ASSOCIATION OF PLASTIC RECYCLERS

Certification Scheme for Post-Consumer Plastic Recycling Process – Content Traceability

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Part 1: Introduction

Founded over 30 years ago by mechanical recyclers, APR is an international non-profit and the only North American organization focused exclusively on improving recycling for plastics. Recycling is an essential step to enable the circular economy and reduce plastic waste, and the production and consumption of recycled content in the form of Post-consumer Recycled Content (PCR) is key. To support and grow the use of post-consumer recycled plastics, certification of PCR must be reliable, consistent, and accessible by both producers and users of recycled plastic resins. As noted by the International Organization for Standardization (ISO), the value of a certification is the degree of confidence and trust that is established by an impartial and competent demonstration of fulfillment of specified requirements by an independent third party.

Part 2: Scope

What This Standard Covers

The APR Recycled Content Standard is a chain-of-custody system that tracks post-consumer (PCR) plastic waste through the recycling process and communicates how much of a reclaimer's product comes from post-consumer material as defined by ISO 14021, which provides the following definition for post-consumer recycled content:

"*Post-consumer Recycled Content (PCR) means material generated by households or by 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.*"

This standard may be used by any organization capable of performing a recycling process or portion thereof to convert post-consumer plastic waste into recycled resin pellet or flake and for which complete traceability of the PCR can be accomplished. The only grade of recycled material that qualifies for APR PCR Certification under this standard is post-consumer plastic resin (PCR). The APR PCR Certification Program will recognize pellet or flake that contains a minimum of 90% post-consumer plastic material to allow reclaimers the ability to operate within the processing and infrastructure capabilities of their individual sites.

Conformity to the requirements of this standard must be met to achieve and maintain certification.

NOTE: The term reclaimers and recyclers may be used interchangeably in this document, and in Appendix B – Additional Requirements for RecyClass Certification, the use of recycler is equivalent to APR's use of the term reclaimer.

What This Standard Does Not Cover

The APR supports the opportunity to accelerate the plastics circular economy, and reduce dependency on non-renewable resources, through the intersection of mechanical and chemical recycling technologies. Chemical recycling has the potential to expand opportunities for recycling materials that are not recycled by mechanical processes. Recycling processes that use mass balance or free allocation attribution models will not be considered at this time for certification under this standard.

Additionally, APR acknowledges up to 10% of the total output material by weight may potentially be PIR that is intentionally or unintentionally added or additives that are required to be mixed with the recycled content to meet manufacturing needs or customer requirements. This portion of the output material is also not eligible for certification as PCR under this standard.

Finally, this standard does not include any consideration for energy recovery or reprocessing materials that are to be used as fuels.

Part 3: Definitions

See Appendix A.

Part 4: Reference Documents

- ISO 22095:2020 Chain of Custody – General terminology and models
- ISO 17065:2012 Conformity assessment Requirements for bodies certifying products, processes and services
- ISO 17067:2013 Conformity Assessment – Fundamentals of product certification and guidelines for product certification schemes
- ISO 14021: Environmental labels and declarations – self declared environmental claims
- EN 15343: Recycled Plastics – Recycling traceability and assessment of conformity
- RecyClass Audit Scheme: Recycling Process Certification – Recycled Plastics

NOTE: Reclaimers wishing to obtain RecyClass certification in conjunction with APR PCR certification must also fulfill the requirements found in Appendix B of this standard.

Part 5: Standard Maintenance and Fees

Maintenance

APR will perform a full review of this standard every five years and will regularly review and update this standard to ensure industry trends, changes in accepted industry practices and legislative outcomes are addressed in an ongoing manner. Changes and updates will be reviewed by the APR PCR Working Group composed of industry representatives across the supply chain.

Examples of cases where this standard may be updated prior to the five-year full review cycle include:

- Changes to standards (such as ISO 22095) or references as well as newly enacted legislation relevant to the scope of this standard.
- Changes as directed by APR Board of Directors that are deemed as affecting the focus and/or scope of this standard.
- Repeated comments or feedback from auditors, APR members or stakeholders regarding the conformity requirements of this standard. Such comments will be taken to the APR PCR Working Group for consideration to improve the standard document or the auditing and certification process.

