December 11, 2017

Via the Federal eRulemaking Portal

Document Control Office (7407M)
Office of Pollution Prevention and Toxics (OPPT)
Environmental Protection Agency
1200 Pennsylvania Ave. N.W.
Washington, DC 20460–0001

Re: EPA–HQ–OPPT–2016–0597, Negotiated Rulemaking to Limit Reporting of Inorganic Byproducts That Are Recycled, Reused, or Reprocessed

Dear Sir or Madam:

The undersigned industry groups and companies had representatives who were members on the Negotiated Rulemaking Committee established under section 8(a)(6) of the Toxic Substances Control Act. These entities submit the attached comments in response to EPA's request for input on ways to decrease the burden associated with the reporting of inorganic byproducts while maintaining its ability to receive the information it needs to understand exposure, 82 Fed. Reg. 47423 (Oct. 12, 2017).

Sincerely,

American Chemistry Council
American Coal Ash Association
American Fuel and Petrochemical Manufacturers
American Iron and Steel Institute
American Petroleum Institute
Copper & Brass Fabricators Council
Guardian Industries
Institute of Scrap Recycling Industries
IPC – Association Connecting Electronics Industries
Phibro-Tech, Inc.
Portland Cement Association
Specialty Steel Industry of North America
Steel Manufacturers Association
Utility Solid Waste Activities Group

Attachment

Docket No. EPA–HQ–OPPT–2016–0597

Negotiated Rulemaking to Limit Reporting of Inorganic Byproducts That Are Recycled, Reused, or Reprocessed

Comments of Several Industry Groups Represented on the Negotiated Rulemaking Committee

December 11, 2017

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EXECUTIVE SUMMARY

EPA should remove disincentives to recycling inorganic byproducts. Recycling of these byproducts generally is increasing, but EPA's TSCA reporting requirements disincentivize recycling by increasing the burden and liability associated with recycling the byproducts, as compared to disposal. To address this problem, Congress recently directed EPA to adopt a rule to limit reporting of inorganic byproducts that are recycled.

To assist EPA in this activity, section 8(a)(6) of the Toxic Substances Control Act (TSCA), added by the 2016 amendments to TSCA,[1] called for a negotiated rulemaking to develop proposals for how EPA should limit reporting requirements while still collecting information necessary for its implementation of TSCA. The Negotiated Rulemaking Committee developed proposals for EPA's consideration, but did not reach consensus on any of those proposals. Nevertheless, EPA is still obligated to propose and publish a rule to limit reporting of inorganic byproducts that are recycled, reused, or reprocessed (collectively referred to herein as "inorganic byproducts that are recycled"). The industry member proposals deserve careful review as EPA plans for its rulemaking.

The requirement to limit reporting of inorganic byproducts that are recycled finds additional support in EPA's authority under section 8(a)(1). It authorizes EPA to collect such information "as the Administrator may reasonably require," but "only to the extent the Administrator determines" that reporting "is necessary for the effective enforcement of this Act." Thus, the burden falls on EPA to justify why it needs to collect information on inorganic byproducts that are subsequently recycled.

EPA generally explained how it uses information collected under section 8(a) to help prioritize and evaluate chemicals. However, historically and continuing to the present day, EPA has not adequately justified the necessity of collecting information on inorganic byproducts that are recycled. The purposes underlying TSCA's chemical data reporting requirements, such as facilitating prioritization and risk evaluations, are not likely to be advanced by EPA's collection of information on inorganic byproducts that are recycled. Instead, EPA is likely to continue to collect and rarely, if ever, use that information.

EPA has also not adequately justified the reasonableness of its current reporting requirements for inorganic byproducts that are recycled. These requirements impose the administrative and recordkeeping burdens characteristic of any reporting requirement. Beyond that, however, they actually discourage recycling -- in part due to EPA's interpretations of its own regulations. One interpretation potentially subjects companies that do not regard themselves as chemical manufacturers to EPA's reporting requirements as if they were, merely because of how they handle the complex mixtures that result from their operations. The other interpretation narrows the scope of the exemption for byproducts used for limited commercial purposes with the effect of making many byproducts that are recycled ineligible for the exemption. For example, inorganic byproducts that used as site-limited intermediates are ineligible for the exemption.

[1] Frank R. Lautenberg Chemical Safety in the 21st Century Act, Pub. L. 114-182 (June 22, 2016) (LCSA).

During the negotiated rulemaking, representatives of several industry groups participated as members of the Negotiated Rulemaking Committee.[2] These industry members presented several reasonable proposals to limit reporting and reduce burdens. Although EPA appeared receptive to discussing and further refining some of these proposals, the other members of the Negotiated Rulemaking Committee opposed the proposals, or placed conditions that would have produced little burden reduction in reporting requirements. In turn, the proposals suggested by those members would have increased, rather than decreased, reporting burdens. The proposal by the EPA members would have resulted in some reduction in reporting requirements, but would not have resulted in significant reductions in reporting burden. These inconsistent approaches meant that the Negotiated Rulemaking Committee was unable to achieve consensus.

Although the full committee did not reach consensus, the industry member proposals deserve careful review by EPA. EPA is still obligated by section 8(a)(6) to propose and publish a rule limiting the reporting of inorganic byproducts that are recycled. The industry groups whose representatives served on the Negotiated Rulemaking Committee are prepared to work with EPA to develop that rule.

DISCUSSION

1. TSCA Section 8(a)(6) Requires EPA to Limit the Reporting Requirements for Inorganic Byproducts That Are Recycled

The Negotiated Rulemaking Committee was convened pursuant to section 8(a)(6), which provides (emphasis added):

> NEGOTIATED RULEMAKING.—
> (A) The Administrator shall enter into a negotiated rulemaking pursuant to subchapter III of chapter 5 of title 5, United States Code, to develop and publish, not later than 3 years after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, **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**.
> (B) Not later than 3 and one-half years after such date of enactment, the Administrator **shall publish a final rule** resulting from such negotiated rulemaking.

