ Missing from this estimation is the disproportionate impact that TRI reporting has on small manufacturers and formulators. Many small businesses simply do not have the dedicated staff to devote a week to complete Form R reports, and must use contracted experts to assist in collecting information and completing reports. EPA does not sufficiently consider these costs and the burden created by TRI reporting requirements. The economic impact on small business for reporting hundreds of pigments and other materials encapsulated in formulations of inks, paints, coatings and plastics could be greatly reduced by removing unnecessary substances and products from the TRI reporting list. If EPA does not propose to delist such substances, EPA needs to redo its cost analysis based on the assumption that a substantial number of submitters will have to hire outside contractors to perform this work.

Conclusion

In Appendix F of the Supporting Statement, entitled "Information Sources Containing Data Subsets, But Not Comprehensively Comparable Alternatives to TRI Data," EPA discusses the existence of a network of other data sources that provide much of the data reported in consolidated form via the TRI. Since much, if not all, of the information collected in the TRI exists in other databases, EPA should make a much greater effort to avoid unnecessary redundancy by reviewing and removing substances, products and processes which pose no significant risk from time-consuming TRI reporting.

CPMA has in past worked with EPA to identify and remove substances which do not warrant reporting on the TRI. CPMA encourages EPA to revisit its position on changes in the TRI and actively work with industry to reduce unnecessary reporting.

Sincerely,



David Wawer
Executive Director

¹⁰ Supporting Statement, p.3.