Get Certified! An Overview of APR’s PCR Certification Program
TODAY’S PRESENTERS

Kara Pochiro
VP of Communications & Public Affairs, APR

Ali Briggs-Ungerer
Member Services Director, APR

Bill Hoffman
Senior Scientist, UL Environment

Cherish Miller
VP of Marketing & Sustainability, Revolution
WHO IS APR?

International trade association

The Voice of Plastics Recycling®

Companies committed to the success of plastics recycling
Increase Supply
Enhance Quality
Expand Demand
Communicate Value

APR Primary Goals
WHAT DO WE DO?

- APR Design® Guide for Plastics Recyclability
- Training
- Advocacy
- APR Recycling Demand Champions
- PCR Certification
- Resource Development
- Education
APR's Recycling Demand Champion Campaign
Wed, May 27th @ 2:00 PM - 3:00 PM EDT

Registration links, presentation slides and recordings available on the APR Website
SUBSCRIBE TO APR’s PODCAST

Listen on Apple Podcasts  Listen on Spotify  Listen on Google Podcasts  LISTEN ON SOUNDCLOUD

Recycled Content
The True Value of PCR with Greg Janson, CEO of QRS Inc.
PCR Certification
Program Overview
What is the problem?

**Supply:** Reclaimers have PCR for sale but see their competitors passing off PIR as PCR.

**Demand:** Brand Owners looking to buy PCR but skeptical of getting 1-2 drastically lower bids.

When both sides need the same thing, this is an industry problem.
What is the solution?

Certified PCR (flake, pellet, regrind)
Why is it the solution?

- Provides confidence that endorsed certification companies adhere to a clear, consistent definition of PCR.

- Helps **level the playing field** by endorsing multiple, credible third-party certifying bodies.

- Increases **accessibility & confidence** in certification across a diversity of PCR applications.
How does the PCR Certification Program work?

1. APR endorses third-party companies to conduct certifications.

2. Plastics reclaimers hire APR endorsed companies to conduct certification.

3. APR promotes program and certified PCR from APR members.
How does APR endorse the certifying companies?

• Use ISO 14021:2016 definition for PCR
  • *Material generated by households or commercial, industrial and institutional facilities, in their role as end-users of the product, which can no longer be used for its intended purpose. This includes return of material from the distribution chain.*
  • Adhere by operating procedures
    • Required documentation
    • Mass Balance Analysis
    • Recycled Content Calculation
    • Annual Recertification Process
    • Site Visit
  • Three-year endorsement
Who has APR endorsed to certify PCR?

- AM Testing & Services, Inc.
- SCS Global Services
- UL Verification Services Inc.
What does the PCR Certification program not include?

- APR does not certify PCR content; APR is not the certifier.
- Program is focused on the PCR pellet, flake, regrind and *not* products (yet!)
- PIR
- APR does not adjudicate “percentage of PCR content” disagreements.
- APR membership not a requirement
- APR does not collect a fee
- Application info remains confidential
But what if we didn’t think of something?

A five-person Technical Support Group will arbitrate issues of concern.

1. APR Plastic Reclaimer
2. APR Board Member
3. APR-endorsed Certifying Company
4. Brand Owner
5. EPA Representative
I’m a reclaimer – how do I get my PCR certified?

plasticsrecycling.org/pcr-certification

<table>
<thead>
<tr>
<th>Company</th>
<th>Contact</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Testing &amp; Services, Inc.</td>
<td>Roger Matilla</td>
<td><a href="mailto:Roger@AMTesting.com">Roger@AMTesting.com</a></td>
<td>(708) 907.9252</td>
</tr>
<tr>
<td></td>
<td>Bill Baumann</td>
<td><a href="mailto:BBaumann@AMTesting.com">BBaumann@AMTesting.com</a></td>
<td></td>
</tr>
<tr>
<td>SCS Global Services</td>
<td>Nicole Munoz</td>
<td>NMunoz@scs globalservices.com</td>
<td>(510) 452-8031</td>
</tr>
<tr>
<td>UL Verification Services Inc.</td>
<td>Bill Hoffman</td>
<td><a href="mailto:bill.hoffman@ul.com">bill.hoffman@ul.com</a></td>
<td>(847) 684-1112</td>
</tr>
</tbody>
</table>
I’m looking for certified PCR – how do I find it?

