



November 4, 2019

EPA Docket Center  
Environmental Protection Agency  
Mailcode 28221T  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

**RE: Docket ID No. EPA-HQ-OAR-2018-0416; National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating Residual Risk and Technology Review (84 Fed. Reg. 49382, September 19, 2019)**

The Pressure Sensitive Tape Council (PSTC) submits these comments on the proposed National Emission Standards for Hazardous Air Pollutants (NESHAP): Paper and Other Web Coating (POWC) Residual Risk and Technology Review (RTR) (84 Fed. Reg. 49382, September 19, 2019). PSTC is a not-for-profit, 60-year old, North American trade association for tape manufacturers and affiliate suppliers, dedicated to helping the industry produce quality pressure sensitive adhesive tape products in the global marketplace. Our members produce over 90% of the total pressure sensitive adhesive tape manufactured volume and represent \$10 billion in annual sales. Member companies have manufacturing plants and facilities in 28 states and employ over 53,000 people. PSTC member companies comply with the highest standards for manufacturing quality products with environmentally and socially responsible methods and practices.

Overall, we believe that the U.S. Environmental Protection Agency (EPA) has reached the correct conclusion that risks from the source category are acceptable, no additional emissions reductions are necessary to provide an ample margin of safety, and that there have been no advances in practices, processes, or controls since promulgation of 40 CFR Part 63, Subpart JJJJ (POWC NESHAP). We concur that these results support that there should be no changes to the emission standards.

As stated throughout this comment letter, we support EPA's proposed revisions that clarify multiple points of ambiguity in the current rule and reduce regulatory burden. However, we provide suggestions below for your consideration in order to improve upon several of the proposed changes.

**I. We Agree with EPA's Finding that Risk is Acceptable from the Source Category and the Existing Standards Provide an Ample Margin of Safety**

We agree with EPA's finding that risks from the source category are acceptable, additional emissions reductions are not needed to provide an ample margin of safety, and that it is not necessary to set a more stringent standard to prevent an adverse

environmental effect.<sup>1</sup> EPA's modeling results indicated that the maximum individual cancer risk based on actual emissions from the POWC source category was 6-in-1-million, which is well below the 100-in-1-million upper end of presumptively acceptable risk. Almost 95% of the facilities modeled at or below a risk level of 1-in-1 million.<sup>2</sup> For several facilities, EPA either conservatively assigned permit allowable emissions as actual emissions or assumed reported VOC emissions were HAP emissions. In some cases, EPA speciated a facility's reported VOC into a HAP profile based on the source category's total HAP emissions instead of determining what HAPs (if any) each facility had in its coatings.<sup>3</sup>

EPA also conservatively assumes that the entire population continuously breathes outdoor air at fixed residential locations for 70 years. People move about as part of their daily routine and rarely live at a single residence for 70 years (see for example studies cited in EPA's own Exposure Factors Handbook). In 2015, California's Office of Environmental Health Hazard Assessment (OEHHA) revised their methodology for air toxics assessments to use a 30-year residential cancer risk exposure to identify the maximum exposed individual to more accurately reflect the average time at a single residential location.<sup>4</sup> Use of a 30-year period to assess inhalation risk would further reduce the estimated risk.

In addition, emission rates were developed for the acute exposure analysis by multiplying annual average hourly emission rates by ten. This approach likely overstates hourly emissions from facilities complying using low-HAP coatings by a factor of almost ten, but could be representative of short term uncontrolled emissions from facilities using a compliance strategy that includes add-on controls.

Although EPA's risk analysis was very conservative and likely overstates both annual and short-term HAP emission rates from many of the facilities, the results still indicate very low risk. The finding of low risk from the POWC source category demonstrates that the promulgation of the POWC NESHAP was successful and that more stringent standards are not necessary.

## **II. Technology Review**

EPA has correctly concluded that there have not been any developments in practices, processes, or controls beyond those identified in the originally-promulgated POWC NESHAP, and no revisions to the POWC NESHAP are necessary pursuant to Clean Air Act (CAA) section 112(d)(6).<sup>5</sup> POWC facilities either use non-HAP coatings, low-

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<sup>1</sup> 84 Fed. Reg. 49398-49399

<sup>2</sup> EPA-HQ-OAR-2018-0416-0162, Appendix 10

<sup>3</sup> EPA-HQ-OAR-2018-0416-0084, Appendix D

<sup>4</sup> <https://oehha.ca.gov/media/downloads/crn/2015guidancemanual.pdf>

<sup>5</sup> 84 Fed. Reg. 49382

HAP coatings, add-on controls, or a combination of techniques to comply. There are no technologies in use now that are different than those in use when the rule was originally promulgated (the hot melt adhesive discussed in the technology review memorandum<sup>6</sup> is just another type of low-HAP coating). When the EPA promulgated the POWC NESHAP, it anticipated that facilities in the source category would utilize all the technologies currently being used. In addition, there is not one technology that could be feasibly applied across the source category to further reduce HAP emissions from facilities not using non-HAP coatings. Each facility's coating technology is specific to the product being made and its quality and performance requirements. Although some facilities have more stringent permit requirements than the POWC NESHAP, it would not be cost effective to require a more stringent level of organic HAP control across the source category and it is not necessary based on the results of the risk review.

### **III. Startup, Shutdown, and Malfunction (SSM)**

#### **a. Revisions to the Thermal Oxidizer Temperature Requirements are Appropriate**

When EPA promulgated the current standards, it determined it was appropriate not to subject facilities to the emission standards during SSM events, requiring instead that sources follow work practices to minimize emissions during such events, including by developing and following an SSM plan. EPA has now proposed at §63.3320(b) that the standards apply at all times. Therefore, it was appropriate for EPA to evaluate whether corresponding adjustment of the POWC NESHAP's requirements is necessary. For facilities using compliant coatings, no such adjustments are needed, largely because emissions during startup and shutdown are the same as emissions during normal operations.