[2] The industry groups providing members of the Negotiated Rulemaking Committee included, among others: American Chemistry Council, American Coal Ash Association, American Fuel and Petrochemical Manufacturers (AFPM), American Iron and Steel Institute, American Petroleum Institute, Copper & Brass Fabricators Council, Guardian Industries, Institute of Scrap Recycling Industries, IPC – Association Connecting Electronics Industries (IPC), Phibro-Tech, Inc., Portland Cement Association, Specialty Steel Industry of North America, Steel Manufacturers Association, and Utility Solid Waste Activities Group. The industry participants are further identified at https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OPPT-2016-0597-0055&contentType=pdf.

This provision is plainly intended to encourage recycling of inorganic byproducts[3] by limiting the reporting requirements applicable to such byproducts.

Congress included this provision in the LCSA because of, among other things, a longstanding debate between EPA and inorganic byproduct manufacturers about EPA's overly narrow interpretation of the scope of a current byproduct exemption from chemical data reporting and its impact on recycling of inorganic byproducts. That debate focused on whether or not the "extraction" provision of 40 C.F.R. § 720.30(g)(3), which is incorporated by reference in reporting requirements under section 8(a)(1), extends to extraction through chemical reaction. The subject matter of the debate is discussed below in section 4.c of these comments.

Dialogue between affected industry groups and EPA began in 2005, shortly before the 2006 submission period for the Inventory Update Rule (IUR). Prior to that time, the IUR had excluded inorganic chemical substances entirely, but in 2003 EPA had revoked that exclusion.[4] The dialogue continued for years. EPA expressed its interpretation of the "extraction" provision in letters, meetings, and presentations, and the industry groups criticized the reasoning behind that interpretation.[5] In 2010, EPA included this interpretation in a notice of proposed rulemaking to revise the IUR[6] and related guidance documents. Commenters on the proposed rule objected to EPA's interpretation, but EPA reconfirmed it in the 2011 final rule, which also renamed the IUR as the Chemical Data Reporting rule (CDR). There it observed the particular relevance of this issue to inorganic byproducts that are recycled:

> [I]t is apparent that scope of the CDR obligation to report byproducts is not well understood by industry. The scope of byproduct reporting has become a particularly pertinent issue because (by the terms of the 2003 IUR Amendments) inorganic chemical substances are now no longer exempt from reporting under CDR, including (beginning with the 2012 CDR) the information collection requirements for processing and use information. Inorganic chemical substances are often recycled, which may trigger the

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[3] A "byproduct" is "a chemical substance produced without a separate commercial intent during the manufacture, processing, use, or disposal of another chemical substance or mixture." 40 C.F.R. §§ 704.3 (incorporated by reference in 40 C.F.R. § 711.3), 720.3(d).

[4] When the IUR began in 1986, it excluded all inorganic chemical substances, including inorganic byproducts that are recycled. Former 40 C.F.R. § 710.26(a), 51 Fed. Reg. 21438, 21447 (June 12, 1986). This exemption was revoked in 2003. 68 Fed. Reg. 848, 853 (Jan. 7, 2003). The requirement to report information on inorganic chemicals was phased in beginning with the 2006 submission period, and inorganic chemicals were subject to full reporting for the first time with the 2016 submission period.

[5] The following is a partial list of the correspondence and meetings devoted to this contentious topic: June 28, 2005 EPA responses to follow-up questions from Neil King representing several nickel industry associations; Oct. 27, 2005 letter from Neil Patel, Acting Director of Economics, Exposure and Technology Division (EETD), Office of Pollution Prevention and Toxics (OPPT), to the Metals Chemistry Forum; Jan. 19, 2006 letter from Neil Patel to Metals Chemistry Forum; Sept. 22, 2006 letter from the Aluminum Association to Susan Sharkey; Oct. 19, 2006 EPA general summary of IUR-related issues for utilities; Oct. 24, 2006 letter from Susan Sharkey to the Aluminum Association; Mar. 12, 2007 letter from IPC to Robert Lee, Director, EETD; June 28, 2007 industry coalition letter to Charlie Auer, Director, OPPT; July 11, 2007 industry meeting with EPA; July 20, 2007 IPC letter to Robert Lee; Aug. 14, 2007 letter from Neil Patel to Ad Hoc Inventory Reporting Work Group (AHIRWG); Nov. 30, 2007 letter from Robert Lee to IPC; Dec. 11, 2007 IPC letter to Robert Lee; Jan. 10, 2008 AHIRWG letter to Charlie Auer; Feb. 12, 2008 letter from IPC to Robert Lee; Aug. 27, 2008 letter from Charlie Auer to IPC; Dec. 18, 2008 AHIRWG letter to Marcus Peacock, EPA Deputy Administrator.

[6] 75 Fed. Reg. 449656, 49675-76 (Aug. 13, 2010).

> need to report a byproduct substance that is recycled. In an effort to further clarify reporting obligations, EPA is providing additional information on byproduct reporting ....[7]

That "additional information" included the CDR Instructions and a 2012 collection of byproduct and recycling scenarios.[8] In the 2011 rule's preamble, EPA also pledged to look for opportunities to limit reporting of recycled byproducts:

> EPA encourages recycling. The Agency intends to examine the collected information related to byproducts, recognizing the importance of recycling, to identify whether there are segments of byproduct manufacturing for which EPA can determine that there is no need for the CDR information for the 2016 or other future reporting cycles.[9]

Congress was fully informed of this situation. Industry representatives testified about it before the Environment and Energy Subcommittee of the House Energy and Commerce Committee in 2011[10] and during TSCA reform hearings in 2014.[11] In 2014, a member of the House Energy and Commerce Committee wrote to EPA asking about the results of its examination of "whether there are segments of byproduct manufacturing for which EPA can determine that there is no need for the CDR information for the 2016 or other future reporting cycles"" mentioned in the 2011 rule's preamble[12] and was promised a substantive response "in early 2015,"[13] although to date EPA has not provided such a response. In early 2015, an industry group sent letters to Senate and House leaders on TSCA reform legislation highlighting this issue in the context of that legislation.[14] On July 16, 2015, the Environment and Energy Subcommittee held a closed-door meeting with EPA on section 8(a) reporting issues, including those relating to byproducts that are recycled.