<table>
<thead>
<tr>
<th>Company</th>
<th>Contact Information</th>
<th>Certifying Company</th>
<th>Certification Date</th>
<th>PET</th>
<th>HDPE</th>
<th>PP</th>
<th>LDPE</th>
<th>LLDP</th>
</tr>
</thead>
</table>
| Avangard Innovative, L.P | Marcus San Juan  
msanjuan@avangard.com  
(713) 744-2300         | AMI Testing & Services, Inc. | 8/7/2019    | X   |      |    |      |      |
| Envision Plastics | Tamsin Efthophi  
Tamsin.efthophi@envisionplastics.com  
(326) 461-4767 | SCS Global               | 2/10/2020  |      | X    |    |      |      |
| Revolution       | Cherish Miller  
cmiller@revolutioncompany.com  
(714) 801-3172 | SCS Global               | varies by location |      |      |    |      | X    |
Thank you.

Ali Briggs-Ungerer
APR

ali@plasticsrecycling.org
UL Recycled Content Program for APR

2020
We help you:

- Strengthen security
- Protect brand reputation
- Manage transparency
- Enhance sustainability
- Deliver quality and performance
- Confirm compliance
- Build workplace excellence
- Advance societal well-being

We help you demonstrate safety.
88% of U.S. BUILT ENVIRONMENT AUTHORITIES trust and accept the UL Mark

94% of U.S. authorities having jurisdiction are familiar with UL compared with 41% for the next highest TIC company

We reach more than 2 BILLION GLOBAL CONSUMERS annually with safety, security and sustainability messages

Brand presence and leadership

UL MARKS APPEAR ON TENS OF BILLIONS of products globally

66% of U.S. retailers express a preference for the UL Mark over other TIC marks

WE WORK TO PROTECT THE MARKET FROM COUNTERFEIT GOODS. In 2018, 108,000 PRODUCTS bearing counterfeit UL Marks were seized, with an estimated value of $2.1 MILLION.
Our team

14,000+
EMPLOYEES
Goal of a Recycled Content Certification Program

- Minimize Risk
- Assurance of Performance
- Meet Requirements of Third Party
- Market Acceptance
Qualifications for Credibility

Third party verification of recycled content claims should generally be able to meet the following requirements (referenced in APR’s endorsement of PCR Certification Organizations):

1. The certification body should be ISO 17065 accredited and in good standing, and its accreditation should cover its recycled content verification program.
2. The standard and resulting certification claim statements should adhere to ISO 14021 definitions for pre- and post-consumer material.
3. The certification program should require at least six months, but preferably 12 months of data.
4. The certification program should require an annual recertification process.
5. Certification should require a site audit as part of the recycled content verification process.
6. The resulting certification claim statement and any associated label should be transparent.
Why Careful Recycled Content Claims Matter

When demand exceeds supply, gray market actors will seek to sell virgin material as recycled content. This disrupts the market and creates distrust of market facing claims. Consumer concern or confusion in turn draws regulatory attention.

In this environment, careful attention to supplier engagement and market facing claims that adhere to best practices, national and international guidance helps build that trust.
In October 2012, the U.S. Federal Trade Commission issued a revision to its “Guides for the Use of Environmental Marketing Claims” (the “Green Guides”).

