July 1, 2020

U.S. Environmental Protection Agency
EPA Docket Center,
OLEM Docket, Mail Code 28221T, 1200
Pennsylvania Avenue NW
Washington, DC 20460

Re: Docket HQ-OLEM-2019-0589

Thank you for allowing me, representing SPRI Inc. (a 69-member trade association representing manufacturers of flexible membrane roofing systems, the components utilized with these systems, design professionals and testing laboratories), to provide feedback regarding Docket ID No. EPA-HQ-OLEM-2019-0589 entitled “Existing Comprehensive Procurement Guideline Designations and Recovered Materials Advisory Notice Recommendations: Request for Comments”. Specifically, the SPRI membership has several concerns regarding the proposals outlined in Section IX. Construction Products / F. Roofing Materials within the “BACKGROUND DOCUMENT FOR THE FINAL COMPREHENSIVE PROCUREMENT GUIDELINE (CPG) IV AND FINAL RECOVERED MATERIALS ADVISORY NOTICE (RMAN) IV”. These concerns are outlined below.

The “BACKGROUND DOCUMENT” referenced above is dated April 1, 2004. Since 2004, significant changes and improvements have occurred in the roofing industry due to the emergence of new technologies. A few examples are the introduction of TPO (“Thermoplastic Olefin”) roofing membrane, which became commercially available in the mid 1990’s but now makes up the largest segment of the commercial roofing market (this product is not mentioned in the referenced document). Hypalon roofing membrane, which is mentioned in the referenced document, is no longer commercially available; and the ASTM standard associated with this product was withdrawn in 2011 (D5019-07a was the last published document before its withdrawal). Along with these examples, there have been many other changes, all of which have benefitted the end user due to lower installation costs along with improved performance.

Also referenced in the “BACKGROUND DOCUMENT” are products that contain 100% post-consumer content. There are really no such products available since even when using primarily recycled content (there is one polymer shingle manufacturer that claims 80%) there are additional components that must be included in roof coverings such as fire retardants, UV and heat stabilizers, pigments for color, etc. Products such as polymer shingles are also rigid and have thicknesses of ¼ inches or more. As a contrast, single-ply membranes are flexible and much thinner than a residential shingle. Single-ply membranes are as thin as 36-mils (0.036 inches) but provide significant long-term performance due to refinement of formulations over a several decade period. Adding post-consumer recycled products (of which the quality and consistency is very difficult to control) into such a membrane would significantly decrease the physical properties and long-term performance of the material.

In order to decrease impact to the environment, many single-ply roofing manufacturing facilities have implemented procedures that give them the ability to produce almost no scrap that goes to a landfill. Examples of this enhanced technology can be found in the thermoplastic industry that has developed
technology where by elutriation, reinforcing fabric can often be separated from the polymer, after which the remaining plastic is ground, reheated and converted into pellets which are then fed into the bottom ply of new membrane. These technologies are utilized by manufacturers of many single-ply materials and benefit the end user by reducing the cost of the finished product as well as the environment by minimizing the amount of material deposited in landfills.

Single-ply roofing membranes change over time due to the effects of exposure to UV radiation, heat, and contact with foreign substances that are deposited on the roof. These changes result in the reduction of physical properties over time. Introducing “weathered”, end of life consumer products (such as aged roofing membrane) into new roofing membrane at the levels proposed by the EPA, in quantities other than a very small percentage, would result in a much compromised lifespan for roofing membrane. Single-ply manufacturers have developed products that are now performing for as long as 35 years or more. Reducing the long-term performance of these products by the introduction of inconsistent post-consumer material will likely result in roof replacement occurring in a much shorter time period. This will therefore often result in more material introduced to landfills.

The single-ply roofing industry has developed products that provide maximum benefit to the end user by reducing installed costs and improving performance characteristics of the membrane. These improvements have increased the reliability of the roof as well as the longevity. This long-term performance has reduced the number of roof replacements. Less roof replacements along with the manufacturers reducing the amount of land fill material by improved production procedures equals a win, win for the end user and the environment.

The implementation of these higher recycled content requirements will substantially reduce the number of products available to the end user as well as increase the cost of the roofing assembly. In addition, the performance levels of membrane that the roofing industry has tirelessly worked to maximize will be decreased. Accordingly, SPRI respectfully requests that the Environmental Protection Agency refrain from implementing minimum recycled content in single-ply roofing membranes, as has been proposed.

Sincerely,

Randy Ober
Technical Director
SPRI (Single Ply Roofing Industry)