Congress took note of this debate. The 2015 House report on TSCA legislation noted that the bill did not include a provision "limiting section 8(a) reporting requirements for byproducts if EPA already has that information and if the reporting discourages recycling," because EPA already had statutory authority to address that issue, but asserted that:

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[7] 76 Fed. Reg. 50816, 50832 (Aug. 16, 2011).
[8] EPA, 2012 Chemical Data Reporting – Byproduct and Recycling Scenarios (Jan. 20, 2012), https://www.epa.gov/chemical-data-reporting/chemical-data-reporting-byproduct-and-recycling-scenarios.
[9] 76 Fed. Reg. at 50833.
[10] Statement of Marcia Y. Kinter, Specialty Graphic Imaging Association, before the Subcommittee on Environment and Energy, House Energy and Commerce Committee (Feb. 15, 2011), http://archives.republicans.energycommerce.house.gov/Media/file/Hearings/Environment/021511/Kinter.pdf.
[11] Testimony of Dr. Brent Grazman, Vice President, Viasystems Group, Inc., on behalf of IPC, before the Environment and Energy Subcommittee of the House Energy and Commerce Committee (Feb. 4, 2014), http://docs.house.gov/meetings/IF/IF18/20140204/101706/HHRG-113-IF18-Wstate-GrazmanB-20140204-U1.pdf.
[12] Oct. 8, 2014 letter from Rep. Bill Johnson to EPA Administrator Gina McCarthy.
[13] Dec. 30, 2014 letter from Gina McCarthy to Rep. Johnson.
[14] Mar. 31, 2015 IPC letter to Senators Inhofe, Udall, and Vitter; Apr. 8, 2015 IPC letter to Representatives Shimkus and Tonko.

> If the Administrator fails to promptly and adequately address these concerns, the Committee will work with other Members of Congress and with the Administration to consider legislative remedies.[15]

EPA did not adequately address those concerns, so Congress included section 8(a)(6) as a result.

Section 8(a)(6) calls for EPA to promulgate a final rule by December 22, 2019 that limits section 8(a) reporting for inorganic byproducts that are recycled. That rule must be based on the results of the negotiated rulemaking. In this case, those results are the various proposals discussed by the Negotiated Rulemaking Committee. The Committee's inability to reach consensus on those proposals means that EPA must assess these various proposals and make its own selection, or, alternatively, come up with another approach for limiting the reporting of inorganic byproducts that are recycled.

At an early meeting of the Negotiated Rulemaking Committee, EPA representatives asserted that EPA would be excused from its obligation to promulgate a final rule if the Committee were unable to reach a consensus. That position was also asserted in meeting notices that appeared in the Federal Register.[16] EPA's interpretation of section 8(a)(6) is not shared by industry stakeholders. Nothing in section 8(a)(6) makes the rulemaking obligation dependent on the negotiated rulemaking reaching a consensus. Section 8(a)(6) mandates that EPA promulgate a final rule by December 22, 2019 even though no consensus was reached.

2. TSCA Section 8(a)(1) Requires EPA to Justify the Necessity and Reasonableness of Its Reporting Requirements for Inorganic Byproducts That Are Recycled

Particularly in light of the directive to EPA in section 8(a)(6), EPA must establish that its continuing collection of information on inorganic byproducts that are recycled is necessary and reasonable.

EPA bases its current reporting requirements for inorganic byproducts that are recycled on section 8(a)(1) of TSCA, which grants EPA limited authority to require manufacturers to collect and report information:

> The Administrator shall promulgate rules under which—(A) each person (other than a small manufacturer or processor) who manufactures or processes … a chemical substance … shall maintain such records, and shall submit to the Administrator such reports, as the Administrator may **reasonably require** …, but only to the extent the Administrator determines the maintenance of records or submission of reports, or both, is **necessary for the effective enforcement of this Act**.[17]

Thus, EPA's reporting requirements under section 8(a)(1) must be both necessary and reasonable. These requirements apply to the reporting scheme as a whole and to reporting

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[15] H.R. Rep. No. 114-176 on the TSCA Modernization Act of 2015 (June 23, 2015) at 33-34, https://www.congress.gov/114/crpt/hrpt176/CRPT-114hrpt176.pdf.
[16] 82 Fed. Reg. 25790, 25793-94 (June 5, 2017); 81 Fed. Reg. 90843, 90846 (Dec. 15, 2016).
[17] TSCA § 8(a)(1) (emphasis added).

requirements for inorganic byproducts that are recycled in particular. Reasonableness implies that the benefits of reporting exceed the burdens of reporting. Necessity is a higher standard of need for the information to be reported. As explained below, EPA has not adequately established that its current reporting requirements for inorganic byproducts that are recycled are reasonable and that the information collected on them is necessary for the effective implementation of TSCA. EPA should proceed to limit reporting of inorganic byproducts that are recycled, as directed by section 8(a)(6).

3. EPA Has Not Adequately Established That Reporting of Information on Inorganic Byproducts That Are Recycled Is Necessary

The Negotiated Rulemaking Committee focused its attention on the reporting requirements under the CDR for inorganic byproducts that are recycled.

EPA's primary rationale for collecting information under the CDR is "to enable EPA and other Federal agencies to improve their risk screening capabilities, enabling them to better assess and manage risk, and improve public awareness."[18] In light of the LCSA, this means that EPA plans to use exposure and use information collected through the CDR to prioritize chemical substances under 40 C.F.R. Part 702, Subpart A, and to conduct risk evaluations for high-priority substances under 40 C.F.R Part 702, Subpart B.