By contrast, facilities using add-on controls may experience problems complying with 3-hour average operating parameter limits during some periods of operation. We support that EPA has proposed to revise the temperature operating limit for oxidizers to be no more than 50 °F below the value established during the last performance test. See §63.3370(k)(4), Table 1, and elsewhere in the proposed rule. This "50 °F criterion" is especially relevant to transitional periods (like startup) when an oxidizer's temperature may drop slightly due to quick changes in organic loading or when cold air from the coating line is initially introduced during startup.<sup>7</sup> The 50 °F criterion also needs to be added at §63.3360(e)(3).

We note in support of the proposed 50 °F criterion for establishing oxidizer temperature operating limits that a similar criterion is included in several surface coating New Source Performance Standards (NSPS) at 40 CFR Part 60, Subparts RR, TT, and FFF.

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<sup>6</sup> EPA-HQ-OAR-2018-0416-0086

<sup>7</sup> EPA-HQ-OAR-2018-0416-0096

Most PSTC facilities subject to the POWC NESHAP are additionally subject to one of these NSPS—adding a similar 50 °F criterion to the POWC NESHAP creates consistency across regulatory requirements. In addition, all oxidizers reasonably continue to achieve a high destruction efficiency during short periods of operation at no more than 50 °F below the temperature operating limit developed during stack testing. And we note that fifty degrees is only about 3 percent of a typical thermal oxidizer’s temperature operating limit.

EPA’s proposed revision of the method for establishing oxidizer temperature operating limits should additionally apply to catalytic oxidizers, which is also consistent with the above-noted NSPS rules. The NSPS provisions for catalytic oxidizer operating limits also allow for setting the minimum temperature drop across the catalyst bed at 80% of the average temperature different during the most recent performance test. EPA should incorporate this provision as well. See, for example, 40 CFR. § 60.443(e). Accordingly, we request the following changes to the proposed rule, both to add the 50 °F criterion to catalytic oxidizers and to include the criterion elsewhere in the rule to ensure clarity and consistency.

At Table 1, we request that EPA change Items 2.a. & 2.b. to the following.

*2.a. The average temperature at the inlet to the catalyst bed in any 3-hour period must not fall more than 50 °F below the combustion temperature limit established according to §63.3360(e)(3)(ii)*

*2.b. The temperature rise across the catalyst bed must not fall below 80% of the limit established according to §63.3360(e)(3)(ii)*

At §§ 63.3360(e)(3)(i)(B), 63.3360(e)(3)(ii)(B), & 63.3360(e)(3)(ii)(C), we request the following changes.

*63.3360(e)(3)(i)(B) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. Maintain the 3-hour average combustion temperature no more than 50 °F lower than this average combustion temperature.*

*63.3360(e)(3)(ii)(B) Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. Maintain the 3-hour average combustion temperature no more than 50 °F lower than this average combustion temperature and maintain the 3-hour average temperature difference across the catalyst bed at no less than 80% of this average temperature differential.*

63.3360(e)(3)(ii)(C) *As an alternative to monitoring the temperature difference across the catalyst bed, you may monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (e)(3)(ii)(D) of this section. During the performance test, you must monitor and record the temperature just before the catalyst bed at least once every 15 minutes during each of the three test runs. Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. Maintain the 3-hour average combustion temperature no more than 50 °F lower than this average combustion temperature.*

At §§ 63.3370(k)(4) & 63.3370(l)(3), we request the following changes:

63.3370(k)(4) *No operating limit deviations. You are in compliance with the emission standards in §63.3320(b) if the thermal oxidizer is operated such that the average combustion temperature does not fall more than 50°F below the temperature established in accordance with §63.3360(e)(3)(i) for each 3-hour period, or the average combustion temperature of the catalytic oxidizer does not fall more than 50°F below the temperature established in accordance with §63.3360(e)(3)(ii) for each 3-hour period, and the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with §63.3350(f); and*

63.3370(l)(3) *No operating limit deviations. You are in compliance with the emission standards in §63.3320(b) if the oxidizer is operated such that the average combustion temperature does not fall more than 50°F below the temperature established in accordance with §63.3360(e)(3)(i) for each 3-hour period, or the average combustion temperature of the catalytic oxidizer does not fall more than 50°F below the temperature established in accordance with §63.3360(e)(3)(ii) for each 3-hour period, and the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with §63.3350(f); and*

Finally, we support the proposed requirements at §§63.3340(c)(1) & (2) to conduct performance tests at representative operating conditions of both the coating line(s) and their emission capture system(s) and add-on control device. Requiring facilities to test at non-representative conditions, such as at maximum solvent throughput sometimes requested by state and local permitting authorities, typically results in an artificially high operating limit for temperature being established that can then be met during

normal operation of the line only by needlessly supplying supplemental fuel to the oxidizer (and thereby needlessly adding to the operation's NO<sub>x</sub> and greenhouse gas emissions).

Alternatively, for facilities that conduct their performance test during maximum solvent loading conditions, we request that EPA add in the ability to establish the oxidizer temperature operating limit based on the temperature set point during a performance test conducted at a high solvent load, instead of the average oxidizer temperature during the test. Facilities establish an oxidizer set point temperature based on the temperature needed to assure proper destruction efficiency of the compounds in the exhaust stream being combusted and the residence time in the combustion chamber. However, temperatures during a test can be significantly above the set point if a high solvent loading is experienced, even with no supplemental fuel firing, because the oxidation reaction is self-sustaining.