**Substantiation:** Marketers must substantiate claims under a "reasonable basis" test;

**Qualification and Disclosure:** Marketers must qualify claims where the claimed environmental attribute relates only to a portion of the product (e.g., packaging) if the claim would otherwise expressly or impliedly overstate the attribute or benefit;

**Display of Qualifying Language:** Any qualification should be clear to prevent consumer deception; avoidance of overstated claims -- marketers should avoid implications of significant environmental benefits if the benefit is negligible; and

**Comparative Statements:** Where marketing materials make explicit or implicit comparisons between the environmental attributes of different products, the materials should be clear to avoid consumer deception.
The latest edition of UL’s recycled content program is applicable to validation of conventional (mechanical) recycled content systems such as we have been doing for years, and covers both pre-consumer (post-industrial) and post-consumer sources. It now also enables validation of additional source material (e.g., ocean-bound plastic, biomass) as well as technologies (i.e., advanced recycling) and accounting methods (i.e., segregated material flows, credit account of mass balance allocation).
What it covers

**Goal:** extend the life of materials and reduce consumption of natural resources, thus providing substantial environmental benefit and encouraging the circular use of materials

**Defined Sources:** recycled content, byproduct synergy, reused components, refurbished components, ocean plastic, or biomass sources of materials

**Accounting methods:** Segregated supply chain management of materials, Chain of Custody between sites, and Mass Balance accounting systems

What it does not cover: whole product lifecycle effects and environmental tradeoffs, health and safety regulations, and is not intended to replace any applicable legal regulations.
Typical Validation Process

- **Initiate Project**
  - Assign project manager

- **Collect Documentation**
  - Reclaimed material supplier statements

- **Site Audit**
  - Set date for site audit
  - Site audit based on desktop review

- **Issue Report**
  - Summary of results of audit
  - Shipping documents
  - Clarify scope of project, if required

- **Recycled content records**
Documentation Requirements

- Clear Scope including sites, products, and supply chain
- Production records confirming virgin and recycled material used
- Description of calculation methods explaining type of credit and conversion system used
- Receiving records including supplier, date, quantity and ID of material received
- Supplier declarations
- Description of process including flowcharts
- Clear system description
  - Where materials enter and conversion into credits
  - Material flow connection
Sample Potential Claim Statements

**Segregated material flows:** Magic Bag contains a minimum of 50% post-consumer recycled content.

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Magic Bag contains an average of 20% Ocean-bound Plastic content.

**Mass balance accounting:** Magic Bag contains 20% pre-consumer and 50% post-consumer recycled content using mass balance system.

**Chain of custody:** X20 Laptop contains a minimum of 20% closed-loop recycled content, consisting of 90% recycled plastic.
Featuring more than 130,000+ products families
MasterFormat product coding
AutoDesk® Revit, Autocad and Sketch-up Add-ins
Search by Sustainable Building Credits
Avitru MasterSpec partnership

UL.COM/SPOT
Thank you.

William Hoffman, Ph.D.
Program Manager, Corporate Fellow
Bill.Hoffman@ul.com
+1 847-664-1112
PCR Certification

May 2020
Revolution at a Glance

- Manufacture Products up to 97% Postconsumer Resin
- Diverted over 1.5 billion pounds of waste from landfills
- Recover, clean and process more than 150 million pounds annually
- Save 100 billion gallons of water annually with Pipe Planner irrigation software
- Over 30 years in business

Revolution is a global brand unified by a single mission: creating better plastics that help preserve our environment. We believe in manufacturing products with the highest amount of postconsumer recycled resin possible through our innovative Closed Loop System that diverts millions of pounds of plastic waste from the landfills each year. Consumers and companies rely on Revolution to provide sustainable, high-quality products through our family of brands:
Why Certify?

- Credibility
- Drives Value
- Regulations
Experience with Certifications

Revolution Bag

SCS Global Services does hereby certify that an independent assessment has been conducted on behalf of:

**Revolution Bag**

BB01 Fraser Pike, Little Rock, AR, United States

For the following product(s):

**Plastic Bag:**
Hercules Natural (N1 Formula)

The product(s) meet(s) all of the necessary qualifications to be certified for the following claim(s):

**SCS RECYCLED CONTENT CERTIFIED**
Conforms to SCS-Recycled Content Standard V7-0 for a Minimum 97% Post-Consumer Recycled Plastic Resin Content and made with 100% Post-Consumer Recycled Resin Material. The material quantification and mass-balance calculations are completed on a dry-weight basis.