During the negotiated rulemaking, EPA did not identify specific needs for information related to inorganic byproducts that are recycled. Rather, EPA largely relied on generic explanations that could be applied to any chemical substance subject to CDR reporting. For example, EPA provided the following statement:

> As with all manufactured chemical substances, CDR information on byproducts is of interest to the EPA because such exposure-related information is not otherwise available, and it is necessary for the Agency to manage risks associated with these chemical substances, to fulfill its mandate of protecting human health and the environment.

The only specific examples that EPA could identify where prioritization and risk evaluation might be needed involved inorganic byproducts containing substances listed on the 2014 update to the TSCA Work Plan. Section 6(b)(6) directs EPA in selecting chemical substances for prioritization to give a strong preference to substances on the 2014 update to the TSCA Work Plan. EPA repeatedly referred to the categories of metals and metal compounds appearing on the TSCA Work Plan, which are:

- Antimony and antimony compounds
- Arsenic and arsenic compounds
- Cadmium and cadmium compounds
- Chromium and chromium compounds
- Cobalt and cobalt compounds
- Lead and lead compounds

[18] 76 Fed. Reg. 50816, 50818 (Aug. 16, 2011).

- Molybdenum and molybdenum compounds
- Nickel and nickel compounds

Even these examples provide limited justification for a general requirement to report information on inorganic byproducts that are recycled. The category of antimony and antimony compounds is unlikely to be prioritized for many years due to a recently-completed risk assessment on the major antimony compound.[19]

EPA may also prioritize chemical substances that are not included on the TSCA Work Plan. EPA has already concluded that prioritization and risk evaluation of mercury and mercury compounds, which were dropped from the TSCA Work Plan, is unnecessary.[20] EPA recently published an extensive proposed reporting rule for mercury and mercury compounds, specifically including their byproducts, which would go beyond the CDR in several respects.[21] Thus, except for the seven categories of metals and metal compounds on the TSCA Work Plan other than antimony and antimony compounds, EPA has given no indication that it will need or use information on inorganic byproducts that are recycled because it is likely to want to consider them for prioritization and risk evaluation for far into the future.

On the contrary, the evidence strongly suggests that EPA is very unlikely to utilize the CDR information it collects on other inorganic byproducts that are recycled for prioritization and risk evaluation.

Many byproducts are complex mixtures for which value can be obtained through recycling. Under TSCA nomenclature rules, these complex mixtures are considered to be individual chemical substances known as substances of Unknown or Variable composition, Complex reaction products and Biological materials (UVCBs). Virtually all UVCBs on the Inventory, other than those for petroleum process streams, were added through the PMN process. In the preamble to the prioritization rule, EPA announced, in effect, that it is unlikely that it will designate a former PMN substance as high priority for many years:

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[19] EPA completed a risk assessment on antimony trioxide (ATO) in 2014 focused on ecological risks from the use of ATO as a synergist in halogenated flame retardants. It found no concern for this use of ATO. The risk assessment noted that "ATO is the most widely used antimony compound, accounting for roughly 80 percent of primary (*i.e.*, mined) antimony consumption in the US." EPA, TSCA Work Plan Chemical Risk Assessment Antimony Trioxide (Aug. 2014), https://www.epa.gov/sites/production/files/2015-09/documents/ato_ra_8-28-14_final.pdf.

[20] EPA, TSCA Work Plan for Chemical Assessments: 2014 Update (Oct. 2014), p. 7, https://www.epa.gov/sites/production/files/2015-01/documents/tsca_work_plan_chemicals_2014_update-final.pdf ("EPA is removing mercury and mercury compounds from the TSCA Work Plan for Chemical Assessments because their hazards are already well characterized and EPA has a strong risk reduction effort in place. Protecting human health and the environment by reducing exposures to mercury and mercury compounds remains a priority for EPA, and the Agency has taken and continues to take risk management measures for these chemicals, including efforts to implement the Minamata Convention. Therefore, the Agency does not believe that its risk management activities on mercury and mercury compounds need additional assessment under the process for the TSCA Work Plan for Chemical Assessments.").

[21] 82 Fed. Reg. 49564 (Oct. 26, 2017), implementing section 8(a)(10)(D). That provision exempts persons generating mercury-related wastes, such as byproducts sent for disposal, but the exemption does not extend to persons who recover mercury or mercury compounds.

> With respect to chemical substances newly added to the TSCA Inventory following EPA's completion of premanufacture review under section 5 of TSCA (15 U.S.C. 2604), EPA expects that such chemical substances are not likely to be selected as early High-Priority candidates in light of the risk-related determination that the Agency must make pursuant to TSCA section 5(a)(3).[22]

Another reason why UVCB byproducts are unlikely to be prioritized is that those for which EPA had concerns during the PMN review process are likely to be subject to a section 5(e) order imposing risk management controls, making the need for prioritization, risk evaluation, and then possibly risk management unnecessary in virtually all cases.

Certain other inorganic byproducts, such as coal combustion residuals (CCR), have already been subject to extensive risk assessment studies under other EPA programs. CCR were subject to a detailed risk assessment process that resulted in stringent regulations governing the proper disposal of CCR under Subtitle D of the Resource Conservation and Recovery Act.[23] These regulations also set forth specific criteria for the beneficial use (i.e., recycling) of CCR, designed to ensure protection of human health and the environment.[24] Having already been subject to an extensive EPA risk assessment and with regulatory criteria applicable to recycling of CCR, it is highly unlikely that EPA will select CCR for prioritization under TSCA any time in the foreseeable future, if ever.