b. Provisions for Malfunctions are not Necessary

EPA has proposed to remove the SSM provisions but has requested comment on whether a malfunction work practice is necessary. We agree with EPA's assertion in the preamble that a malfunction of a POWC emission unit would not likely result in a violation of the standard.<sup>8</sup> For facilities using low- or no-HAP coatings, no equipment malfunction should ever result in a violation of the rule's emission limits. For facilities using add-on controls, a malfunction of the control device or capture or monitoring systems would not likely result in a violation of the rule's emission limits because of the following: a) the standard does not explicitly require the use of add-on controls (note, for example, the rule's provisions for intermittently-controlled work stations), b) the compliance period is monthly (not 3 hours), and c) the rule provides for emissions averaging across all POWC lines at a facility. It is additionally noted that the proposed rule requires facilities to assume that no control of emissions occurred during period of operating parameter deviations (as well as during periods that an add-on control device otherwise wasn't operating). *See* §§ 63.3370(k)(5), 63.3370(l)(4) & 63.3370(o)(6). POWC facilities already have the ability to manage their operations to achieve compliance on a monthly basis, such as by using automated systems that promptly shut down a line during a malfunction. By EPA's own admission,

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<sup>8</sup> 84 Fed. Reg. 49400

incorporating the provisions suggested in the preamble would not allow facilities to exceed the emission limit<sup>9</sup>, so incorporating them would serve no purpose.

#### **IV. EPA Should Provide Additional Time to Comply with the Proposed Changes**

EPA has proposed to provide only 180 days for existing facilities to comply with all of the proposed amendments (see §63.3330).<sup>10</sup> We believe that between at least 270 and 365 days are needed. The currently-proposed 180 days is not enough time for facilities using add-on control devices to effect a smooth transition to the new requirements, including: developing a site-specific implementation plan; reviewing startup and shutdown procedures; reprogramming electronic systems and automated alarms consistent with removal of SSM provisions and the revision of the oxidizer temperature operating limit; reworking recordkeeping and reporting procedures and systems to match the layout of the new CEDRI form; developing and communicating guidance to ensure consistent implementation across a company's facilities; preparing permit applications and acquiring revised air permits to reflect the elimination of SSM provisions and addition of new requirements; and developing and providing training for facility staff on the rule's revised requirements. Facilities that would like to implement the revised provisions for developing emission factors for reactive coatings will also need time to understand the requirements and plan for emissions testing.

Applying for and receiving a permit revision to reflect the rule's revised requirements alone will likely require more than 180 days. If additional time is not provided, many facilities will face conflicting requirements: the requirements in their permit based on the current POWC NESHAP, versus the requirements of the revised, RTR-based NESHAP. Working with information technology support staff to re-program a facility's electronic systems to align with the new requirements can also reasonably be expected to take more than 180 days to plan and implement.

For facilities using add-on control devices, EPA should provide a compliance deadline of more than 180 days, and should provide this deadline in accordance with semi-annual reporting periods. This will provide for the most efficient transition and prevent facilities from having to prepare one semiannual report that covers two sets of requirements. Accordingly, if EPA promulgates the final rule in mid-2020, the new requirements should apply beginning on July 1, 2021.

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<sup>9</sup> 84 Fed. Reg. 49400

<sup>10</sup> 84 Fed. Reg. 49406

## V. Technical Changes

### a. We Support the Addition of the Emission Factor Approach for Determining Volatile Matter Retained in the Coating Web or Otherwise not Emitted

PSTC strongly supports the rule's proposed changes for determining the volatile matter retained in the coated web or otherwise not emitted, such as for sources that utilize reactive coatings. As EPA noted, the option to test these sources in the original rule was "vague and unworkable."<sup>11</sup> The emission factor approach proposed at §63.3360(g) clarifies how facilities can test for organic HAP actually emitted, using VOC as a surrogate, and how to use that information to comply with the POWC standards, rather than defaulting to the assumption that all organic HAP in a coating formulation are emitted. Adding this procedure eliminates the burden to both the source and regulatory authorities of requesting and receiving approval of an alternate monitoring approach.

EPA has proposed only Method 25A for determining the emission factor. We request that EPA provide additional flexibility by allowing any EPA-approved method, manufacturer's emissions test data (as long as it replicates the facility's coating formulation and operating conditions), or a mass-balance type approach using a modified Method 24. We additionally request, for consistency and clarity, that EPA use the phrase "retained in the coated web or otherwise not emitted" throughout the proposed rule, instead of just "retained in the web," as follows.

At §§ 63.3360(g) & 63.3360(g)(1), we request the following changes, regarding additional test methods for developing emission factors, and consistent usage of the phrase "otherwise not emitted."

*63.3360(g) Volatile matter retained in the coated web or otherwise not emitted to the atmosphere. You may choose to take into account the mass of volatile matter retained in the coated web after curing or drying or otherwise not emitted to the atmosphere when determining compliance with the emission standards in §63.3320. If you choose this option, you must develop a site- and product-specific emission factor (EF) and determine the amount of volatile matter retained in the web or otherwise not emitted using Equation 3. The EF must be developed by conducting a performance test using an approved EPA test method, or alternative approved by the Administrator, and be determined by obtaining the average of a three-run test. You may additionally use manufacturer's emissions test data (as long as it replicates the facility's coating formulation and operating conditions), or a mass-balance type approach using a modified Method 24 (including ASTM D5403-93 for radiation-curable coatings). The EF should equal the proportion of the mass of volatile organics emitted to the mass of volatile*

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<sup>11</sup> 84 Fed. Reg. 49402



*organics in the coating materials evaluated. You may use the EF in your compliance calculations only for periods that the work station(s) was (were) used to make the product, or a similar product, corresponding to that produced during the performance test. You must develop a separate EF for each group of different products that you choose to utilize an EF for calculating emissions by conducting a separate performance test for that product.*

*63.3360(g)(1) Calculate the mass of volatile organics retained in the web or otherwise not emitted for the month from each group of similar products using Equation 3:*

At §§ 63.3370(a)(4) & 63.3370(e), we request the following changes regarding consistent usage of the phrase “otherwise not emitted.”