APR will document and consider all proposals for changes to assess their value or feasibility within the standard scope. Feedback will be provided within 90 days when appropriate.

Program Fees

APR will collect a nominal fee for administrative costs related to maintaining this certification program which will be in addition to the fees charged by the certification bodies. APR fees will be collected through the certification body invoicing process at the time of the annual audit process to minimize administrative activities.

The following table outlines the annual fees APR will collect for certification:

	Single Site Fee (USD)	**Multi-Site Fee (USD)**
APR Member	$850	$850 + $250 per additional site
APR Non-Member	$1700	$1700 + $250 per additional site

Part 6: Calculation of Recycled Content

Certification will include a calculation of recycled content per recycled output.

Each site will determine product groups based on specific characteristics of the post-consumer waste materials processed and operational processes occurring at the site. For example, groupings such as PP, HDPE, PET, etc. (based on polymer type) will be acceptable as will designations of material characteristics such as Natural, Colored, etc.

Calculation of the post-consumer recycled content portion of the recycled output for each product group for which the reclaimer is seeking certification will be calculated per the following equation:

$$RC\ in\ Output(\%) = \frac{RM}{RT}\ x\ 100$$

RC = Recycled Content expressed as a percentage
RM = Mass of Post-Consumer Plastic Input
RT = Total Mass of the Output Material

RC represents the amount of post-consumer material in the output product expressed as a percentage. Any ingredients in the recycled output other than post-consumer plastic material such as modifiers, additives, carriers, fillers, antioxidants for example count towards the total mass of the output material.

The reclaimer will also perform an internal verification for each product group in the scope of the certificate to assure the total claimed PCR content of output product does not exceed the volume of input post-consumer plastic waste used.

Part 7: Chain of Custody Models

When implementing the chain-of-custody, each organization active in the supply chain must meet requirements to maintain a chain-of-custody. This standard will recognize several chain-of-custody models including segregation and controlled blending. Certification may be based on either of these two models.

Please NOTE: If an organization plans to obtain RecyClass Recycling Process Certification, the segregated and controlled blending models are the only methods currently accepted by RecyClass.

Segregated Model

This chain-of-custody model maintains specified characteristics of a material from the initial input to the final output. Reclaimers must achieve the following when using this model:

1. Reclaimers will define which specific characteristics of the post-consumer material are maintained throughout the recycling process (i.e. PP, HDPE, Natural, etc).
2. Post-consumer materials with specified characteristics are kept physically separated and will remain clearly identifiable through sourcing, processing, trading and sales processes. Physical separation may be defined in terms of production and storage space, time or permanent identification of the post-consumer content.
3. The specific characteristics identified are maintained throughout the supply chain.
4. Inputs will have identical characteristics but may be from different sources. These inputs may be mixed with each other but may not be mixed with any other materials during the recycling process.
5. Output quantities correspond to the input quantities with the consideration of an appropriate conversion process loss.

Controlled Blending Model

This chain-of-custody model includes post-consumer plastic waste with a set of specified characteristics being mixed with other materials or substances without that set of characteristics according to certain criteria. The result of this mixing is an output with a known portion of post-consumer recycled plastics within specified framework. Calculation of recycled content in the output is calculated as a minimum percentage of recycled post-consumer plastic. The output PCR percentages are always calculable as the ratio between inputs is known for all outputs for a contained volume (such as a batch, storage container or facility). Reclaimers must achieve the following when using this model:

1. Ensure that the quantity of physical inputs and outputs (per volume or weight) per product group are monitored and documented at each site.
2. Have a procedure in place to control the traceability of the post-consumer plastic per the recycled output within a specified share of recycled plastics.
3. Ensure that the PCR supplied to customers from a site does not exceed the percentage of input PCR received at that site.
4. Ensure blended material or product is physically separated and will remain clearly identifiable through sourcing, processing, trading and sales processes. Physical separation may be defined in terms of production and storage space, time or permanent identification of the post-consumer content.