These considerations do not mean that no inorganic byproducts that are recycled will ever be designated as high-priority substances. However, they do mean that inorganic byproducts that are recycled are very unlikely to be so designated for many years, given EPA's objective in prioritization to select those with the highest risk first:

> In selecting candidates for a High-Priority Substance designation, it is EPA's general objective to select those chemical substances with the greatest hazard and exposure potential first, considering reasonably available information on the relative hazard and exposure of potential candidates.[25]

Beyond EPA's general justification for including inorganic byproducts that are recycled in with other CDR-reportable chemical substances, EPA did articulate one byproduct-specific rationale:

> In addition to the uses described elsewhere in this document, the reporting of activities specific to reducing waste or specific to making better use of already existing substances (rather than using virgin materials) is **useful to identify the success of programs designed to encourage recycling and other related activities**, and could be used to recognize companies, industries, and sectors that are using "green" practices. This information would also **help to identify sectors where recycling is not occurring**,

[22] 82 Fed. Reg. 33753, 33756 (July 20, 2017).
[23] 80 Fed. Reg. 21302 (Apr. 17, 2015).
[24] 40 C.F.R. § 257.53 (definition of "beneficial use of CCR").
[25] 40 C.F.R. § 702.5(a).

providing useful data to measure the effectiveness of relevant EPA programs and informing other Agency efforts to encourage practices that reduce waste.[26]

This latter justification is unrelated to EPA's primary responsibilities under TSCA. As noted above, EPA's authority to impose reporting requirements is limited to cases where reporting "is necessary for the effective enforcement of this Act." Nothing in TSCA necessitates that EPA "encourage recycling and other related activities," "recognize companies, industries, and sectors that are using 'green' practices," or "identify sectors where recycling is not occurring." Accordingly, EPA should not rely on these discretionary policy goals to justify the burdens of collecting and reporting information on inorganic byproducts that are recycled.

4. EPA Has Not Adequately Established That Its Reporting Requirements for Inorganic Byproducts That Are Recycled Are Reasonable

a. CDR Reporting in General Is Burdensome

The CDR requirements impose recordkeeping and reporting burdens on manufacturers. The CDR requires reporting of detailed information on all chemical substances on the TSCA Inventory either domestically manufactured or imported in quantities that meet an applicable reporting threshold. The general facility threshold is 25,000 lbs. in a calendar year.[27] However, the facility threshold is 2,500 lbs. in a calendar year for facilities manufacturing chemical substances regulated through various means, including a proposed or final rule under sections 5(a)(2), 5(b)(4), or 6, or an order under section 5(e) or 5(f).[28] In addition to information regarding manufacture of the chemical substance on-site, the manufacturer must also report downstream processing and use information, including detailed information relating to downstream worker and consumer exposures,[29] information that is often difficult and time-consuming to obtain.

For example, a typical circuit board factory uses over 20 different manufacturing processes and has some 75 individual chemical tanks or process baths. Many of these baths are composed of many separate chemical substances. In each of these tanks or process baths a number of chemical reactions may occur, generating inorganic byproducts that may be recycled. The CDR currently requires the circuit board manufacturer to identify any byproducts that are recycled; calculate the volume of each byproduct manufactured (both for purposes of comparing against the reporting thresholds and for reporting volumes if the thresholds are exceeded); and determine whether or not the third-party recycler uses a chemical reaction in the recycling process (which, as described below, is crucial in most cases for determining whether or not the byproduct is exempt from reporting).

CDR reporting is required once every four years, although manufacturers must continually collect information throughout those four years in order to be able to complete the report forms.

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[26] EPA, Chemical Data Reporting: Importance of Data and Need for Data on Inorganic Byproducts (Aug. 3, 2017), available in Docket No. EPA–HQ–OPPT–2016–0597.
[27] 40 C.F.R. § 711.8(a)(2).
[28] 40 C.F.R. § 711.8(b).
[29] 40 C.F.R. § 711.8(b)(4).

For the 2016 CDR submission period, reports were submitted by 2,247 manufacturers for 8,707 chemical substances manufactured at 4,917 sites.[30] EPA projected the reporting costs for the 2016 CDR to be $52,059,120 per year, with an average cost per submitter of $10,430.[31] Reports are submitted on a per-site basis. EPA projected that for the 2012 submission period, the average cost per site would be $35,200, and for subsequent submission periods (such as that for 2016), the average cost per site would be $36,800.[32]

Because reporting requirements for inorganic byproducts that are recycled are complex, non-compliance can result in substantial enforcement liability. In contrast, inorganic byproducts that are disposed of in an appropriate landfill are exempt from reporting, and thus incur no enforcement liability. This consideration is a non-quantifiable but still very real disincentive for recycling inorganic byproducts rather than disposing of them.

b. CDR Reporting for Inorganic Byproducts That Are Recycled Is Particularly Burdensome

In addition to these general burdens of CDR reporting, manufacturers of inorganic byproducts that are recycled have some special considerations that make their reporting particularly burdensome.

Many industrial sectors downstream from chemical manufacturing do not consider themselves to be chemical manufacturers. However, EPA considers them to be manufacturers of chemical substances for CDR purposes if they make byproducts in the course of their production processes. Thus, many companies are subject to CDR reporting solely due to the need to report the byproducts that they manufacture "without a separate commercial intent" in the course of their primary operations, unless their byproducts are subject to a CDR exemption for byproducts, discussed below.

This means that such companies must learn the complex TSCA requirements and institute compliance programs, including the set-up of expensive IT systems to track reportable substances, solely in order to meet the reporting requirements. This is particularly burdensome since for virtually all other purposes they are not considered to be chemical manufacturers.

The burden also extends beyond these direct impacts on companies. The burden also includes the negative impacts that can occur when EPA collects poor quality data as part of its CDR process. The current CDR requires a manufacturer to report each pound of a recycled substance, even though this results in that same pound being reported multiple times as the process of

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[30] EPA, 2016 Chemical Data Reporting Results, https://www.epa.gov/chemical-data-reporting/2016-chemical-data-reporting-results.