*63.3370(a)(4) Accounting for volatile matter retained in the web or otherwise not emitted*

*63.3370(e) Accounting for volatile matter retained in the web or otherwise not emitted. If you choose to use the equation in §63.3360(g) to take into account volatile organic matter that is retained in the web or otherwise not emitted you must identify each group of similar products that can utilize each site- and product-specific emission factor. Details regarding the test methods and calculations are provided in §63.3360(g).*

Finally, we request that EPA require re-testing to re-establish emission factors only if there has been a change in coating formulation, operating conditions, or other change that could reasonably increase emissions. Coating technologies involving low-emitting processes like ultraviolet or electron beam cured coatings generally do not increase their organic HAP emission rate over time. Specifically, we request that EPA change §63.3360(a)(2)(ii) as follows.

*63.3360(a)(2)(ii). Perform a periodic test once every 5 years for each non-recovery control device to determine the destruction or removal efficiency according to §63.3360(e). If applicable, perform a periodic test once every 5 years to re-establish emission factors for the mass of volatile matter retained in the coated web or otherwise not emitted to the atmosphere, in accordance with §63.3360(g). Re-establishing emission factors is required only if there has been a change in coating formulation, operating conditions, or other change that could reasonably increase emissions since the time of the last test that was used to establish the emission factors.*

b. We Support Excluding Sources Using Only Non-HAP Coatings

EPA has requested comment on “changing the applicability of the subpart to exclude sources [that is, web coating lines] that only use non-HAP coatings but are located at a major source from the POWC NESHAP requirements to reduce regulatory burden.”<sup>12</sup> We support such a change and request that EPA add it to the POWC NESHAP. This exclusion is a logical step under EPA’s efforts to reduce regulatory burdens, and is similar, in key respects, to the rulemaking to rescind EPA’s “once in, always in” policy that previously required facilities that had reduced their HAP emissions to area source levels to remain subject to major source NESHAP.<sup>13</sup> At a minimum, excluding sources (coating lines) from the rule, as noted, would reduce regulatory burden without increasing emissions, and could provide facilities with important incentives to reformulate their coatings to non-HAP coatings, thereby reducing emissions below what the rule would otherwise require.

We request that EPA add the noted exclusion, but make it clear that all of a facility’s lines that would otherwise be subject to the POWC NESHAP must use non-HAP coatings to qualify for the exclusion. Otherwise, the provision might be mistakenly interpreted as removing, for some facilities, the rule’s current flexibility that provides for monthly emissions averaging across all POWC lines, including those that use non-HAP coatings.

c. Operating Parameter Deviations are not Violations of the Rule’s Emission Limits

EPA is proposing to “clarify language in §63.3370 that currently implies deviations in operating parameters result in non-compliance with the standard.”<sup>14</sup> We agree with EPA’s statement, because a deviation from a 3-hour average operating parameter limit does not automatically result in, and in most cases would not result in, non-compliance with the NESHAP’s emission limits, which are based on a monthly compliance calculation. Furthermore, facilities typically operate their control equipment with a margin of compliance, so that a brief or even somewhat longer excursion outside an operating limit should in most cases not result in violation of the corresponding emission limitation.

In its preamble to the proposed rule, EPA has asserted that, although operating parameter deviations are not violations of the rule’s emission limits, facilities need to assume, for purposes of their monthly compliance demonstrations, that their add-on control device provided no control during each 3-hour average of a corresponding

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<sup>12</sup> 84 Fed. Reg. 49406

<sup>13</sup> 84 Fed. Reg. 36304

<sup>14</sup> “Operating parameters were established in the POWC NESHAP to aid in determining a source’s compliance, but they were not intended to constitute a violation of the emission standard.” 84 Fed. Reg. 49405

operating parameter deviation.<sup>15</sup> See §§ 63.3370(k)(5), 63.3370(l)(4) & 63.3370(o)(6). This is an overly conservative approach: add-on control devices and capture systems typically continue to provide high levels of control, except during the most significant departures from the value of an operating parameter. We therefore request that EPA provide an option for facilities to develop a control curve based on test data or engineering data that documents the level of control achieved at lower than 50 degrees below the oxidizer temperature established the last performance test demonstrating compliance, and/or a similar curve, based on test data, for departures from capture system operating parameters.

d. Thermocouple Validation, not Calibration, should be Required

The current POWC NESHAP requires facilities using an oxidizer to install, calibrate, maintain, and operate temperature monitoring equipment in accordance with the manufacturer's specifications [see §63.3350(e)(9)]. The rule additionally states, vaguely, that the "calibration of the chart recorder, data logger, or temperature indicator" must be "verified" every 3 months, or replace the corresponding unit. We provide the following suggestions to clarify the regulatory requirements.

We support EPA's proposed changes at §63.3350(e)(10)(iv) requiring quarterly "validation" rather than calibration of temperature sensors, and providing several options for validations. Our member companies are not aware of a thermocouple manufacturer that specifies periodic thermocouple calibrations, nor are member companies aware of a procedure or protocol for doing so. These devices usually fail instead of drifting and becoming less accurate. We additionally note that some of our members use thermocouples that have dual sensors to account for the possibility of failure. We therefore ask EPA to clarify that either of the following satisfies the option at §63.3350(e)(10)(iv)(E): the use of dual-sensor thermocouples, or the use of multiple temperature sensors in the oxidizer combustion chamber.

We have the following additional suggestions and requests regarding temperature monitors for oxidizers at §63.3350(e)(10). First, we ask that the required accuracy of 2.5% of full scale of the type of the thermocouple at §63.3350(e)(10)(iv)(A) apply equally at §63.3350(e)(10)(iv)(E), instead of 25°F—we are aware of no reason to specify different levels of accuracy between the proposed validation methods. Second, §63.3350(e)(10)(v), as proposed, should be revised to read as follows, making it consistent with §63.3350(e)(10)(iv).