5. Output quantities correspond to the input quantities with the consideration of an appropriate conversion factor.

Part 8: Chain of Custody Process Requirements

Identification at Delivery

Reclaimers will perform a visual inspection and verify at least the following information on all incoming plastic waste shipments confirming:

1. Suppliers name and address
2. Date and Quantity of delivery
3. Product group as defined by the supplier
4. Statement of origin as post-consumer waste
5. Conformity to any specifications required by the reclaimer. Non-conforming material will be identified, separated from material that meets specification and put on hold until a final disposition is assigned.

This information may be documented on forms such as an invoice, bill of lading, letter, shipping documents or other form of communication between the supplier and reclaimer.

Identification of Post Consumer Content Throughout the Process

1. Reclaimers will ensure that the post-consumer content remains identifiable through the sourcing, storage, processing, trading and sales process. This may be achieved by means such as:
   a. Physical separation of production or storage
   b. Separation in terms of time
   c. Permanent identification of the post-consumer material
2. Reclaimers will verify the post-consumer content is controlled during the production, trading and sales process to ensure it is not replaced by non-certified material.
3. Reclaimers will have in place a system that records movement of post-consumer plastic materials into and out of stock as well as the capability to determine tonnage of stock present on site at any given time. Sale of Certified Post-Consumer Recycled (PCR) Products

At the time of sales or transfer of PCR products to another entity, reclaimers will provide the next entity in the chain of custody with written information confirming their certification status. Reclaimers will include the following information at a minimum on outgoing sales documents:

1. Customer's name and address
2. Date and Quantity of product sold
3. An official APR PCR claim used according to APR-PCR-104: Rules for PCR Certification Logo, Label and Claim Use

This information may be documented on forms such as an invoice, bill of lading, letter, shipping document or other form of communication between the reclaimer and customer.

Part 9: Core System Requirements

Administration

Reclaimers will operate in compliance with all local, state or federal laws and will maintain the following documents if applicable:

- Applicable registration documentation demonstrating it is a legal entity with appropriate permissions to operate at all processing sites. The reclaimer will maintain a listing of the name, location and processes performed at each site.
- Insurances necessary to operate
- Valid waste management permits
- Operating licenses
- Environmental licenses with provisions on waste treatment

Roles and Responsibilities

1. The reclaimer's management will define and document a commitment to implementing and maintaining the requirements of this standard. The commitment will be made publically available as well as to its employees, suppliers, customers or any interested parties upon request.
2. The reclaimer's management will designate a member of the management team that will have overall responsibility and authority for this chain-of-custody system.
3. A periodic management review of this chain-of-custody system and its compliance to the requirements must be completed at least annually.
4. Reclaimers will identify employees performing work affecting the performance of this standard and will define responsibilities and authorities relating to the process. These employees should include those performing the following functions:
    a. Procurement of raw material and identification of its origin
    b. Product processing that includes segregation or controlled blending as well as calculations for

the output products

c. Product sale and labeling
d. Management system function such as Internal audits, tracking and response to complaints and nonconformities.

5. Reclaimers will demonstrate their commitment to comply with social, health and safety requirements in the spirit of principles of the ILO Declaration of Fundamental Principles and Rights at Work (1998) and will have procedures or systems in place to address the following:
   a. Freedom of association and recognition of the right to collective bargaining
   b. Eliminating child labor and all forms of forced or compulsory labor
   c. Non-discrimination in respect to employment and occupation
   d. A safe and healthy working environment

