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November 28, 2018

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Acting Principal Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001

Attention: Docket ID Number EPA-HQ-OPPT-2017-0648

OMB Control Number 2070-0162

Submitted to the Federal eRulemaking Portal (www.regulations.gov)

Re: Environmental Protection Agency's "Information Collection Request Submitted to OMB for Review and Approval; Comment Request; Chemical Data Reporting Under the Toxic Substances Control Act (TSCA Section 8(a)) (Renewal)"

Dear Ms. Bertrand:

The American Fuel & Petrochemical Manufacturers ("AFPM") respectfully submits the attached comments on the Environmental Protection Agency's ("EPA" or the "Agency") proposed renewal of "Information Collection Request Submitted to OMB for Review and Approval; Comment Request; Chemical Data Reporting Under the Toxic Substances Control Act (TSCA Section 8(a)) (Renewal)."¹

AFPM is a national trade association representing virtually all U.S. refining and petrochemical manufacturing capacity. AFPM refining and petrochemical member companies are subject to the Toxic Substances Control Act ("TSCA") and are directly impacted by EPA's Chemical Data Reporting (CDR) rule and information collection activities.

As part of its information collection renewal, AFPM has identified areas where the Agency can take advantage of opportunities to evaluate the practical utility of collected information and minimize the burden of reporting on respondents. These comments are intended to be constructive in helping EPA realize the objectives found in the Paperwork Reduction Act (PRA), the explicit language in TSCA Section 8(a)(6) requiring the Agency to reduce reporting burdens for inorganic byproducts, and requirements found in Executive Order 13771.

Sincerely,

James Cooper
Senior Petrochemical Advisor

¹ See 83 *Federal Register* 54341 (October 29, 2018).

Information Collection Request Submitted to OMB for Review and Approval; Comment Request; Chemical Data Reporting Under the Toxic Substances Control Act (TSCA Section 8(a)) (Renewal)

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COMMENTS BY TOPIC

These comments address EPA's renewal for the CDR Information Collection Request (ICR) and will focus on opportunities for the Agency to evaluate the practical utility of collected information and minimize the burden of reporting on respondents.

1.0 OBJECTIVES FOUND IN THE PAPERWORK REDUCTION ACT

1.1 In its ICR renewal for CDR reporting, EPA should evaluate the practical utility of information pertaining to inorganic byproducts related to spent catalysts and site-limited intermediates and seek to minimize the reporting burden of respondents.

The PRA (see section 3506(c)(2)(A)) directs federal agencies to evaluate the practical utility of collected information and, importantly, to “[m]inimize the burden of the collection of information on those who are to respond.” AFPM firmly believes that there are opportunities to achieve these legislative objectives for the collections under CDR reporting.

2.0 PRACTICAL UTILITY OF INFORMATION COLLECTED ON SPENT CATALYSTS AND PROPOSAL TO REDUCE REPORTING BURDEN

2.1 Use and Recycling of Spent Catalysts

Catalysts are used throughout the chemical and refining industries to help produce desirable products under less hazardous conditions. They are critical to work place safety. Moreover, catalysts are used in closed systems, which are designed to reintroduce the catalyst into a processing unit or reaction vessel until the catalyst is spent and requires regeneration (an industry term synonymous with recycling). During the use of the catalyst, the catalyst can lose reactivity when inorganic byproducts are formed. Catalyst regeneration also takes place in closed systems during processing and often makes use of chemical reactions to return the spent catalyst back to its original and useful molecular species.

The methods for catalyst regeneration are varied, depending on molecular structure of the catalyst after use and the specific chemical reactions required to return the catalyst to its original state. The one thing that catalyst regeneration techniques tend to have in common is that the reactions take place in closed systems during processing thus reducing potential for worker exposure. During regeneration, the used catalyst is introduced into a reaction vessel with one or more other chemicals to induce a reaction that consumes the reactants and may form one or more molecular constituents. Some of these are disposed of as waste and subject to federal, state and local disposal requirements. The new molecular constituent of interest may also be consumed in each step until the original catalyst material is produced. The only products resulting from this multi-step process are some wastes (currently exempt from CDR reporting) and the original catalyst material. The only commercial intent in this process is to recycle a used catalyst and return the regenerated catalyst to the user for its original purpose.

2.2 EPA should reduce the reporting burden on spent catalysts, consistent with the objectives of the PRA, TSCA Section 8(a)(6).

The reporting of inorganic byproducts resulting from catalytic processes that are recycled on-site or confined to recycling at another site, where recycled material is sent back to the original site of use (and byproduct generation), should be afforded a limited reporting burden that includes one-time reporting of the name of the byproduct and the average percentage range of byproduct that is recycled for subsequent use.