*63.3350(e)(10)(v) Conduct validation checks any time the temperature sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor."*

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<sup>15</sup> 84 Fed. Reg. 49405

Third, the second sentence of §63.3350(e)(10)(i)—the requirement to calibrate the chart recorder or data logger—should be removed because it is not feasible to calibrate either device, and most facilities now use an electronic signal to record temperature data for compliance purposes, not a chart recorder. We also ask that EPA clarify that formal notification and reporting are not required for temperature sensor validation (e.g., these are not performance evaluations subject to §63.8 notification and reporting requirements because there are no promulgated performance specifications for parameter monitors). *See* § 63.8(a)(2).

Finally, EPA has proposed a new requirement at §63.3350(e)(10)(vi) for quarterly inspection of all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion. We request that EPA delete the requirement because electronic monitoring systems are designed to alert facility personnel if a signal from the temperature sensor is interrupted, and in some cases, prevent the facility from applying coatings altogether. Otherwise, EPA should simplify the requirement to include only a quarterly inspection of thermocouple components for proper connection and integrity. EPA should additionally clarify that any such inspection applies only to the temperature sensor and not to the entire oxidizer system.

e. The Methodology for Determining HAP Content of Coatings Should be Adjusted

The POWC NESHAP allows facilities to determine HAP content of coatings using EPA Method 311 or using formulation data [see §63.3360(c)]. The current regulatory text requires the information collected to represent all HAP present at a level greater than or equal to 0.1 percent for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and greater than or equal to 1.0 percent for other organic HAP. 29 CFR 1910.1200(d)(4), which has since been deleted, was not actually a list. The paragraph pointed to different references manufacturers and importers should use to classify chemicals. From the December 29, 2011 version of Title 29:

*§1900.1200(d)(4) – Chemical manufacturers, importers and employers evaluating chemicals shall treat the following sources as establishing that a chemical is a carcinogen or potential carcinogen for hazard communication purposes:*

- (i) National Toxicology Program (NTP), Annual Report on Carcinogens (latest edition);*
- (ii) International Agency for Research on Cancer (IARC) Monographs (latest editions); or*
- (iii) 29 CFR part 1910, subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration.*

To resolve this issue, EPA has proposed to add a list of HAP that must be below 0.1 percent in a new Table 3 in the rule. However, the Table 3 list is not based on the

documents referenced by OSHA, but is based on various EPA risk assessment guidelines.<sup>16</sup> We have reviewed the Table 3 list against the carcinogens identified in the NTP annual report and the IARC Monographs and there are several chemicals in the Table 3 list that are not listed as carcinogens in those reports. Facilities rely on safety data sheets (SDS) to identify whether coatings contain carcinogens. EPA should not finalize a separate list in Table 3, because this will create uncertainty as to whether non-HAP coatings are being used as coating manufacturers are not identifying all Table 3 chemicals as carcinogens, instead relying on the OSHA guidelines. Facilities should not be asked to rely on a new EPA list that will render SDS unreliable, will result in inconsistencies among coating regulations, and could result in the need for reformulation if a compound in Table 3 that OSHA does not consider a carcinogen is present in coatings in an amount between 0.1 and 1 percent.

The Hazard Communication Standard (HCS) [29 CFR 1910.1200(g)], revised in 2012, requires that a chemical manufacturer, distributor, or importer provide an SDS (formerly MSDS or Material Safety Data Sheets) for each hazardous chemical to downstream users. EPA should remove Table 3 and instead reference the OSHA SDS requirements for classification of carcinogenicity at 29 CFR 1910.1200 Appendix A, section A.6.4, which match the current requirements in the obsolete OSHA regulatory reference proposed for deletion. Section 11 of the SDS is required to provide toxicological information, including an indication of whether the chemical is listed in the NTP Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the IARC Monographs (latest editions) or found to be a potential carcinogen by OSHA.<sup>17</sup> A regulatory reference, rather than a static list that does not match other coating regulations to which our members are subject, will ensure that the most current list of carcinogens is being used and facilities will be able to continue to rely on SDS to document they are using non-HAP coatings. Our suggested regulatory language is:

*Include each organic HAP determined to be present at greater than or equal to 0.1 mass percent for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200 Appendix A and greater than or equal to 1.0 mass percent for other organic HAP compounds.*

- f. We Support EPA's Clarification that Compliance may be Demonstrated Across Multiple Groupings of Lines and Clarification of a Mass Balance Approach for Demonstrating Compliance

We support EPA's proposed clarification, added as an introductory paragraph at §63.3370, that facilities can demonstrate compliance separately for each line, for any

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<sup>16</sup> 84 Fed. Reg. 49405

<sup>17</sup> <https://www.osha.gov/Publications/OSHA3514.html> and 29 CFR 1910.1200 Appendix A.

grouping of lines, or across the entire collection of lines at a facility (the affected source of the NESHAP in all cases remains the facility's entire collection of web coating lines subject to the rule). EPA thereby confirms that facilities have the flexibility to apply different compliance approaches across the facility, adjusting groupings and compliance approaches, and electing different emission limitation options (that is, the rule's emission limitation options at §63.3320(b)) for those groupings from month-to-month as needed. This clarification reduces the potential for inconsistent regulatory interpretations by sources and permitting agencies, and is consistent with other coating rules that apply to our members, such as 40 CFR 63, Subparts OOOO and SSSS.