[31] EPA, Information Collection Request Submitted to OMB for Review and Approval; Comment Request; Partial Update of the TSCA Sec. 8(b) Inventory Data Base, Production and Site Reports (Chemical Data Reporting, 80 Fed. Reg. 4915 (Jan. 29, 2015).

[32] EPA, Economic Analysis for the Final Inventory Update Reporting (IUR) Modifications Rule (June 30, 2011), Docket No. EPA-HQ-OPPT-2009-0187, at p. 4-60 ("The average post-amendment cost per site is calculated to be approximately $35,200 in first reporting cycle, and $36,800 for all future reporting cycles. This is an increase of approximately $9,000 per site during the first reporting cycle and $16,600 during future reporting cycles compared to the baseline.").

production and recycling continues. This can result in significant over-counting of volumes manufactured, which can lead to inaccurate conclusions by EPA, all of which can impact a business or an entire industry.

c. EPA Interprets the CDR Byproduct Exemptions Narrowly, Which Discourages Recycling

The CDR includes two exemptions from reporting for byproducts,[33] presumably to encourage recycling.[34] However, EPA interprets one of these exemptions so narrowly as to discourage many kinds of recycling for inorganic byproducts.

One of the CDR exemptions exempts byproducts that are not recycled, but instead are disposed of without a commercial purpose (e.g., by incineration or in a landfill), per 40 C.F.R. § 720.30(h)(2).[35] The other CDR exemption exempts byproducts that are recycled in one of a few ways: burning as a fuel to recover the BTU value; use as landfill cover or land application as a soil amendment; or for extraction of component chemical substances, per 40 C.F.R. § 720.30(g).[36] This exemption provides a limited incentive for recycling. The "use as a fuel" provision mainly applies to organic byproducts, however; it has little application to inorganic byproducts, which generally do not burn. The land application provision does exempt some inorganic byproducts that are recycled.

The "extraction of component chemical substances" provision has the potential to exempt many inorganic byproducts that are recycled. However, this exemption only pertains to recycling by physical means; it does not include recycling by way of chemical reactions. The vast majority of recycling involves chemical reactions to obtain a predecessor, higher-value substance. Since EPA interprets this provision very narrowly, it is of limited value to inorganic byproduct manufacturers.

EPA interprets the term "component chemical substance" in the "extraction" provision as follows:

> A "component chemical substance" means a chemical substance that **already exists** in the byproduct. **If the recycling process involves breaking chemical bonds or forming new chemical bonds to convert a chemical substance in the byproduct into a different chemical substance (which is then extracted), then the recycling process does not count as extracting a component chemical substance of the byproduct.**

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[33] 40 C.F.R. § 711.10(c), applying the PMN exemptions in 40 C.F.R. § 720.30(g) and (h)(2) to the CDR.

[34] When EPA originally proposed those byproduct exemptions, as part of its Inventory Reporting regulations, it justified the exemptions by saying, "In proposing to exempt from the reporting requirements such byproducts which have some commercial purpose, EPA intends to encourage conservation and recycling of the energy and resources contained in the waste material that might otherwise be discarded because of reporting burdens under TSCA." 42 Fed. Reg. 39182, 39186 (Aug. 2, 1977).

[35] Section 720.30(h)(2) exempts "Any byproduct which is not used for commercial purposes."

[36] Section 720.30(g) exempts from PMN requirements "Any byproduct if its only commercial purpose is for use by public or private organizations that (1) burn it as a fuel, (2) dispose of it as a waste, including in a landfill or for enriching soil, or (3) extract component chemical substances from it for commercial purposes. (This exclusion only applies to the byproduct; it does not apply to the component substances extracted from the byproduct.)"

> Note: In circumstances where other substances in the byproduct are chemically reacted in order to facilitate the separation of a desired component chemical substance, such that the component chemical substance itself is not chemically changed before being extracted, then the process does constitute an extraction of the unchanged component chemical substance.[37]

In applying this interpretation, EPA has explained how inorganic byproducts generated in the printed circuit board industry and then recycled may be reportable for the CDR:

> Suppose, for example, that tin nitrate is generated from the stripping of tin during the manufacture of printed circuit boards. The tin nitrate is converted to tin hydroxide, which is then sold to a recycler who uses it to manufacture tin. In that case, both the tin nitrate and the tin hydroxide have commercial purposes and would be reportable by the printed circuit board company.[38]

In that example, the byproduct tin nitrate is converted back to the tin from which it was made, but EPA does not consider that tin is "extracted" from the tin hydroxide. Not only does this interpretation act as a disincentive to recycle the tin nitrate, it is also a disincentive to convert the tin nitrate into the safer tin hydroxide for transportation. There are many examples of metal compounds being converted into safer compounds for shipping safety. Unfortunately, EPA places unnecessary reporting burdens on these instances. Chemical safety is a top priority at EPA. Regulatory requirements should support and not penalize safety practices such as these.

EPA's interpretation of the "extraction" provision is not shared by many companies that recycle byproducts by reacting them (or having them reacted by third parties) to obtain more valuable predecessor products (e.g., by reacting a metal oxide byproduct formed from a metal in order to recover the metal).

This interpretation is also contrary to EPA's original understanding of the "extraction" exemption at the time of its first adoption, in 1977 as part of the Inventory Reporting requirements in Part 710. There EPA explained:

> *Comment 55:* Persons who extract component chemical substances from byproducts should not be required to report those chemical substances.
> *Response:* The Administrator agrees with this comment .... There is no requirement that these persons report any chemical substance which is extracted or separated from a byproduct, including by means of heat **or a chemical reaction**, if the chemical substance that is recovered is actually present in the byproduct **or was an intermediate used in the manufacture of the byproduct** ....[39]

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[37] EPA, Instructions for Reporting 2016 TSCA Chemical Data Reporting (June 23, 2016), p. 2-6, https://www.epa.gov/sites/production/files/2016-05/documents/instructions_for_reporting_2016_tsca_cdr_13may2016.pdf (emphasis added).

