CALL FOR COMMENTS

Proposal for Revisions to the

GS-60 Standard for Plastic Trash Bags and Can Liners

June 18, 2024. Green Seal® is inviting feedback on proposed revisions to the GS-60 Standard for Plastic Trash Bags and Can Liners. We are seeking comments from all stakeholders including industry experts, public health researchers, product designers, raw material suppliers, product testing laboratories, purchasers, end users, and the public. Instructions for submitting comments are on Page 3 of this document.

Summary of Proposed Revisions:

> Green Seal proposes to update the maximum allowed virgin material permitted in certified trash bags and can liners. These adjustments are the result of a strengthened dataset which is more reflective of products on the market.

Green Seal® is the leading U.S. ecolabel, symbolizing transparency, integrity, and proven environmental leadership. We develop life-cycle-based standards and certify products and services that can prove they meet our strict criteria for human health, reduced environmental impacts, and effective performance. Operating as a nonprofit since its founding in 1989, Green Seal has certified thousands of products and services in over 450 categories, and is specified by countless schools, government agencies, businesses, and institutions.

Document Guide

Section I. Instructions for Submitting Comments

Green Seal develops standards though an open, transparent process that prioritizes public and stakeholder input. Public comment periods are carried out to solicit input and define Green Seal's intended outcomes for product certification against the new or revised criteria.

Guidelines for Submitting Comments

- Comments should be specific in nature.
- Comments should include a technical or market-focused justification.
- Comments should include references from reputable sources.
- Comments should include actionable solutions.

Public Comment Closing Date

This comment period is open for 30 calendar days. The comment period closes on July 18, 2024.

Submit Comments

Comments can be submitted via Green Seal's website.

Requests for Comment Period Extension

Any request for comment period extensions should be submitted via our contact form. If granted, extensions will be publicly announced on Green Seal's website.

Comment Review Process

Upon receiving comments, Green Seal will confirm receipt and may reach out to schedule a brief conference call to request clarifications.

Within 90 days of the close of the comment period, Green Seal publishes a Response to Comments document which includes the text of all written comments submitted during the Public Comment Period and summarizes any actions taken or justifications for inaction regarding the changes to the standard.

For Questions About this Process

For other inquiries, contact Shaina Banks, Product Manager, Products & Standards.

Section II. Proposal Overview

In 2023, Green Seal issued Edition 1.0 of the Standard for Plastic Trash Bags and Can Liners that recognizes products that exhibit health and environmental leadership. The criteria include requirements for achieving virgin plastic source reduction and incorporating recycled content without loss of functional performance. In addition, the standard sets minimum thresholds for packaging sustainability and restricts the use of hazardous chemicals and fragrances. Green Seal is now proposing to adjust the criteria related to the maximum amount of virgin plastic permitted in certified trash bags and liners. These adjustments are a result of a strengthened dataset and will allow Green Seal to more accurately reward environmental leadership (e.g., products in the top 30% of the market for efficiently using virgin plastic).

In 2024, Green Seal performed a review of the virgin plastic reduction criteria that involved a market scan, outreach to stakeholders, and environmental impacts research. The results of that review highlighted a necessary issue for revision:

> **Proposed Adjustments to the Requirements for Virgin Plastic Use Reduction:** Green Seal proposes to update the maximum allowed virgin material permitted in a certified product based on the collection of additional product data that strengthens our understanding of the top 30% of products on the market.

Intended Outcomes

Reducing Virgin Plastic and Associated Greenhouse Gas Emissions

Trash bags and can liners that use virgin plastic content create high levels of greenhouse gas emissions and contribute to plastic pollution. Incorporating post-consumer recycled (PCR) content into a trash bag reduces plastic waste by creating an end-market for recycled films and reduces the carbon impact associated with extracting and manufacturing new virgin material. However, PCR content alone may not be an effective way to identify products that reduce virgin plastic use. Green Seal's analysis of products in the marketplace found that bags that feature PCR content sometimes incorporate the same amount, or more, virgin plastic than bags that do not contain PCR content. Thus, Green Seal's standard sets forth requirements for both the minimum amount of PCR content required and the maximum amount of virgin material allowed in a bag.

Incentivizing Investment in Supply Chains to Create a Supply of High-Quality Post-Consumer Recycled Content

Approximately 12 million tons of flexible films were generated in 2019; however, only 4% were recovered for recycling.[1] Barriers to collecting more material include a lack of residential curbside access for most U.S. households, removal of store drop-off bins from some stores, low participation rates, and limited end markets for recovered material. Green Seal's standard sets forth requirements to increase the use of post-consumer recycled content, which helps to strengthen demand for recycled materials and supports efforts to increase collection and recovery rates.

Following Standard Development Best Practices

Green Seal systematically reviews standards in accordance with international best practices to ensure standards remain relevant, feasible for all types of enterprises, and reflect good sustainability practices. Standard revisions are carried out within a transparent, stakeholder-engaged process.

[1] How to Scale the Recycling of Flexible Film Packaging: Modeling Pyrolysis' Role in Collection, Quantity and Costs of a Comprehensive Solution. https://plasticsrecycling.org/images/library/Pyrolysis-Role-in-_FFP-Recycling-Report.pdf

Section III. Red-Lined Tracked Changes

Green Seal proposes the following revision to the GS-60 Standard for Plastic Trash Bags and Can Liners:

Text in the box below show the details of the proposed revision.
The red text shows proposed additions. Any text ~~with strikethrough lines~~ are proposed deletions.

