Plastic Waste Reduction Standard
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CORRECTIONS & CLARIFICATIONS

CORRECTIONS AND CLARIFICATIONS TO THE PLASTIC WASTE RECYCLING METHODOLOGY (PWRM0002)

Publication date: August 12, 2024

This document provides corrections and clarifications applicable to the *Plastic Waste Recycling Methodology (PWRM0002), v1.1,* including their effective date. Project proponents and validation/verification bodies (VVBs) must apply and interpret *PWRM0002, v1.1* consistent with the corrections and clarifications set out in this document.

The corrections and clarifications will be incorporated into the next issued versions of the program documents.

Correction/ Clarification	Description	Document and Section Reference	Effective Date
Correction 1	**Removed definitions for "recyclable" and "recycled plastic waste"** Two definitions removed from Section 3 of the *Plastic Waste Recycling Methodology, v1.1*: 1) "Recyclable," as its definition already appears in the *Plastic Program Definitions, v1.0* 2) "Recycled plastic waste," as it is no longer necessary due to Clarification 1 made to the recycling-related definitions in the *Plastic Program Definitions, v1.0*.	*Plastic Waste Recycling Methodology, v1.1,* Section 3 *Plastic Program Definitions, v1.0*	Effective immediately, including all project requests currently in the Verra project review process
Correction 2 / Clarification 1	**Corrected guidance for determining baseline recycled plastic waste for capacity addition activities and applying adjustment factors for composite materials** Section 8.1 of the *Plastic Waste Recycling Methodology, v1.1* is updated to: 1) Correct "annual recycling rate" to the "amount of recycled material" for determining baseline recycled plastic waste for capacity addition activities	*Plastic Waste Recycling Methodology, v1.1,* Section 8.1	Effective immediately, including all project requests currently in the Verra project review process

Correction/ Clarification	Description	Document and Section Reference	Effective Date
	2) Correct the guidance about applying the adjustment factor for composite materials to project recycled plastic waste amounts only. **Clarified text in relation to the correction** Section 8.1 of the *Plastic Waste Recycling Methodology, v1.1* is updated to clarify that the baseline recycled plastic waste amount for projects recycling composite materials will remain fixed throughout the crediting period.		
Clarification 2	**Revised terminology related to recycling** Minor edits are made to the recycling terminology throughout the methodology to reflect Clarification 1 of the recycling definitions in the *Plastic Program Definitions, v1.0*.	*Plastic Waste Recycling Methodology, v1.1,* Sections 4, 5, 8 and 9 *Plastic Program Definitions, v1.0*	Effective immediately, including all project requests currently in the Verra project review process
Clarification 3	**Updated definition of "region"** The definition of "region" in Section 3 of the *Plastic Waste Recycling Methodology, v1.1* is updated to: "The spatial extent that covers at least the geographic area containing the source of the plastic waste and the project activity, and at most covers the country or countries in which the source of the plastic waste and the project activity are located. The applicable geographic area may be an administrative unit (e.g., municipality, district, state or country), based on the availability of data."	*Plastic Waste Recycling Methodology, v1.1,* Section 3	Effective immediately, including all project requests currently in the Verra project review process
Clarification 4	**Updated language in Applicability Condition 7** Applicability Condition 7, in Section 4 of the *Plastic Waste Recycling Methodology, v1.1* is updated to enhance clarity. The text "Only the fraction of the recycling facility's output that is or can be used to produce recycled plastics is eligible for WRCs" is updated to "Any output that is used as a fuel, for energy recovery and/or as a chemical for any purpose other than plastic production is not eligible for WRCs."	*Plastic Waste Recycling Methodology, v1.1,* Section 4	Effective immediately, including all project requests currently in the Verra project review process

Correction/ Clarification	Description	Document and Section Reference	Effective Date
Clarification 5	**Updated guidance for demonstrating regulatory surplus** The guidance for demonstrating regulatory surplus in Section 7, Step 1: Regulatory Surplus, of the *Plastic Waste Recycling Methodology, v1.1* is updated to clarify that mandated extended producer responsibility (EPR) schemes in a project region must be considered for the demonstration of regulatory surplus to ensure that the requirements are consistently interpreted by project proponents and consistently assessed by the VVBs.	*Plastic Waste Recycling Methodology, v1.1,* Section 7, Step 1: Regulatory Surplus	Effective immediately, including all project requests currently in the Verra project review process

The redlined corrections and clarifications are below. The text in ~~strikethrough red~~ represents deletions and in green represents insertions.