The manufacturer of the original material already reports the substances in the catalyst, the physical form of the catalyst, whether the catalyst is being recycled, and downstream uses on Form U as part of its CDR reporting obligations, including the sectors in which the catalyst is used, the number of sites and the number of workers potentially exposed. The only information that EPA does not have from the original manufacturer is the name of the byproduct and the amount of the byproduct sent for recycling by the user. Requiring reporting lifecycle information by the end user of the catalyst is duplicative and has no practical utility, because EPA already has that same information from the original catalyst manufacturer. It could also distort the marketplace by double-counting materials.

2.2.1 Example: Metal Catalyst

Metal catalysts are used in certain refining and petrochemical manufacturing processes. Depending on the severity of its use, the catalyst is contaminated with coke and other organic materials and requires regeneration periodically (e.g., every 6 months, annually or biannually). The organic materials occlude (block) the pore sites on the active catalyst and reduce the surface area of the catalyst particles, which reduces contact with reactants, thereby reducing the effectiveness of the catalyst. Regeneration is a physical process that uses heat to remove the organic materials; therefore, no new chemical is created, or byproduct formed, and thus nothing is reportable under this scenario according to the current reporting criteria.

Over time, the catalyst can no longer be regenerated and is sent off-site for reclamation of the metal. For safety reasons, the metal catalyst is often deactivated by conversion to a metal oxide prior to shipment. Under the current reporting system, the metal oxide would be reported under CDR, even though it poses less risk than the metal catalyst. Under this new proposal, the metal oxide would be considered an intermediate and would not be reported.

Depending on the catalyst, reclamation can use chemical reactions and/or heat to reclaim the metal. Either approach results in complete destruction of the original catalyst species and, through a series of steps, results in the manufacture of the metal. Currently, the intermediates formed during processing are reportable, as is the resulting metal. Under this new proposal, only the resulting metal would be reported under CDR. The intermediates that are formed and consumed during processing would no longer be reported.

2.2.2 Example: Acid Catalyst

Acid catalysts are described in a different manner than metal catalysts. When acid catalysts need regeneration, they are considered “spent.” For metal catalysts, “spent” means that the catalyst can no longer be regenerated. When an acid catalyst is spent, it usually means that impurities are formed, which reduces the acidity of the catalyst and, thereby, its catalytic effectiveness. At that point, the acid requires regeneration.

The method for regenerating the acid catalyst differs from that used for metals. In the case of sulfuric acid catalyst, heat is used to thermally decompose the spent acid and form sulfur dioxide, which is then cleaned and oxygenated to form sulfur trioxide. The sulfur trioxide is mixed with water to form sulfuric acid. Under the current regulations, the sulfur dioxide, sulfur trioxide and sulfuric acid are all reportable. Under the new proposal, there would be no reporting as long as sulfuric acid is sent back to the original end user site.

3.0 PRACTICAL UTILITY OF INFORMATION COLLECTED ON SITE-LIMITED INTERMEDIATES AND PROPOSAL TO REDUCE REPORTING BURDEN

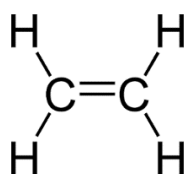
Intermediates are chemicals used to make other chemicals. The intermediate chemical is consumed in the process and no longer exists as that original substance once processing is complete. The term “site-limited” means that the chemical intermediate is consumed at the manufacturing site.

3.1 EPA should reduce the reporting burden for site-limited intermediates, consistent with the objectives of the PRA.

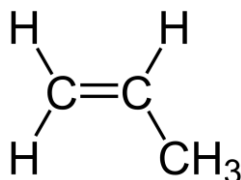
The reporting of site-limited intermediates should be afforded a limited reporting burden. EPA already has information on conditions of use for existing intermediates from previous CDR submissions. EPA also collects information on conditions of use for new intermediates from Premanufacture Notice (PMN) submissions. Isolating and confining an intermediate utilizing pipelines or hoses prevents release and subsequent potential exposure; therefore, there is not an unreasonable risk to human health or the environment under an intermediate’s conditions of use. Furthermore, because the chemical intermediate is consumed on site, it is not sold into commerce, which is the fundamental factor by which TSCA authorizes the Agency to regulate chemicals.

3.1.1 Example: Site-limited monomers

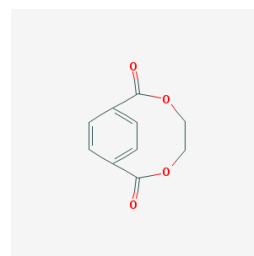
A monomer is a chemical intermediate often used to make plastic. The monomer, which is usually very reactive, is fully consumed in the process and is converted into a long-chain molecule called a polymer (i.e., plastic). Monomers can be simple molecules, such as ethylene, which has only two carbon atoms, and propylene, which has three carbon atoms; or, it can be a more complex molecular structure like ethylene terephthalate (as depicted below).