Documentation and Record Keeping Requirements

1. Reclaimers will have in place documented procedures for this standard that must include:
   a. Raw material flow through the recycling process (may be a diagram or document)
   b. Organizational structure chart
   c. Responsibilities and authority relating to this standard including titles and job descriptions relevant to this standard for key staff (supervision and management)
   d. Procedures covering the requirements of this standard
2. Reclaimers will maintain records relative to and in support of this standard for a minimum of five years. Such records will include but are not limited to:
   a. All purchases of post-consumer plastic waste to include its origin and source, suppliers name and address, weight and date of delivery, haulers name and address (if applicable) and a valid scale/weighbridge calibration certificate if located on site and used for material purchase (if applicable)
   b. Documented evidence of a regular physical inspection of stock verifying the level of stock shown in the stock management system is correct. The frequency of this inspection is at the discretion of the reclaimer and is subject to the system used by each reclaimer but must occur at least on an annual basis.
   c. Calculations demonstrating the percentage of post-consumer plastic material by product group
   d. All production records using post-consumer material resulting in certified PCR material. These material records should include but are not limited to production “recipes” detailing:
      - Input plastic
      - Recycled outputs

- Additives and master batches
- Solid waste
- By-products

e. Sales records including customers name and address, weight of recycled output material sold, date of sale, an APR claim statement, a Technical Data Sheet (if applicable) and valid scale/weighbridge calibration certificate if located on site and used for PCR material sales (if applicable)

f. Internal audits, non-conformities and corrective actions relative to this standard.

g. Top managements periodic review to compliance of the requirements of this standard

h. Complaints relating to this standard received from customers and other parties

i. Employee training for this standard

Resource Management

1. Competency and Training:
   Reclaimers will ensure that all employees engaged in work relative to the implementation and maintenance of this standard are competent to perform their work based on training, education, experience and skills and are in possession of any required licenses (if applicable). Training will be given at regular intervals as determined by site management and must be documented.
2. Facilities: Reclaimers will ensure the following:
   a. Infrastructure, equipment and technical facilities needed to meet the requirements of implementing and maintaining this standard are identified, provided and maintained at each site.
   b. Input plastic waste and PCR recycled output material will be stored such that their quality does not degrade. Suitable storage would include impermeable surfaces such as asphalt, concrete or on pallets if a surface is not impermeable or is untreated.
   c. Reclaimers who have scales on site for weighing input plastic waste or recycled output material for sale will maintain a valid certificate showing the scale has been inspected and calibrated to a standard for use for the sale or purchase of goods. The inspection and calibration must be done by a qualified and authorized company or organization.
   d. The approximate size of the covered and uncovered storage areas should be specified and documented.

Internal Audit and Management Review

1. Reclaimers will conduct an internal audit prior to the initial third-party certification audit and at least annually thereafter covering all requirements of this standard for overall conformance.
2. During the internal audit, the following requirements must be met:

a. The audit will be conducted by employees that have adequate knowledge of this standard.
b. For multi-site organizations, off-site interviews and desk audits will be allowed.
c. If the reclaimer has not purchased any post-consumer waste material, produced outputs of PCR recycled material or sold certified product since the previous audit, no internal audit is needed for that audit cycle.
d. The internal audit must be documented and will consist of an audit report.
e. In the case of non-conformities, corrective and preventative actions will be determined, implemented, resolved and fully documented.

3. Results of the internal audit will be presented to management during an annual management review.

Complaints and Non-Conforming Material

1. Complaints
   Reclaimers will have a procedure in place to address complaints received regarding conformity to the requirements of this standard. The procedure will require the reclaimer to, at a minimum:
   a. Acknowledge receipt of the complaint to the complainant in a timely manner (determined by the reclaimer).
   b. Conduct an investigation, propose corrective and preventative actions if needed with specified timeframes, and implement those actions within the specified timeframe.
   c. Notify the complainant if more time is needed to complete the investigation
   d. Notify the complainant when the reclaimer has adequately addressed the complaint, come to a resolution and closed the complaint.
   e. Maintain records of all complaints received relative to this standard including any actions taken to resolve the issue, date complaint was closed, and dates of communications to the complainant.
2. Reclaimers will have a procedure in place to address non-conforming materials identified during incoming receipt or post-production that do not meet specified criteria (or requirements) relative to this standard for acceptance or sale. Non-conforming material will be quarantined, and a final disposition determined and documented. The procedure should include how the supplier is notified of the non-conformity (including timeframes) as well as what controls were completed.