Made with 100% Post-Consumer Recycled Resin

Registration #: SCS-MC-03359
Valid from: January 1, 2020 to September 30, 2020

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SCS Global Services does hereby certify that an independent assessment has been conducted on behalf of:

**Revolution Bag**

BB01 Fraser Pike, Little Rock, AR, United States

For the following product(s):

**Plastic Bag:**
Hercules Black (B1 Formula)

The product(s) meet(s) all of the necessary qualifications to be certified for the following claim(s):

**SCS RECYCLED CONTENT CERTIFIED**
Conforms to SCS-Recycled Content Standard V7-0 for a Minimum 94% Post-Consumer Recycled Plastic Resin Content. The material quantification and mass-balance calculations are completed on a dry-weight basis.

Made with 100% Post-Consumer Recycled Plastic Resin

Registration #: SCS-MC-03358
Valid from: January 1, 2020 to September 30, 2020

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Stanley Mathuram, PE, Vice President
2001 Powell Street, Ste. 800, Emeryville, CA 94608 USA

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Stanley Mathuram, PE, Vice President
2001 Powell Street, Ste. 800, Emeryville, CA 94608 USA
Experience with Certifications

Command Packaging

Sah Dharma Pvt. Ltd, 88, Salomon St, Salinas, CA, United States

For the Following plastic products:

Plastic Bags:

LLDA Super Sack & MDR Super Sack

The products meet all of the necessary qualifications to be certified for the following claims:

SCS RECYCLED CONTENT CERTIFIED

Conforms to SCS RECYCLED CONTENT STANDARD V1.2 for a 100% Post-Consumer Recycled Plastic Resin.

Content. The material quantification and mass-balance calculations are completed on a dry weight basis.

Registration # SCS-RC-04241
Valid from March 1, 2019 to May 31, 2020

Colour

1 R 49 G 144 B 68

2 R 64 G 84 B 100

3 R 29 G 154 B 214

4 R 116 G 134 B 147

5 R 140 G 184 B 202

6 R 59 G 175 B 73

Experience with Certifications

A2LA Cert. No. 1380.01
ISO/IEC 17025:2005
Date: 04/10/2020
Valid Until 04/10/2022

Item 1

Results for testing according to Senate Bill No. 276: 18270 Reusable Grocery Bags are listed below:

<table>
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<tr>
<th>Item</th>
<th>Citation</th>
<th>Requirement Type</th>
<th>Requirement Details</th>
<th>P</th>
<th>F</th>
<th>N/A</th>
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<tbody>
<tr>
<td>1</td>
<td>42204(a)(1)</td>
<td>Has a handle</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>42204(a)(1)</td>
<td>Designed for at least 125 uses</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td>42204(a)(2)</td>
<td>Has a volume capacity of at least 15 liters</td>
<td></td>
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<td>4</td>
<td>42204(a)(3)</td>
<td>Is machine washable or made from a material that can be cleaned and disinfected</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>42204(a)(5)(A)</td>
<td>The name of the manufacturer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>42204(a)(5)(B)</td>
<td>The country, state, or place of manufacture</td>
<td></td>
<td></td>
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<tr>
<td>7</td>
<td>42204(a)(5)(C)</td>
<td>A statement that the bag is a reusable bag and is designed for at least 125 uses</td>
<td></td>
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</tr>
<tr>
<td>8</td>
<td>42204(a)(6)(A)</td>
<td>If the bag is eligible for recycling in the state, instructions to return the bag to the store for recycling or to another appropriate recycling location. If recyclable in the state, the bag shall include the sharing economy recycling symbol or the term “recyclable,” consistent with the federal trade Commission guidelines use of such term, as updated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>42204(a)(6)(B)</td>
<td>Does not contain lead, cadmium, or any other toxic material that may pose a threat to public health. A reusable bag manufacturer may demonstrate compliance with this requirement by obtaining a no objection letter from the federal food and Drug Administration. This requirement shall not affect any authority of the Department of Toxic Substances Control pursuant to Article 24 (commencing with Section 25231) of Chapter 6.5 of Division 29 of the Health and Safety Code and, notwithstanding subdivision (a) of Section 25207.3 of the Health and Safety Code, the reusable grocery bag shall not be considered as a product category already regulated or subject to regulation.</td>
<td></td>
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<tr>
<td>10</td>
<td>42204(a)(6)(K)</td>
<td>Complies with Section 280.12 of Part 260 of Title 16 of the Code of Federal Regulations related to recyclable claims of the reusable grocery bag</td>
<td></td>
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</tbody>
</table>
Experience with Certifications