Ethylene



Propylene



Ethylene Terephthalate

Simple monomers (also called base petrochemicals) can be manufactured by a process called cracking, where the bonds of a chemical are broken apart by heat and the molecular fragments rearrange, according to the laws of physical chemistry, and make a completely new substance (the monomer). The monomer is then fed into another closed system by pipeline to undergo polymerization, which consumes the monomer and results in small plastic pellets called resin. Both the cracking of the original feedstock and polymerization of the monomer take place in closed systems connected by pipeline.

Monomers can also be manufactured as a result of chemical reactions. For example, reacting para-xylene (a base petrochemical) and oxygen produces terephthalic acid. Reacting ethylene (a base petrochemical) and oxygen, then adding water produces ethylene glycol. Reacting the ethylene glycol with terephthalic acid produces the ethylene terephthalate monomer. Of course, the chemistry is a little more complex than just

mixing these substances together; however, the point here is to illustrate that monomers can be the result of multi-step processes. In the case of ethylene terephthalate, para-xylene, terephthalic acid, ethylene and ethylene glycol are all chemical intermediates consumed in the multi-step process. Those substances do not exist in the resulting ethylene terephthalate monomer, which is itself a monomer used to make polyester. Furthermore, those site-limited intermediates are not sold into commerce.

3.1.2 Example: Petrochemical Derivatives

To build upon Section 3.1.1, chemicals derived from base petrochemicals, such as ethylene, propylene, butylenes, benzene, toluene, xylenes, etc., are logically referred to as petrochemical derivatives. Many of those derivatives, such as ethylene glycol and propylene oxide, are also used as intermediates to manufacture substances other than plastics, such as surfactants and pharmaceuticals. Most base petrochemicals and derivatives are used as building blocks to make other chemicals; therefore, a large portion of these substances are only used as intermediates and, by virtue of being completely consumed, typically do not make their way into end products. The petrochemical building blocks are not sold into commerce; rather, they are consumed during processing to make the other chemicals.

4.0 RATIONALE FOR REDUCED REPORTING

4.1 The reduction in CDR reporting burden for spent catalysts is justified because it is consistent with the objectives outlined in the PRA, the spent catalysts are not sold into commerce; and, it is consistent with the requirements of TSCA Section 8(a)(6).

As stated previously, the objectives of the PRA are quite clear, and this proposed reduction is consistent with those requirements. Additionally, spent catalysts that are sent to be reclaimed or regenerated are not sold into commerce; rather, the sole intent is recycling. TSCA Section 8(a)(6) has an explicit requirement that EPA develop “a proposed rule providing for limiting the reporting requirements, under this subsection, for manufacturers of any inorganic byproducts, when such byproducts, whether by the byproduct manufacturer or by any other person, are subsequently recycled, reused, or reprocessed.” The Agency has previously fulfilled its other requirement, namely entering into a negotiated rulemaking, which is also explicitly stated in Section 8(a)(6). Reducing the reporting burden on spent catalysts would achieve the requirement of “limiting the reporting” obligations.

4.2 The reduction in CDR reporting burden for site-limited intermediates is justified because it is consistent with the objectives outlined in the PRA, the risk of site-limited intermediates does not change; and, because site-limited intermediates are not sold into commerce.

This proposed reduction for site-limited intermediates is also consistent with the objectives of the PRA. As outlined in Section 3.0 of these comments, the risk under the conditions of use of site-limited intermediates does not change. EPA already has information on the conditions of use for existing intermediates from previous CDR submissions, and from PMN submissions for new intermediates. Furthermore, site-limited intermediates are consumed and never sold into commerce.

5.0 CONCLUSION

AFPM appreciates EPA’s decision to provide another 30-day comment period for this ICR. AFPM has identified opportunities for the Agency to meet objectives outlined in the PRA, as well as meeting a requirement to reduce reporting burdens for inorganic byproducts. AFPM’s proposed burden reductions

are not only justified under the objectives in PRA and TSCA Section 8(a)(6) but follow the spirit of Executive Order 13771.

EPA already collects information on catalysts and their conditions of use from the catalyst manufacturer. Spent catalysts are not sold into commerce for purposes other than recycling. Even in cases where the metal is reclaimed, the conditions of use for the catalyst that is returned to the user site remains constant. There is no practical utility or benefit from collecting information on spent catalysts every four years.

The conditions of use for site-limited intermediates are also constant. If they are used in closed systems and transferred via pipeline or hose, the potential for release or subsequent exposure is essentially negligible. Other than a one-time collection of use information, which EPA already has for new chemicals when Premanufacture Notices (PMNs) are filed, and for existing chemicals from previous CDR submissions, there is no practical utility or benefit from collecting additional information.

AFPM appreciates the opportunity to highlight areas in which EPA can evaluate the practical utility of its collections under CDR reporting. AFPM firmly believes that the Agency can meet several different statutory objectives by adopting reduced reporting requirements for spent catalysts and site-limited intermediates. AFPM is committed to working with EPA to refine this proposal to ensure the Agency collects information with practical utility and demonstrable benefit, while meeting the objectives of the PRA and TSCA.