We also support EPA's addition of a "mass-balance" approach for compliance demonstrations, proposed at §63.3370(r). For example, as noted by EPA, not all of the variables included in the detailed calculations in §63.3370(b) through (p) are always needed<sup>18</sup> and this can cause confusion when regulatory agencies request a demonstration of how each variable is being tracked by a facility. However, we believe that EPA has mistakenly stated the procedures for demonstrating compliance by mass balance at §63.3370(r)(1). The mass of HAP emitted during the month should be divided by the mass of any of the following, in accordance with the emission limitation at §§63.3320(b)(1)–(3) elected for the demonstration: mass of HAP applied on the lines, or mass of coating materials applied on the lines, or mass of coating solids applied on the lines. More specifically, we request that proposed §63.3370(r)(1) be re-stated as follows:

*63.3370(r)(1) Separately for each individual/grouping(s) of lines, you must sum the mass of organic HAP emitted during the month and divide by the corresponding total mass of all organic HAP applied on the lines, or total mass of coating materials applied on the lines, or total mass of coating solids applied on the lines, for the same period, in accordance with the emission limitation that you have elected at §§63.3320(b)(1)–(3) for the month's demonstration. You may also choose to use volatile organic content as a surrogate for organic HAP for the compliance demonstration in accordance with §63.3360(d). You are required to include all emissions and inputs that occur during periods that each line or grouping of lines operates in accordance with the applicability criteria in §63.3300.*

We additionally request that EPA change the words "each" and "every" to "all" at proposed §§ 63.3370(r)(2)(i) & (ii), to accommodate facilities that may track materials usage simultaneously across more than one work station, or do this, in part, by material inventory. We request that EPA clarify that "organic content retained in the web" includes organic content "not otherwise emitted," consistent with §63.3360(g). And we suggest that EPA clarify that facilities need to record the mass of coating materials

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applied at their work stations, and mass of coating solids, if applicable. Specifically, we propose the following changes.

63.3370(r)(2) *You must include all of the organic HAP emitted by your individual/grouping(s) of lines, as follows.*

63.3370(r)(2)(i) *You must record the mass of organic HAP or volatile organic content applied at all work stations of each of your individual/grouping(s) of lines. You must additionally record the mass of all coating materials applied at these work stations if you are demonstrating compliance for the month with the emission limitation at §63.3320(b)(2) (the “coating materials” option). You must additionally record the mass of all coating solids applied at these work stations if you are demonstrating compliance for the month with the emission limitation at § 63.3320(b)(3) (the “coating solids” option).*

63.3370(r)(2)(ii) *You must assume that all of the organic HAP input to all never-controlled work stations is emitted, unless you have determined an emission factor in accordance with §63.3360(g).*

63.3370(r)(2)(iii) *For all always-controlled work stations, you must assume that all of the organic HAP or volatile organic content is emitted, less the reductions provided by the corresponding capture system and control device, in accordance with the most recently measured capture and destruction efficiencies, or in accordance with the measured mass of VOC recovered for the month (e.g., carbon control or condensers). You may account for organic HAP or volatile organic content retained in the web or otherwise not emitted if you have determined an emission factor in accordance with §63.3360(g).*

63.3370(r)(2)(iv) *For all intermittently-controlled work stations, you must assume that all of the organic HAP or volatile organic content is emitted during periods of no control. During periods of control, you must assume that all of the organic HAP or volatile organic content is emitted, less the reductions provided by the corresponding capture system and control device, in accordance with the most recently measured capture and destruction efficiencies, or in accordance with the measured mass of VOC recovered for the month (e.g., carbon control or condensers). You may account for organic HAP or volatile organic content retained in the web or otherwise not emitted if you have determined an emission factor in accordance with §63.3360(g).*

63.3370(r)(2)(v) *You must record the organic HAP or volatile organic content input to all work stations of your individual/grouping(s) of lines, and the corresponding mass of coating materials and/or solids applied, if applicable, and determine corresponding emissions during all periods of operation, including malfunctions or startups and shutdowns of any web coating line or control device*

Finally, we believe the proposed compliance demonstration methodology at §63.3370(r)(3) should be adjusted, and §63.3370(r)(3)(iv) should be deleted, to be consistent with the rule elsewhere (See in particular the format of §63.3370(o)(6)), and to include the proposed rule's 50 °F temperature criterion for oxidizers (See §63.3370(k)(4), for example). We additionally note two minor citation referencing errors at §63.3370(r)(3) (the section currently references subsection (r)(4), which does not exist). Specifically, we request the following changes.

*63.3370(r)(3) You are in compliance with the emission standards in §63.3320(b) if each of your individual/grouping(s) of lines meets §63.3370(r)(3)(i)-(iii), as applicable. If operating parameter limit deviations occurred, including periods that the oxidizer control device(s), if any, operated at an average combustion temperature more than 50 °F below the temperature established in accordance with §63.3360(e), you are in compliance with the emission standards in §63.3320(b) for the month if, assuming no control of emissions for each 3-hour deviation period (or in accordance with an alternate approved method), one of the standards in §63.3370(r)(3)(i)-(iii) was met.*

*(r)(3)(iv) [Delete]*

g. The Coating Materials Definition needs Additional Clarification

We strongly support EPA's proposed revision of the definition of coating material at §63.3310, clarifying that coating materials are liquid or semi-liquid materials. The understood intent is to ensure that materials applied as dry solids and not as part of the coating itself are not counted in the compliance demonstration calculations (e.g., dry grit applied on top of a coated web), which would allow for higher monthly emissions, and that vapor deposition coating is not covered by the POWC NESHAP. To ensure that the proposed revision is not incorrectly interpreted to exclude hot melt adhesives or coatings—because these materials are sometimes referred to as 100% solids coatings by some facilities—or interpreted to exclude the solids fraction of coatings as applied, we request that EPA further revise the definition of “coating material(s)” as follows:

*Coating material(s) means all liquid or semi-liquid materials (including the solids fraction of those materials as applied), such as inks, varnishes, adhesives (including hot melt adhesives or other hot melt materials), primers, solvents, reducers, and other materials applied to a substrate via a web coating line. Materials used to form a substrate or applied via vapor deposition, and dry abrasive materials deposited on top of a coated web, are not considered coating materials.*



h. We Support Web Coating Line Usage Thresholds to Clarify Applicability of Other NESHAP