Outsourcing

Reclaimers may outsource the handling and processing of post-consumer materials to contractors which must be included within the scope of their APR PCR chain-of-custody certificate. Reclaimers planning to include outsourcing within the scope will ensure the following:

1. Reclaimers will retain legal ownership of the material included in the outsourced processes and will not relinquish that ownership at any time during the outsourcing process.
2. Contractors will hold a valid APR PCR certificate or a recognized equivalent certificate. If no valid certificate is available, the reclaimer must include the outsourcing process in the scope of the audit and will include in the signed contract that the contractor will allow the reclaimers CB access to the contractor's site and/or to any records or processes associated with this standard.
3. The reclaimer will have a signed agreement with each contractor which identifies the work to be performed and specifies that the contractor agrees to the following:
    a. The contractor will maintain physical separation of the contracted post-consumer material from all other materials present at the contractor's site.
    b. The contractor will not make any claims related to this standard relative to the outsourced product.
    c. The contractor will not further outsource any processing or storage of the claimed material.
    d. The contractor will allow the reclaimer's CB access to the contractor's site and records if requested.
4. The reclaimer will maintain a list of all contractors used for outsourcing purposes which will include at a minimum the following:
    a. contractor's name, address, contact details
    b. contractors' valid APR PCR or accepted equivalent certificate number and expiry date
    c. product type and weight of material sent for outsourcing
    d. dates material was sent out
    e. outsourced processes to be performed

Part 10: Certification Process

Reclaimers seeking certification must undergo an audit to conformance against this standard by an APR approved independent third-party certification body (CB). Certification under this standard will focus on the origin of the input material, the traceability throughout the recycling process, verification of the recycled content in and sale of the output product. A chain of custody audit will be used to trace the path of post-consumer material flow within the recycling process.

Data used for certification to other recognized third-party traceability certification standards may be used in support of certification to this standard. For example, recognized third party certification standards include:

- ISO 9001
- RecyClass Audit Scheme (*Working in note of reciprocity if approved and agreed to by RecyClass)

- ISO 14001

Certification Types

1. Individual Site Certification – certification within a single site.
2. Multi-site Certification – certification covers multiple sites owned by a reclaimer with commonalities among the sites (see APR PCR 103: Requirements for Multi-Site Certification for specific details).
3. Full Certification – certification based on 12 months of data issued as the result of a successful initial, surveillance (if scope change) or recertification audit verified by an independent, APR endorsed third-party certification body on behalf of APR. Certificates will be valid for three years.
4. Conditional Certification – certification issued as a result of a successful initial audit that was based on at least 3 months but less than 12 months of required data. Conditional certificates will be issued for one year.

Audit Process and Intervals

The chain-of-custody audit focuses on the recycling process/es within the site(s) seeking certification and will review 12 months of data (with the exception of a conditional certification) that supports the operation (receipt of post-consumer waste material through sales of recycled product). Audits will include document review and verification, a traceability check, calculations verifying content claims and volume reconciliation verification (input versus output) and an on-site audit component.

Audits will be performed at the following intervals:

1. Initial Audit – An initial audit will take place that must include a full audit of the recycling process from supplier through sales with an on-site component for each site within the scope of the certificate.
2. Surveillance Audit – These audits will continue to focus on the recycling process to confirm continued compliance to this standard. Single sites with a full cycle of successful certification audits (initial, surveillance and recertification) may then request a remote audit for subsequent surveillance audits. Not more than one remote surveillance audit may be performed during a complete 3-year audit cycle. Multi-site certificate holders may be audited using a statistical sampling process on surveillance years to confirm compliance across all sites eliminating the need to audit every site each year. No new certificate will be issued for surveillance audits unless there has been a change to the operations affecting the scope or compliance status of certificate.
3. Recertification Audit – A recertification audit will take place every three years following an initial audit. These audits will follow the same process as the initial audit and must include an on-site component.