3.1 Maximum Allowed Virgin Material. Products that use virgin material shall not exceed the amounts of virgin material per liner, as outlined in the table below:

Product Size	**Maximum Weight of Virgin Plastic in Liner (lbs.)[(a)]**
7 –10 gallons	~~0.011~~ 0.012
11 – 19 gallons	~~0.015~~ 0.018
20 – ~~30~~ 39 gallons	~~0.036~~ 0.045
~~31 – 39 gallons~~	~~0.041~~
40 – 49 gallons	~~0.046~~ 0.059
> 50 gallons	~~0.070~~ 0.071

[(a)] Represents the top 30% of the market per size category

3.1.1 Liner Weight Calculations. The weight of virgin plastic in a product shall be calculated following the equation in Annex B.

Section IV. Research Record

The following section summarizes market and technical research on the impacts of virgin plastic use in trash bags and can liners.

Reducing Virgin Plastic Use

The production of virgin plastic has high environmental impacts, mainly due to the large amounts of raw material and energy inputs and associated greenhouse gas emissions. While the scale can vary by resin type and geography, recycling of plastics has clear, quantified environmental benefits. Studies show that incorporating recycled content into plastic products results in net reductions of greenhouse gas emissions by eliminating emissions associated with raw material extraction and the manufacturing of virgin material. For example, using 100 percent recycled materials compared with 100 percent virgin materials reduces roughly 70 percent of the greenhouse gas emissions per kilogram of plastic resin produced.[2]

However, the results of Green Seal's market analysis show that while incorporating recycled resins in plastic bags does have documented benefits, the PCR content alone is an unreliable indicator of environmental preferability. This is because bags featuring PCR content may still incorporate the same amount of virgin plastic as PCR-free bags in the same size and use category — making the presence of PCR content on its own an unreliable indicator of products that reduce virgin plastic use.

Recognizing Virgin Plastic Efficiency

Edition 1.0 of Green Seal's Standard for Plastic Trash Bags and Can Liners introduced the concept of plastic efficiency for recognizing bags that reduce the highest amount of virgin plastic possible while still performing as intended. To create this concept, Green Seal conducted a market analysis that originally covered 148 products from 56 companies. Green Seal made an effort to collect data from a variety of manufacturers, and to diversify the manufacturers selected in each size category.

Green Seal used the following methodology to recognize bags that are the most efficient in their virgin plastic use:

- The weight of plastic for each bag was determined by multiplying the bag width, length, and gauge in this formula: ((width x length x gauge)/15/1000)) = weight of liner
- The weight of the liner was then multiplied by the percentage of non-virgin plastic material in the liner. Any post-consumer recycled content, advertised mineral additives, and post-industrial recycled content were considered as non-virgin plastic material.
- The amount of non-virgin plastic material was subtracted by the total liner weight to get the weight of virgin plastic in a liner.

Example:
For a 30-gallon bag that is 30 inches by 33 inches at a gauge of 0.8 mil with 30 percent recycled content:

((30 x 33 x 0.8)/15/1000) = 0.0528 lbs.

0.0528 lbs. x 30% =0.0158 lbs.

[2] Life Cycle Impacts for Post-Consumer Recycled Resins: PET, HDPE, and PP. https://plasticsrecycling.org/images/library/2018-APR-LCI-report.pdf

0.0528 lbs. – 00.158 lbs. = 0.037 lbs. of virgin plastic

Strengthened Dataset

As part of our commitment to continual improvement, in 2024, Green Seal collected additional product data to increase the total number of products in our dataset by 60%. Overall, we expanded the market analysis dataset from 148 to 247 products, and from 56 to 74 manufacturers. Green Seal also made an effort to further diversify the number of manufacturers included, collect more data for household products, and expand the number of datapoints for each size category. As a result, each size category now includes a minimum of 30 products from at least 20 manufacturers, as opposed to a minimum of 20 products in the previous edition of the standard. With an increased dataset, the maximum allowed virgin plastic values shifted to the new levels described in Section III above.

Green Seal also used the new dataset to evaluate the size categories used in the standard, and identified two key changes:

1. Adjusting the smallest size category to include 7-, 8-, and 9-gallon bags: Previously, Green Seal did not consider bags under 10 gallons to be in scope of the program due to a lack of variation in virgin plastic use, which restricted Green Seal from recognizing leadership. However, as part of our market analysis exercise, Green Seal collected additional data points for bags in the 7-9 gallon range and determined there are bags that can be recognized as leadership due to lower levels of virgin plastic use than their conventional counterparts. For example, there is a 0.019 pounds difference between the bag with the most and least virgin plastic at the 7-gallon size. There is a 0.004 pounds difference between the average virgin plastic weight of the 7-9 gallon and 10-gallon bags. Given the average virgin plastic weights are similar, Green Seal proposes to include these bags in one size category for 7-10 gallons.

2. Combining two size categories to create a 20-39 gallon category: Under the new dataset, the maximum weight of virgin plastic allowed for the size categories of 20-30 gallons and 31-39 gallons were 0.042 pounds and 0.047 pounds respectively. Given the very low level of separation – 0.005 pounds – Green Seal proposes to consolidate these two size categories into one new category for 20-39 gallons. When combined, the new level of allowed virgin plastic for this size category is 0.045 lbs.