**Encore® Recycling Inc.**

340 E Camel Back Rd Suite 30, Salinas, CA, United States

For the following product(s):

**Encore® Recycling, Inc.**

The products meet all of the necessary qualifications to be certified for the following claim(s):

**SCS RECYCLING PROGRAM CERTIFIED**

Facility conforms to the SCS Recycling Program Standard V4.0. This facility has demonstrated to efficiently process pre-consumer and/or post-consumer waste material for landfill diversion. Processed material can be used and/or incorporated into finished product as pre-consumer or post-consumer recycled content.

Registration #: SCS-RP-04242
Valid from: March 1, 2019 to May 31, 2020

**Delta Plastics of the South LLC**

3101 South Main Street, Stuttgart, AR, United States

For the following product(s):

**Plastic:**

LDPE/LLDPE Plastic Pellets

The products meet all of the necessary qualifications to be certified for the following claims:

**SCS RECYCLED CONTENT CERTIFIED**

Conforms to SCS Recycled Content Standard V1.0 for 100% Post-Consumer Recycled LDPE/LLDPE Resin Pellets Content. The material quantification and mass-balance calculations are completed on a dry-weight basis.

Registration #: SCS-MC-01094
Valid from: January 1, 2020 to September 30, 2020
Requirements

AT LEAST 6 MONTHS OF DATA SUBMITTED (PREFERABLY 12 MONTHS)

BILL OF MATERIALS / PERCENT OF PCR IN FINAL PRODUCT

TOTAL PRODUCTION DURING REVIEW PERIOD

PURCHASING AND SHIPPING RECORDS DURING REVIEW PERIOD

QC PROCEDURE FOR SUPPLIER APPROVAL, SPECIFICATIONS, AND CHANGES

SUPPLIER INTERVIEWS TO CONFIRM AFFIDAVIT INFORMATION

ONSITE AUDIT DETERMINED BASED ON SUPPLIER/MATERIAL RISKS

COMPLETE MASS BALANCE, REPORT & CERTIFICATION DECISION
Requirements

<table>
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<tr>
<th>Colour</th>
<th>R</th>
<th>G</th>
<th>B</th>
</tr>
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<td>184</td>
<td>202</td>
</tr>
<tr>
<td>6</td>
<td>59</td>
<td>175</td>
<td>73</td>
</tr>
</tbody>
</table>

Each Pellet Type will have a separate Spreadsheet for the verification of PCR

Each Pellet Type will have information regarding the PCR that went into the pellet

Included:
- PCR Supplier’s Name, location, contact information
- Descriptions and sources of the post-consumer material
- Each batch or lot of PCR will include:
  - Production Dates
  - Model / Type / Item Number / Lot Number
  - Weights
  - Analytical Results for each batch or lot
  - Shipping / Receiving information

For each Pellet Type, information included:

- Production Dates, Quantities and weights
- Lot numbers, actual weights, and designations of the PCR that went into the production
- Any other information required to identify the PCR that went into the pellets under review

![Image of a field](image1.png)
![Image of a truck](image2.png)
![Image of shredded material](image3.png)
![Image of a hand holding pellets](image4.png)
Demand Levels Meeting the Cost/Supply of PCR Film

What is Needed

- Retailers and Brand Owners to demand and pay for PCR content in products
- Producers *able & willing* to use PCR when virgin resin pricing drops below PCR resin
- Effective public policy that supports PCR minimum content requirements
- Accountability in the industry to ensure PCR content and supply chain integrity
Thank you for your time!

Cherish Miller
cmiller@revolutioncompany.com
Questions?

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Ali@PlasticsRecycling.org
CMiller@RevolutionCompany.com
Bill.Hoffman@UL.com