EPA has proposed to add a usage threshold at §63.3300(h) requiring a web coating line to “comply with the subpart of this part that applies to the predominant activity conducted on the affected source,” and has proposed to define predominant activity as 90 percent of the mass of substrate coated during the compliance period.<sup>19</sup> While facilities would like to streamline their regulatory obligations and comply with a single NESHAP for their coating operations rather than many, the term “compliance period” could be interpreted to require a facility performing different types of coating to determine which NESHAP applies on a monthly basis, and potentially change applicable NESHAP rules from month-to-month. Additionally, usage of the term “affected source,” appears to be inconsistent with the example at §63.3300(h), because the POWC NESHAP is the “collection of all web coating lines at your facility” except those exempted by the rule. *See* §63.3300. We request that EPA revise proposed §63.3300(h), clarifying that “predominant activity” may be determined on a calendar year basis, such as is provided in 40 CFR 63, Subpart MMMM (for “Surface Coating of Miscellaneous Metal Parts and Products”). *See* 40 CFR 63.3881(e).

*63.3300(h) Any web coating line that coats both paper or a web, and another substrate such as fabric, may comply with the subpart of this part that applies to the that line’s predominant activity. Predominant activity for this subpart is 90 percent of the mass of substrate coated. For example, except if otherwise exempted a web coating line that coats 90 percent or more of a paper substrate, and 10 percent or less of a fabric or other textile substrate, would be subject to this subpart and not 40 CFR 63, subpart OOOO. You may use data for any reasonable time period of at least 1 year in determining the relative amount of coating activity, as long as they are expected to represent the way the source will continue to operate in the future. You must determine and document predominant activity annually.*

i. A Printing Activity Exemption Should be Allowed

EPA is proposing a printing activity exemption at §63.3300(i) to allow for modified POWC lines already subject to the POWC NESHAP to continue to demonstrate compliance with the POWC NESHAP in lieu of demonstrating compliance with 40 CFR 63, Subpart KK. To further reduce regulatory burden to both facilities and permitting authorities, we request that the proposed regulatory text be reworded to apply to existing printing capability, not just modifications.

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63.3300(i) *Any web coating line subject to this subpart that includes printing activities may demonstrate compliance with this subpart, in lieu of demonstrating compliance with subpart KK of this part.*

Otherwise, we request that EPA revise proposed §63.3300(i) as follows, ensuring that lines that are subject to NESHAP POWC do not become subject to subpart KK of this part if the mass of materials applied by the line's product and packaging rotogravure print stations and/or wide-web flexographic print stations exceeds 5 percent of the mass of materials applied by the line in a month. *See* 40 CFR. § 63.821(a)(2)(ii).

63.3300(i) *Any web coating line subject to this part that includes product and packaging rotogravure print stations and/or wide-web flexographic print stations, may continue to demonstrate compliance with this part, in lieu of demonstrating compliance with subpart KK, if the mass of materials applied on these print stations ever exceeds, in a month, 5 percent of the total mass of materials applied by the line in that month.*

## **VI. Repeat Testing**

We generally support EPA's proposed requirement at §63.3360(a)(2) for periodic testing of non-recovery add-on control devices to determine the destruction or removal efficiency. However, as we stated at Section V.a. of this document, repeat testing, also proposed at §63.3360(a)(2), for re-establishment of emissions factors, such as for reactive coatings, is not necessary in most cases.

EPA has proposed a deadline for a performance test of within 3 years after promulgation of the final RTR rule, and subsequent tests no later than 60 months thereafter. *See* §63.3330. We would appreciate clarification that the first periodic test can be conducted within either 3 years of promulgation of the final RTR rule or within 60 months of the previous test, whichever is later. This will ensure any facility that has recently conducted a performance test will have the full 5 years between tests.

## **VII. Recordkeeping and Reporting**

- a. The Additional Proposed Excess Emissions Recordkeeping and Reporting Requirements are not Necessary

Because EPA has proposed to eliminate the requirement to develop and follow an SSM plan, EPA is proposing to add requirements for additional recordkeeping and reporting for deviations and excess emissions. At §63.3400(c)(2), for each deviation from an emission limit or operating limit, EPA proposes to add the following additional reporting requirement: "an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the

emissions.” EPA is adding a requirement to record this information at §63.3410(c)(3) for “each failure to meet an applicable standard.”

These additional requirements are not necessary for the POWC NESHAP because compliance is not demonstrated based on a 3-hour average; rather, it is demonstrated on a monthly basis and emissions averaging is allowed. Therefore, a 3-hour average temperature deviation is not likely to result in any excess emissions. The monthly compliance report will indicate whether the facility’s emissions were below the standard. The proposed additions to the compliance recordkeeping and report contents should be deleted because they are not relevant to a rule where compliance is not demonstrated on a short-term basis.

We also believe that EPA has mistakenly substituted the term “emission limits” for the term “operating limits,” as proposed at §63.3410(c).” Facilities need to identify and record periods of deviations of operating limits of their add-on control devices and corresponding capture systems so that they can assume “no control” occurred during these periods in their monthly compliance calculations. See §§ 63.3370(k)(5), 63.3370(l)(4) & 63.3370(o)(6). However, the rule’s emission limitations apply on a monthly basis, meaning that a “deviation from an emission limit” (§63.3410(c), as proposed) is not necessarily knowable (or else not confirmed) until the monthly compliance demonstration has been performed. Accordingly, we request that §63.3410(c) be revised as follows.