[38] EPA, TSCA Chemical Data Reporting Fact Sheet: Byproducts Reporting for the Printed Circuit Board Industry (Feb. 2016), https://www.epa.gov/sites/production/files/2016-02/documents/final_cdr_fact_sheet_printed_circuit_board_2_22_16.pdf.

[39] 42 Fed. Reg. 64572, 64587 (Dec. 23, 1977) (final Inventory Reporting regulations) (emphasis added).

The current EPA interpretation cannot be reconciled with its earlier statement about extraction through a chemical reaction. The current interpretation ignores the earlier reference to "an intermediate used in the manufacture of the byproduct." "Intermediate" suggests, for example, that a metal is an intermediate for a metal oxide and the metal is "extracted" from the metal oxide through a chemical reaction.

In any case, the current EPA interpretation is inconsistent with its policy objective to encourage recycling. Presumably, EPA has about the same need for information about a component chemical substance whether it is "extracted" per EPA's interpretation or "extracted" via a chemical reaction, yet the byproduct from which the component is extracted is exempt from reporting in the first instance and is not exempt in the second.

Furthermore, EPA's interpretation creates considerable uncertainty. If a byproduct manufacturer ships the byproduct off-site for recycling by a third party, as is often the case, the byproduct manufacturer does not necessarily know whether the recycler will (1) physically extract a component chemical substance (in which case the exemption would apply to the byproduct); or (2) react the byproduct to recover a higher-value material (in which case the exemption would not apply to the byproduct). In other words, whether or not the exemption applies often depends on the action of a third party.

Accordingly, EPA's interpretation of the "extraction" provision is the sole reason that many manufacturers of inorganic byproducts that are recycled must report for the CDR.

5. EPA Has Previously Suggested That Limiting Reporting of Inorganic Byproducts That Are Recycled May Be Appropriate

As noted above, five years before Congress mandated a negotiated rulemaking to limit reporting of inorganic byproducts that are recycled, EPA itself recognized that reporting requirements for inorganic byproducts that are recycled were confusing for many:

> [I]t is apparent that scope of the CDR obligation to report byproducts is not well understood by industry. The scope of byproduct reporting has become a particularly pertinent issue because … inorganic chemical substances are no longer exempt from reporting under the CDR …. Inorganic chemical substances are often recycled, which may trigger the need to report a byproduct substance that is recycled ….
>
> Although the need to report byproduct chemical substances is not a new requirement, EPA recognizes that there were many comments and concerns raised about byproduct chemical substances ..., and that there may be byproduct manufacturers who recycle byproducts by sending them off-site to a recycler.[40]

During the meetings of the Negotiated Rulemaking Committee, the EPA members of the Committee acknowledged that the reporting requirements remain unclear to many byproduct manufacturers despite guidance issued in recent years.

[40] 76 Fed. Reg. 50816, 50832 (Aug. 16, 2011).

EPA has also recognized that the information it receives about at least some byproducts is of limited value. In 2011, it declared that limitations on reporting of recycled byproducts would be seriously considered:

> EPA encourages recycling. The Agency intends to examine the collected information related to byproducts, recognizing the importance of recycling, to identify whether there are segments of byproduct manufacturing for which EPA can determine that there is no need for the CDR information for the 2016 or other future reporting cycles.[41]

EPA chose not to limit reporting for recycled byproducts for the 2016 reporting period.[42] Under section 8(a)(6), however, EPA now has both the opportunity and the obligation to limit the reporting requirements for inorganic byproducts that are recycled.

6. The Industry Members Offered Reasonable Proposals to Limit the Reporting of Inorganic Byproducts That Are Recycled

The industry members of the Negotiated Rulemaking Committee offered multiple proposals to the rest of the Committee to limit reporting for inorganic byproducts that are recycled in a reasonable manner. Although the EPA members appeared to be open to further consideration and refinement of these proposals, the other Committee members rejected or placed significant restrictive conditions on all of the industry proposals.

An initial proposal was simply to drop all requirements for reporting inorganic byproducts that are recycled. The EPA members and the other members of the Negotiated Rulemaking Committee opposed this broad approach on the basis that EPA needed at least some information on inorganic byproducts that are recycled.

Another proposal by industry members was to limit reporting for manufacturers of inorganic byproducts that are recycled by exempting them from the need to complete Part 3 of the Form U, pertaining to processing and use information. EPA has exempted hundreds of chemical substances from the need to complete Part 3, many on the basis that the exempted substances are "of low current interest."[43] Again, the EPA members and the other members of the Negotiated Rulemaking Committee objected that information necessary for EPA would thereby not be provided.

The industry members offered a modified version of this proposal, in what became known as Proposal C, offered by a member from the Utility Solid Waste Activities Group. The modified proposal would have exempted inorganic byproducts that are recycled from the need to complete Part 3 of the Form U, except for those inorganic byproducts identified by EPA. The identified byproducts would be those that in EPA's view were not of low current interest, such as those

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[41] Id. at 50832-33.

[42] In 2015, IPC and others corresponded and met with Jim Jones, Assistant EPA Administrator, on this issue, to no avail.

[43] 40 C.F.R. § 711.6(b)(2). EPA requires those seeking such an exemption to submit a detailed petition, after which EPA may engage in notice-and-comment rulemaking. Thus, this process is resource-intensive for both industry and EPA.

from the categories of metals and metal compounds on the TSCA Work Plan. This modified proposal was also rejected, although the EPA members were open to reducing the amount of information to be reported in Part 3 for inorganic byproducts that are recycled.