Correction 1: Removed Definitions for "Recyclable" and "Recycled Plastic Waste"

Document and section reference: *Plastic Waste Recycling Methodology, v1.1,* Section 3

~~**Recyclable**~~

~~Characteristic of a product, packaging, or associated component that can be diverted from the waste stream through available processes and programs and can be collected, processed, and returned to use in the form of raw materials or products (ISO 18604:2013 Packaging and the environment – Material recycling). An item of packaging or a packaging component is recyclable if its successful post consumer collection, sorting and recycling is proven to work in practice and at scale.[1]~~

~~**Recycled plastic waste**~~

~~The output of the recycling facility[2] resulting from sorting and recycling of plastic waste, which can be used either directly or after further processing to manufacture recycled material and subsequently recycled products.~~

~~[1] Adapted from Ellen MacArthur Foundation (2018). New Plastics Economy Global Commitment. Available at: https://www.newplasticseconomy.org/assets/doc/13319-Global-Commitment-Definitions.pdf.~~
~~[2] Recycling facility as defined in the latest version of the Plastic Program Definitions.~~

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Background

Verra has removed the definitions of "recyclable" and "recycled plastic waste" from Section 3 of the *Plastic Waste Recycling Methodology, v1.1* as follows:

- The definition of "recyclable" is no longer needed as it is already included in the *Plastic Program Definitions, v1.0.* This eliminates redundancy.
- The definition of "recycled plastic waste" is no longer needed, due to Clarification 1 made to the recycling-related definitions in the *Plastic Program Definitions, v1.0*.

Correction 2 / Clarification 1: Baseline Recycling Rates and Adjustment Factors

Document and section references: *Plastic Waste Recycling Methodology, v1.1,* Section 8.1(2), 8.1(3), and Subsection "Adjustment factor for composite materials containing non-plastic materials"

2) For a capacity addition activity or technology improvement to an existing facility that results in increased recycling capacity, use one of the following options:
   a) Baseline recycling is equal to the average ~~annual recycling rate~~ amount of recycled material type *i* over the three-year period prior to the start of the project activity;
   b) If the facility has been operational for between one and three years, use the average ~~annual recycling rate~~ amount of recycled material type *i* for the period from the operational start date of the existing facility until the start of the project activity; or
   c) If the operational period before the capacity addition is less than one year, baseline recycling is capped at the total recycling capacity of the existing facility prior to the capacity addition as given by the manufacturer's specifications. In this case, it must be assumed that the recycling capacity for each material type i is equal to the maximum recycling capacity of the facility for that material type.

3) When a project activity is incentivizing and/or facilitating an increase in the collection and/or sorting of plastic waste to enable an increase in its recycling, use one of the following options:
   a) Baseline recycling is equal to the average ~~annual recycling rate~~ amount of recycled material type *i* over the three-year period prior to the start of the project activity;
   b) If the facility has been operational for between one and three years, use the average ~~annual recycling rate~~ amount of recycled material type *i* for the period from the operational start date of the existing facility until the start of the project activity; or

...

Adjustment factor for composite materials containing non-plastic materials

…

The ~~same~~ adjustment factor must be applied to ~~both~~ the calculation of ~~baseline recycled plastic waste (in case of capacity addition activities) and~~ the project recycled plastic waste. The baseline recycled plastic waste amount is calculated using an adjustment factor determined prior to validation and remains fixed throughout the crediting period.

Background

Verra has corrected the "annual recycling rate" to "amount of recycled material" to determine baseline recycled plastic waste for capacity addition activities. The correction addresses that this should be an amount of plastic waste recycled and not a percentage. This ensures consistent units are used in the calculation of net recycled plastic waste.

Verra has corrected the guidance about applying the adjustment factor for composite materials to project recycled plastic waste amounts only. The previous guidance about applying an adjustment factor for composite materials suggested that an adjustment factor should be applied to baseline recycled plastic waste for each year of the crediting period, which could lead to a different value of baseline recycled plastic waste for each year of the crediting period. It is further clarified that the baseline recycled plastic waste amount for projects recycling composite materials should be determined using an adjustment factor prior to validation and remains fixed throughout the crediting period.

Clarification 2: Incorporation of Updated Recycling Terminology

Document and section references: *Plastic Waste Recycling Methodology, v1.1,* Sections 4, 5, 8, and 9

Section 4(1), 4(6), 4(7)

1) Project activities result in recycled material ~~plastic waste~~ through one or more of the following…

   c) … The recycling facility or facilities that process the collected and/or sorted plastic waste must be included in the project boundary and the project proponent must describe the procedures or arrangements (e.g., contractual agreements) in place to eliminate double counting of recycled material ~~plastic waste~~ potentially resulting from the project proponent and a recycling facility both claiming credits for the same recycled material~~plastic waste~~.

