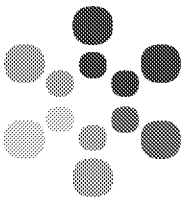

AmericanCoatings
ASSOCIATION℠

March 1, 2018

Bill Wehrum
Environmental Protection Agency
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1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Samantha Dravis
Office of Policy (1803A)
US Environmental Protection Agency
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Mick Mulvaney
The Office of Management and Budget
725 17th Street, NW
Washington, DC 20503

Re: Miscellaneous Coatings Manufacturing MACT (MCM) Residual Risk and Technology Review (RTR); American Coatings Association (ACA) Concerns

Dear Mr. Wehrum, Ms. Dravis and Mr. Mulvaney:

The U.S. Environmental Protection Agency (EPA) is currently conducting a Residual Risk and Technology Review (RTR) of the maximum achievable control technology standard (MACT) for Miscellaneous Coatings Manufacturing (MCM) at 40 C.F.R. Part 63, Subpart HHHHH. The MCM rule promulgated on December 11, 2003 imposed unnecessarily burdensome requirements on coatings, adhesives, and ink manufacturing operations. Now that the rule is under consideration in the RTR rulemaking process, The American Coatings Association (ACA[1]) is concerned that EPA will increase the burden on the coatings industry without commensurate environmental benefits. Many of the current requirements for process tanks

[1] The American Coatings Association (ACA) is a voluntary, nonprofit trade association working to advance the needs of the paint and coatings industry and the professionals who work in it. The organization represents paint and coatings manufacturers, raw materials suppliers, distributors, and technical professionals. ACA serves as an advocate and ally for members on legislative, regulatory, and judicial issues, and provides forums for the advancement and promotion of the industry through educational and professional development services.

and leak detection and repair were developed by EPA using several assumptions that were not valid then (in 2003) and continue to invalid today. ACA is very concerned that EPA will again employ these assumptions to justify more stringent requirements. Consequently, given the relatively short rulemaking schedule, ACA requests that EPA's Office of Policy and the Office of Management and Budget (OMB) review the agency's development of this RTR rulemaking to ensure that our concerns are considered, and that the rule is technically sound and fair.

EPA Must Account for the Unique Characteristics of Coatings, Adhesive, and Ink Manufacturing Operations, Especially With Regard to Leak Detection and Repair

To speed its RTR rule-making, EPA is reviewing the MCM, Miscellaneous Organic Chemical Manufacturing[2] (MOCM, or "MON"), and Organic Liquid Distribution[3] (OLD) MACTs simultaneously. ACA is concerned that the unique characteristics of coatings, adhesives and ink manufacturing operations will be lost in a combined Residual Risk and Technology Review of these three rules.

Formulating and blending operations for manufacturing coatings, adhesives and inks are very different than batch/continuous chemical manufacturing operations, especially regarding emissions from equipment leaks. EPA clearly recognized this difference in its "Notice of available information and solicitation of additional information" for the MON MACT[4] as follows:

> "...data also indicate that, for purposes of characterizing and controlling process emissions, distinctions based on whether the production of these organic chemicals are a formulation operation or a chemical reaction, and whether the process vessel is a batch or continuous reactor are more significant than differences among the final chemical products themselves. The Agency envisions a set of standards establishing separate control requirements for chemical production processes and formulation/blending operations. Separate control requirements may also be established for emission points associated with continuous reactors, batch reactors, and formulation/blending."[5]

As a consequence, EPA developed two different sets of standards – one for manufacturing coatings, adhesives and ink by blending and formulation operations (the MCM rule) and the other for manufacturing miscellaneous chemical (the MON).