Certification Process

1. Reclaimers wishing to obtain PCR certification will review the process information available on the APR website and email APR at PCRCertification@plasticsrecycling.org

   to begin the process
2. APR will determine if the reclaimer meets the minimum PCR content requirement for eligibility for certification.
3. If APR determines the reclaimer meets the minimum PCR content requirement, APR will connect the reclaimer with a representative from the certification body (CB) of their choice.
4. The CB will work with the reclaimer to complete a contract, complete all necessary administrative actions, develop an audit plan and obtain all documents needed for review prior to conducting the audit.
5. The auditor will review the documentation and will determine if the reclaimer fulfills the audit requirements and is eligible to complete an on-site audit.
6. If the reclaimer fulfills the requirements, an on-site audit will be conducted. The on-site portion of the audit will include:
   a. inspecting the location and facilities for conformance to this standard
   b. verification of documentation accuracy and validity
   c. performing a traceability check of recycled plastics along the recycling process which must include a walk-through of the recycling process
   d. performing calculations to verify output volumes correspond to the recycled input volumes used and/or output product recycled content calculations.

      review of claims made on PCR product sold to assure the claims conform to the requirements found in APR-PCR-104: Rules for PCR Certification Logo, Label and Claim Use
7. Upon completion of the on-site audit, the CB will prepare the audit report and will present any non-conformities identified and comments to the reclaimer along with whether a recommendation will be made to grant, continue or renew certification depending on the audit interval.
8. The reclaimer will have 30 days to present corrective and preventative actions for all non-conformities found and 90 days to complete those corrective actions.
9. The CB will issue a final report with a final statement of conformity and detailed audit findings within12 weeks from the date the audit was completed.
10. The CB will provide the reclaimer with a certificate signed by the CB or designee that will include a final statement of conformity to this standard and a list of products or product types included in the scope of the certificate. A copy of the final certificate will be sent to APR for validation, licensing agreement and listing on the APR website (if desired).
11. Reclaimers will be eligible to use the APR certification mark according to APR-PCR-104: Logo, Label and Claim Use

12. Reclaimers have the right to dispute any determination made by the auditor or CB during the audit or in the audit report. Disputes must first be raised with the CB for resolution. If the dispute cannot be resolved between the two parties, the reclaimer has the right to present their dispute to APR for resolution of the issue.

Certification Maintenance

Recyclers must maintain conformity to the requirements of this standard to maintain certification. Changes made to the recycling process or any portion thereof that will affect the conformance to these requirements must be communicated to the certification body. A determination will be made as to whether the changes will affect the scope or status of the certificate and if an additional audit must be conducted prior to the next scheduled audit for the reclaimer.

APR reserves the right to suspend, withdraw or revoke an organization's certification in the following cases:

1. Non-conformance to any of the requirements of this standard.
2. Corrective and preventive actions agreed to as part of the audit have not been implemented during the specified timeframe.
3. Improper use of the APR logo or label
4. Making false or misleading claims related to APR certification

Certification bodies will notify APR at the conclusion of an audit of any findings relative to items 2-4 above for consideration of immediate action.

Part 11: Environmental Considerations

APR acknowledges that many countries have recognized, robust environmental regulations for which avenues, programs and audits to determine compliance to those regulations already exist (such as the United States, Canada and Europe). Consideration will be given to the fact that reclaimers operating in these countries must maintain compliance with the countries regulations in order to continue operation. Reclaimers may use licenses, permits, audit reports, certificates, etc and documentation for such compliance to those regulations to demonstrate compliance to this standard.