*63.3410(c) For each deviation from an operating limit for an add on control device or its associated capture system, you must record the information in §§ 63.3410(c)(1) & (2), and in §63.3410(c)(3), if applicable.*

*63.3410(c)(1) The total operating time of the web coating line(s) controlled by the corresponding add-on control device and/or emission capture system during the reporting period.*

*63.3410(c)(2) The date, time, and duration of the deviation.*

*63.3410(c)(3) If the facility determines by its monthly compliance demonstration, in accordance with §63.3370, as applicable, that the source failed to meet an applicable emission limit of this subpart, you must record the following for the corresponding affected equipment.*

*63.3410(c)(3)(i) Record an estimate of the quantity of HAP (or VOC, if used as a surrogate, in accordance with §63.3360(d)) emitted in excess of the emission limit for the month, and a description of the method used to estimate the emissions.*

63.3410(c)(3)(ii) *Record actions taken to minimize emissions in accordance with §63.3340(b), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.*

For the same reasons stated above, and for consistency with § 63.3410(c), we request that the content of the semiannual compliance report, as proposed at §63.3400(c)(2)(v), be revised as stated below. We note additionally that determining whether deviations occurred during SSM periods should no longer be required because the rule's emission limits apply during all periods of operation.

63.3400(c)(2)(v) *For each deviation from an operating limit for an add on control device or its associated capture system, where you are not using a CEMS to comply with the emission limitations in this subpart, the compliance report must contain the following information, as applicable:*

63.3400(c)(2)(v)(A) *The total operating time of the web coating line(s) controlled by the corresponding add-on control device and/or emission capture system during the reporting period.*

63.3400(c)(2)(v)(B) *The date, time, and duration of each deviation.*

63.3400(c)(2)(v)(C) *If the facility determined by its monthly compliance demonstration, in accordance with §63.3370, as applicable, that the source failed to meet an applicable emission limit of this subpart, report the following for the corresponding affected equipment.*

63.3400(c)(2)(v)(C)(i) *An estimate of the quantity of HAP (or VOC, if used as a surrogate, in accordance with §63.3360(d)) emitted in excess of the emission limit for the month, and a description of the method used to estimate the emissions.*

63.3400(c)(2)(v)(C)(ii) *Actions taken to minimize emissions in accordance with §63.3340(b), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.*

63.3400(c)(2)(v)(E) *Information on the number, duration, and cause of CPMS downtime incidents, if applicable, other than downtime associated with zero and span and other calibration or validation checks.*

- b. EPA Should Clarify that Continuous Monitoring System (CMS) Performance Evaluations Should be Submitted Only for Continuous Emissions Monitoring Systems (CEMS) and not for Continuous Parameter Monitoring Systems (CPMS)

EPA has proposed to add a requirement at §63.3350(e)(5) for facilities to maintain written CMS quality control procedures, including a performance evaluation plan, “as required in §63.8(d).” We note that §63.8 applies only to CMS with an EPA-promulgated performance specification. See 40 CFR § 63.8(a)(2). Because EPA has

not promulgated performance specifications for the CPMS typically used to demonstrate compliance with the POWC NESHAP, such as temperature or pressure monitors, EPA should clarify that §63.3350(e)(5) applies at this time only to CEMS.

We note additional inconsistencies between §63.8 and the POWC NESHAP. For example, the proposed POWC NESHAP requires “validation,” not “calibration,” of temperature sensors. *See* § 63.3350(e)(10). EPA should clarify that, apart from Table 2 of subpart JJJJ, notifications of a “performance evaluation” of a temperature sensor is not required, in accordance with §63.8(e)(2).

#### c. Electronic Reporting Requirement Timing

EPA has proposed to require electronic reporting of performance test reports, performance evaluations, and compliance reports at §63.3330(a)(3). EPA indicates in the rule’s preamble that compliance reports must be submitted via the Compliance and Emissions Data Reporting Interface (CEDRI) via a source category-specific reporting form when the form has been available for 6 months (presumably 6 months after promulgation of the final rule if minimal changes are made to the proposed reporting template).<sup>20</sup> The requirement to use a particular CEDRI form should stipulate that the form has been available for at least 1 year, as was provided in several recent RTR rules (e.g., 40 CFR 63, Subpart OOOO for Fabric Coating). The regulatory language at §63.3400(c)(1)(ii) and (h) conflicts with the preamble language and requires electronic reporting 180 days after promulgation of the RTR rule, not 180 days after the form is available. The timing for use of the CEDRI form should be added to §63.3400(h).

In addition, the timing should be such that the transition to the new reporting methodology will apply to an entire reporting period, not come into effect in the middle of a reporting period and result in two different reports being prepared. Facilities need time to adjust recordkeeping and reporting procedures. EPA could reduce the impact of the proposed rule by requiring only submittal of a scanned copy of the current paper report, and not filling of a new form for submittal.

#### d. Electronic Reporting Template

EPA has included a draft electronic reporting template in the docket for this rulemaking. We reviewed the draft template and have the following comments:

- EPA should ensure the template can be printed and submitted in hard copy form to permitting agencies, most of which are not yet accepting regulatory submittals using CEDRI.

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- EPA should add a “Comment” field to each tab so facilities can provide additional explanation for entries as needed.
- EPA should make the form as simple as possible and keep in mind that compliance is determined on a monthly basis, not on a 3-hour basis. Deviations and malfunctions are not likely to result in emissions that exceed the standard.
- EPA should include instructions on each tab that indicate what information is to be included. For example, state on the Process&CMS Identification Tab that only process lines with CMS required by the rule need to be included.
- The CEMS summary tab’s column headings are labeled as CPMS, not CEMS.
- The excess emissions units on the tab Emission\_Limit\_Exceed should be tons, not tons/yr.

Thank you for your consideration of these comments. We appreciate the clarifications that EPA has proposed to make in the POWC NESHAP to reduce regulatory burden and improve implementation. Please feel free to contact me at 847-686-2306 if you have questions or need more information.

Sincerely,

Michelle Miller  
Executive Vice President  
Pressure Sensitive Tape Council

cc: Dr. K. Spence, EPA