EPA should consider these differences once again during its RTR review of the MCM rule, and especially in connection with the rule's leak detection and repair (LDAR) provisions. Compared with chemical manufacturing operations, coatings, adhesives and ink

[2] 40 C.F.R. Part 63, Subpart FFFF
[3] 40 C.F.R. Part 63, Subpart EEEE
[4] 61 Fed. Reg. 57602 (November 7, 1996).
[5] Id at 57604.

manufacturing operations have very low leak rates for a number of reasons, including the following:

- The coatings industry strives to minimize leaks because these are a serious worker safety and environmental concern, and directly impact the profitability of a facility;
- MCM facilities typically utilize liquid raw materials having low vapor pressures that are less prone to evaporation;
- Unlike many of the operations in chemical manufacturing, most MCM components operate intermittently and under atmospheric or only a slight pressure head, such as developed by transfer pumps;
- Seal-less magnetic-drive pumps, air-operated diaphragm pumps, dual seal and gear pumps, which are designed specifically to have negligible potential for emissions, are commonly used by our industry for transferring materials;
- Most MCM equipment components are located inside production buildings where equipment leaks are readily detectable by employees working in the vicinity of the equipment; and
- Other programs provide redundant monitoring including storage tank spill prevention control and countermeasure; industrial hygiene, and process safety management requirements.

Because of the coating industry's low emissions from equipment leaks, the MCM rule's current option to check leaks by visual, auditory, and olfactory cues in lieu of instrument methods is appropriate and important to the coatings industry. *See* Table 3 to 40 C.F.R. Part 63, Subpart HHHHH, referencing 40 C.F.R. §§ 63.424(a)(d) & 63.428(e), (f) & (h)(4). This option, however, is provided in the current rule only for facilities that are existing affected sources under the MCM rule––the same option is warranted for new MCM affected sources as well.

Please note additionally that in the original MCM rulemaking, EPA utilized LDAR component emissions information provided by ACA to revise its cost effectiveness assessment for above-the-floor instrument LDAR. EPA decided that it could not justify instrument methods as the sole option for LDAR based on its 2003 estimated cost of $15,800/Mg ($21,181 in 2018 dollars). ACA estimates that the current costs of imposing instrument LDAR would be closer to $269,208/Mg HAP controlled. Surely there is no reason to impose this burden since the current requirement of sensory LDAR is effective.

Impact - ACA is concerned that EPA will significantly increase burden by requiring "Instrument" LDAR for MCM facilities. ACA estimates that the impact on the industry would be a significant increase in the costs to implement instrument LDAR -- to over $269,208/Mg HAP.

Recommended Solution - ACA suggests EPA retain the current and effective "Sensory" LDAR requirement for existing and new affected sources.

Process Tank Controls

EPA Process Vent Stream Flow Assumptions

ACA commented in the proposed MCM that EPA's model plants and assumptions for process tanks were not accurate. In the 2003 rulemaking, EPA had assumed that closed vent systems on five process tanks would involve an exhaust air flow totaling only 100 scfm. ACA advised EPA that air flows through collection hoods typically range from 500 to 1000 scfm per tank; collection systems range from 5,000 to 35,000 scfm or more; and general room ventilation air flows are typically in the 1,000s of scfm. Actual data gathered by ACA from 10 facilities indicated air flows ranging from 300 scfm to more than 25,000 scfm. High exhaust air flows are typically utilized in our industry to protect workers when opening and closing vessels when sampling or adding raw materials. The necessarily high air flow rates dramatically impact economically viable methods for controlling emissions from a typical plant subject to the MCM rule.

EPA Process Vent Stream Concentration Assumptions

In the MCM MACT floor analysis, EPA assumed 40,000 ppm as the VOC concentration in exhaust vents for process vessels. At that time, ACA commented that that the highest VOC process vent concentration within the plants surveyed was only 1,235 ppm.

Even disregarding data from ACA's survey, EPA's 40,000 ppm gas stream concentration has no technical basis. The 40,000 ppm concentration assumed that the displaced vapor from the head space of the vessel is in equilibrium with pure toluene solvent, which (in accordance with physical chemistry principles of partial pressures) could occur only if the process vessel were filled with toluene only. A process vessel at a facility subject to the MCM rule would never contain pure solvent because the products of our industry always contain multiple materials in emulsion, suspension, and colloidal forms, not pure organic solvent. EPA should therefore consider that large air flows at generally low concentrations are characteristic of this industry when conducting its technology review.