The industry members offered a different approach with a proposal to expand the "extraction" provision of the byproduct exemption in 40 C.F.R. § 720.30(g) (for CDR purposes only, since only section 8(a) reporting was in scope). This proposal would have exempted from CDR reporting requirements those inorganic byproducts that are recycled through chemical reactions to obtain different forms of the initial inorganic component chemical substance (e.g., obtaining a metal from a metal oxide). As discussed above, this proposal, which became known as Proposal B, would have returned the extraction provision back to EPA's original understanding and to the understanding of many manufacturers of inorganic byproducts (although only for purposes of section 8(a) reporting). The EPA members and the other members of the Negotiated Rulemaking Committee rejected this proposal also.

Two limited versions of Proposal B were also offered. Proposal E, introduced by a member from AFPM, would have limited the changes to the extraction provision to catalyst recycling. This version would also have limited the scope of changes to the extraction provision, in that it would apply only where the recycling occurs at the site of byproduct manufacture or at the site of a third-party recycler and the extracted substance is returned to the site of the byproduct manufacturer. Proposal E would have offered one-time reporting to set a baseline for EPA. Proposal F, also introduced by the member from AFPM, would have exempted inorganic byproducts that are isolated from a process and later reintroduced into the same process at the same site. This proposal would have applied to applications such as scrap metal recycling, Portland cement, and flat glass manufacturing. Both Proposals E and F were rejected as well.

In short, the other members of the Negotiated Rulemaking Committee rejected or placed unrealistic and restrictive conditions on all of the proposals put forward by the industry members on the basis that they would result in the loss of information needed for prioritization and risk evaluation. This blanket opposition was not consistent with the directive of section 8(a)(6) to find ways to limit reporting of inorganic byproducts that are recycled, which necessarily would result in less information being reported to EPA.

7. The Proposals by Other Members of the Negotiated Rulemaking Committee Would Not Meaningfully Limit Reporting of Inorganic Byproducts That Are Recycled

To the extent that other members of the Negotiated Rulemaking Committee offered proposals, none significantly reflected the statutory directive to limit reporting.

A member from the National Pollution Prevention Roundtable offered a proposal, Proposal D, that would eliminate the byproduct exemption in 40 C.F.R. § 720.30(g) from the CDR altogether. The result of this proposal would clearly be to increase reporting of inorganic byproducts that are recycled, since it would require manufacturers of those byproducts covered by current exemptions to report information for the first time. The proponent suggested that reporting burden would be reduced on a net basis since byproduct manufacturers would not have to determine whether or not the exemption applied to their byproducts. This proposal would

actually increase reporting significantly, and thus it would be contrary to the purpose of section 8(a)(6), which is to limit reporting.

A member from the Sierra Club offered a proposal, Proposal G, to improve EPA's data management systems. Although the aim of this proposal is commendable, most Committee members concluded that it was out of scope and would do nothing to limit reporting of inorganic byproducts that are recycled, as mandated by section 8(a)(6).

The EPA members offered a three-part proposal, Proposal A. The first part would remove the exemption in 40 C.F.R. § 720.30(g). As noted above, that aspect would result in increased reporting. During the course of discussions, the EPA members appeared to back away from this part of its proposal and suggested that the scope of the exemption could be clarified through additional guidance.

The second part of the proposal by the EPA members addressed Part 2 of the Form U. It would offer manufacturers of byproducts that are recycled the option of identifying their byproducts by category rather than by CAS number and name, or by accession number and generic name appearing on the public version of the TSCA Inventory. The only categories identified by EPA were the categories for metals and metal compounds on the TSCA Work Plan, and thus would not have applied to many or most byproducts, including byproducts that are UVCBs. This part of the proposal would have done little to limit reporting. The CDR applies only to chemical substances that are already on the TSCA Inventory by CAS number or accession number. Manufacturers of inorganic byproducts that are recycled typically know the CAS numbers or accession numbers applicable to their byproducts. This option could reduce reporting burden in those situations where it is difficult to identify the specific components of a byproduct, but combining related compounds into one category could also increase reporting burden by making it more likely that the applicable reporting threshold would be exceeded.

The third part of the proposal by the EPA members would have reduced, but not eliminated, the information required to be reported on Part 3 of the Form U for inorganic byproducts that are recycled. While the substitute information to be reported would have resulted in a minor reduction in reporting burden, it may have required reporting companies to modify their information collection systems to ensure that the substitute information was collected. The industry members were generally supportive of this proposal, but believed that this aspect of the proposal would have resulted in only minimal burden reduction. Other committee members objected to the marginal loss of information that would have resulted from this aspect of EPA's proposal.

In summary, the members of the Negotiated Rulemaking Committee other than those from industry and EPA offered nothing to limit reporting requirements for inorganic byproducts that are recycled, reprocessed, or reused, as required by section 8(a)(6). The EPA members offered only very limited reporting reductions.

CONCLUSION

In enacting section 8(a)(6), Congress directed EPA to work with stakeholders to identify, negotiate, and implement limits to the reporting requirements for inorganic byproducts that are recycled, reprocessed, or reused. EPA did work with stakeholders in a negotiated rulemaking, which was unable to reach consensus. This was a disappointment. The members of the Committee collectively devoted hundreds of hours to development and discussion of proposals, both during formal Committee meetings and between meetings. More significantly, the Negotiated Rulemaking Committee had a unique opportunity to develop meaningful options for EPA to limit reporting of inorganic byproducts that are recycled and yet was unable to reach consensus on any option.

Nevertheless, the lack of consensus in the Negotiated Rulemaking Committee does not mean that EPA's obligations under section 8(a)(6) are over. EPA is still directed to propose and later adopt a rule limiting requirements for reporting of inorganic byproducts that are recycled, reused, or reprocessed, while meeting the statutory deadline for completing that rulemaking, December 22, 2019. Although the rule need not be limited to these byproducts, it must reduce reporting for them. The rule should take into consideration the ideas and concerns expressed during the negotiated rulemaking, but EPA retains discretion to formulate a new proposal. The industry groups submitting these comments are prepared to work with EPA on development of that proposal and the related rulemaking.