1. Reclaimers will have the following environmental licenses if required in the local municipalities, states, or country in which they operate:
   a. Solid waste

   b. Wastewater treatment
   c. Air emissions
2. Reclaimers must demonstrate no on-site activities are causing obvious contamination to the local environment. Such activities include but are not limited to:
   a. A non-operational water treatment process
   b. Direct discharge of untreated wastewater from the recycling process
   c. Uncontrolled and/or unregulated burning of solid waste for disposal
   d. Storage of waste in such a way that causes pollution of the local environment.
3. If reclaimers perform in-house transport of their waste disposal materials, they have the required licenses to operate the vehicles in the state, region or country where they use their transport vehicles.
4. Reclaimers must have documented evidence that any solid waste disposal products produced by the recycling process have been sent to a suitably licensed disposal site, broker or dealer. Acceptable documents include invoices, delivery notes or signed verification documents showing the details and weights of the solid wastes received.
5. Reclaimers will ensure that solid wastes for disposal are stored in areas equipped with systems to prevent any runoff from harming the local environment..
6. Reclaimers must have documented evidence that any by-products produced by the recycling process have been sent to a suitably licensed site, broker or dealer for treatment or use. Acceptable documents include invoices, delivery notes or signed verification documents showing the type and weight of the by-product received.
7. Reclaimers will have a procedure in place to prevent the leakage or loss of pellets and/or microplastics into the environment from its premises and surroundings. Reclaimers certified to programs verifying their efforts to prevent such leakage or loss such as Operation Clean Sweep for example may use such certification as evidence of meeting this requirement.
8. Reclaimers will have a procedure in place to address chemical product legislation such as REACH, SVCH and similar legislation as applicable to ensure compliance with these rules.

Appendix A: Definitions

Batch – [EN 17615:2020,] Quantity of material regarded as a single unit and having a unique reference.
Certification – The process performed by an independent third-party certification body to verify the conformance of a reclaimer against the requirements of this standard.
Controlled blending – [ISO 22095:2020,] A Chain of custody model in which materials or products with a set of specified characteristics are mixed according to a certain criterion with materials or products without that set of characteristics resulting in a known proportion of the specified characteristics in the final output.
Input Plastic Waste – [RecyClass Audit Scheme] The type of plastic waste grouped according to specific characteristics required for the Recycling Process for which the Recycler is applying for Certification.
Organization – [ISO 22095:2020,] Entity or group of people and facilities with an arrangement of responsibilities, authorities and relationships and identifiable objectives.
Outsourced Process – Any portion of the recycling process operation that is carried out on post-consumer material contracted by and on behalf of a reclaimer to an external independent operation, for example, sorting, removal of contamination, etc.
Post-consumer – [ISO 14021:2016,] Descriptive term covering material, generated by the end users of products, that has fulfilled its intended purpose or can no longer be used (including material returned within the distribution chain.
Reclaimer – Any organization having the capability to perform any or all steps of a recycling process at its operating sites.
Recycled Content – [CEN/TR 15353:2004, adapted] Percentage by weight of recycled plastics in a product. Percentage by weight of *Certified Recycled Input* in *Output*. It must be defined between *Pre-consumer Material* and *Post-consumer Material*.
Recycling Process – Any operation by which a reclaimer mechanically processes post-consumer plastic waste materials into products, materials or substances. The (recycling) process produces an output containing recycled material for which APR PCR certification is being requested.
Segregation – [ISO 22095:2020,] A chain of custody model in which specified characteristics of a material or product are maintained from the initial input to the final output. Note 1 to entry: Addition of material with different characteristics and/or grade to the input is not allowed. Note 2 to entry: Commonly, material from more than one source contributes to a chain of custody under the segregated model.
Site – [ISO 22095:2020] Location with geographical boundaries at which defined activities under the control of an organization are carried out.
Storage Facility (Bay) – A defined storage area where Incoming Waste Plastic can be kept separate from other types of Incoming Waste Plastic.

Traceability – [ISO 22095:2020] The ability to trace the history, application, location or source(s) of a material or product throughout the supply chain.

Appendix B: Additional Requirements to Fulfill RecyClass Certification

NOTE: These requirements are taken directly from Recyclass Audit Scheme for Recycling Process Certification – Recycled Plastics Version 1.1 published 12 June 2023.