Cost of Thermal Oxidation

In 2003, ACA advised EPA that it had underestimated its assumptions about the air flows from stationary process tanks and overestimated the VOC concentrations in vent stream. Reflecting the air flows VOC concentrations that truly characterize our industry, ACA estimated the true cost of installing thermal oxidation in 2003 to be greater than $16,000/Mg ($21,449 in 2018 dollars). It is important that EPA utilize more accurate flow rate and vent stream concentration assumptions in any technology review estimates, especially considering that

thermal oxidation units cost in the range of 1-3 million in capital costs (does not include additional expenses including ductwork, process modifications and fire controls) and well over $500K in annual operation and maintenance costs, as well as increased greenhouse gas emissions.

Portable Process Tanks

EPA correctly concluded in 2003 that installing controls on portable tanks is costly ($21,000/Mg - $28,152 in 2018 dollars) and operationally difficult, and therefore required control of portable tanks by covers. ACA believes that the actual cost to install controls on portable tanks is even greater than what EPA previously estimated, and that requiring covers only on portable tanks continues to be justified.

Impact - ACA is concerned that EPA will increase burden by increasing the stringency of MCM process tank requirements. The installation of thermal oxidation controls on stationary tanks is not cost justifiable. Also requiring add-on controls on portable tanks is technically challenging, and very expensive (hundreds of thousands of dollars), and would not provide any additional environmental benefit.

Recommended Solution - ACA suggests EPA retain the current and effective process tank control requirements.

5% Pollution Prevention Option Is Needed

The 5% pollution prevention option, in accordance with 40 C.F.R. § 63.8055, has been utilized by several MCM facilities. It provides emission reduction with minimum burden, and it provides strong incentives for facilities to reformulate their coatings to containing zero or low-concentrations of HAP substances. ACA strongly requests that EPA retain this important compliance option.

Impact - ACA maintains that the 5% option is a very important compliance option, and its removal would be devastating to several coatings manufacturing companies. Eliminating this option would require facilities to install very expensive control technology without environmental benefit given that the 5% option is effective.

Recommended Solution - ACA suggests EPA retain this very important compliance option.

EPA Must Consider the Facility Closures That Resulted From the MCM and Consolidation

In the 2003 preamble to the final rule, EPA concluded that only "one plant closure [is] expected out of the 127 facilities affected by the proposed NESHAP." And that it "should be noted that ... the facility predicted to close appears to have low profitability levels currently.

Therefore, it is likely that there is no adverse impact expected to occur for those industries that produce output affected by the proposed."

The coatings, adhesives and ink manufacturing industry has changed dramatically since 2003. Industry consolidation as well as the promulgation of the MCM rule forced many facilities to close. Of the 128 facilities that EPA considered in 2003, approximately 43 (34%) of the facilities have closed.

Impact – The stark reality of 43 facility closures highlights the impact of the MCM rule on the coatings, ink and adhesive manufacturing industry.

Recommended Solution - ACA is working diligently with EPA in the RTR rulemaking process. We urge EPA to be open to considering the potential economic impact of the MCM requirements with the knowledge that there are 43 fewer facilities than there were when the original rule was finalized. ACA strives to bring real data to the rulemaking regarding costs and environmental benefits of the current requirements.

Thank you for your consideration of our concerns. As this rulemaking is moving rather quickly and involves several rules, ACA's goal here is to articulate our concerns as early as possible. Please note that we will be following up later with suggestions on a possible work practice standard for start-up, shut-down and malfunction and a suggested exclusion from the rule applicability for operations that process or use organic HAP substances present only at incidental concentrations. ACA is happy to provide updates on these issues as the rulemaking progresses and we are always available to answer questions.

Please do not hesitate to contact me if you have any questions.

Sincerely,

David Darling,
VP, Health, Safety and Environmental Affairs
American Coatings Association

Cc: Jennifer Caparoso, EPA