Core Requirements

1. For storage of Input Plastic Post Consumer Waste, the Recycler will not exceed restrictions set out in their operating license for the processed throughput (if applicable). The computation must consider the total waste plastic processed over the previous 12-month period. A lag of a maximum of two months prior to the on-site audit can be considered for calculation.
2. The Recycler does not exceed any restrictions regarding the amount of Input Plastic Waste stored at the site set out in the operating license. The average of the stock level at the time of the audit, one month prior to the audit and two months prior to the audit must be used to make this computation.
3. All input waste can be identified by a waste category linked to a six-digit code listed in the Annex "List of waste referred to in Article 7 of Directive 2008/98/EC (found in this Recyclass Audit Scheme).
4. The Recycler will be required during an audit to provide the following information for the audit period:
    a. Site, equipment and nominal capacities
    b. Incoming input plastic waste (pre-consumer and post-consumer)
    c. Subcontracted recycling
    d. Energy consumption in KWh per t of Recycled Output produced
    e. Fresh water consumption in liters per t of Recycled Output produced
5. The Recycler has in place documentation to allow the calculation of Beneficial Output and Yield which provides an indication of the amount of Recycled Output (by percent) that is produced from a given tonnage of Input Plastic Waste.
6. The Recycler keeps production records showing the times that the *Recycling Process* was operational on a given day and the volume of *Input Plastic Waste* used and *Recycling Output* produced. Records not the case, a *Provisional Certificate* (Conditional Certificate for APR) must be issued, with a minimum of 3 months data.
7. Disposal of waste within the *Recycler's Site* follows the EU waste hierarchy (reuse, recycling, incineration, landfill). Waste undergoes safe disposal operations which meet the provisions of Article 13 of Directive 2008/98/EC3.

8. If reclaimers are sending wastewater off site for treatment, they must capture and store it in such a way as to prevent potential damage to the environment. Reclaimers must have documented evidence that the wastewater is sent to a suitably licensed treatment site, broker or dealer. Acceptable documents include invoices, delivery notes or signed verification documents showing the details and volumes of the wastewater received.
9. The Recycler receives supplier information regarding *Input Plastic Waste* as per EN15347, Table 1 (Required Characteristics of Plastic Wastes). Guidance for characterisation may be found on the PRE-Bales Characterisation Guiding Requirements. Information on the 'batch size', 'colour', 'form of waste' and 'main polymer present' must be recorded for each delivery. *Recyclers* should also be accepting *Input Plastic Waste* in line with Section 4.1 (Control of Input Materials) in EN15343. 13.9.2
10. The *Recycled Output* is supplied against a Technical Data Sheet that as a minimum refers to polymer, color and the permitted level of contamination and/or follows "PRE-Flakes and Pellets Characterization Guidelines". The permitted range in the characteristics are shown in the Technical Data Sheet for product.
11. *Recycled Output* is supplied against a Technical Data Sheet with characteristics in line with Table 1: Required Characteristics from the EN 1534X standard series:
    - EN15342 for polystyrene recyclates
    - EN15344 for polyethylene recyclates
    - EN15345 for polypropylene recyclates
    - EN15346 for poly (vinyl chloride) recyclates
    - EN15348 for poly (ethylene terephalate) recyclates

    Where no standard exists for Recycled Output polymer produced, the Technical Data Sheet must be in line with the broad principles of the EN Standards set out for other recyclates.

    Any tests of these characteristics must be carried out using the guidance provided in the Standards; costumer's requests; or by industry standards. When deviation on the testing procedure described in the EN 1534X series exists, this must be justified.

Disclaimer

This document has been prepared by the Association of Plastic Recyclers as a service to the plastic packaging industry to promote the most efficient use of the nation's plastics recycling infrastructure and to enhance the quality and quantity of recycled postconsumer plastics. The information contained herein reflects the input of APR members from a diverse cross-section of the plastics recycling industry. The information in this document is offered without warranty of any kind, either expressed or implied, including WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, which are expressly disclaimed. APR and its members accept no responsibility for any harm or damages arising from the use of or reliance upon this information by any party. APR intends to update this document periodically to reflect new developments and practices.

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2		
3		