   …

6) It is possible to directly measure and record the final output of the recycling facility (i.e., the weight of recycled material ~~plastic waste or any other kind of raw material derived from plastics using chemical processes)[3]~~ segregated by material type as defined in the latest

~~[3] This includes but is not limited to chemicals such as polymers, oligomers and monomers.~~

version of the *Plastic Standard*. Where the output is of a chemically decomposed form of plastics and the material type can no longer be determined (i.e., in the case of chemical recycling), the material type must be determined based on the input to the depolymerization process, using a mass balance approach…

7) The quality of the recycled material ~~plastic waste~~ allows it to be used as feedstock in the manufacture of recycled products, thereby displacing the use of virgin plastic. Properties of the recycled material ~~output of the recycling facility~~ (e.g., presence and/or type of contamination, characteristics of macromolecules, chemical stability) may be used to demonstrate quality.

Section 5(4)

4) Entity or entities that purchase recycled material ~~plastic waste~~ from the recycling facility. The recycled material ~~plastic waste~~ may also go through an intermediary process after recycling and before utilization as feedstock for plastic production.

Section 8.1

Baseline recycled plastic waste is the amount of plastic waste that would have been recycled in the absence of the project activity.

Baseline recycled plastic waste is calculated as follows:

$$B_{recycled,y} = \sum_{i=1}^{n} B_{p,recycled,i,y} \times AF_i + \sum_{i=1}^{n} B_{dp,recycled,i,y} \times MF$$

Where:

$B_{p,recycled,i,y}$ = Baseline amount of recycled ~~plastic waste of~~ material type *i* in year *y* (tonnes) without depolymerization

$B_{dp,recycled,i,y}$ = Baseline amount of recycled material ~~plastic waste~~ in the form of depolymerized plastics from material type *i* in year *y* (tonnes). Since the material type can no longer be determined based on the output, it must be determined based on the input to the depolymerization process, using a mass balance approach.

Section 9.2

Note *– Only the table rows with terminology corrections are included below for ease of reading.*

Table 6a: Project recycling parameter

Frequency of monitoring/recording	Recorded at the time of sending each batch of recycled material ~~plastic waste~~ from the recycling facility to the processing or manufacturing facility, to other customers or before use on site

Quality assurance/quality control (QA/QC) procedures applied	Scales must be calibrated according to the equipment manufacturer's specifications or at least every three years. Amount of recycled material ~~plastic waste~~ and quality must be cross-checked with sales receipts of material sold to final buyer, or other equivalent third-party evidence.

Table 6b: Project recycling parameter

Frequency of monitoring/recording	Recorded at the time of sending each batch of recycled material ~~plastic waste~~ from the recycling facility to the processing or manufacturing facility, to other customers or before use on site
Quality assurance/quality control (QA/QC) procedures applied	Scales must be calibrated according to the equipment manufacturer's specifications or at least every three years. Amount of recycled material ~~plastic waste~~ and quality must be cross-checked with sales receipts of material sold to final buyer, or other equivalent third-party evidence.

Table 6c: Project recycling parameter

Frequency of monitoring/recording	Recorded at the time of sending each batch of recycled material ~~plastic waste~~ from the recycling facility to the processing or manufacturing facility, to other customers or before use on site
Quality assurance/quality control (QA/QC) procedures applied	Scales must be calibrated according to the equipment manufacturer's specifications or at least every three years. Amount of recycled material ~~plastic waste~~ and quality must be cross-checked with sales receipts of material sold to final buyer, or other equivalent third-party evidence.
Comments	Only material types for which recycling activities are determined to be additional at validation are included for crediting. The amount of recycled material ~~plastic waste~~ of material type *i* in the form of depolymerized plastics is used to calculate the mass fraction parameter (Table 8).

Table 8: Mass fraction for monomers and oligomers to plastics

Frequency of monitoring/recording	Recorded at the time of sending each batch of recycled material ~~plastic waste~~ from the recycling facility to the processing or manufacturing facility, to other customers or before use on site

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Section 9.3

…

Record-keeping practices must include the following procedures:

- …
- The amount of each material type recycled by the project must be measured with weighing scales before being dispatched to the next stage and before being used for any manufacture of products within the recycling facility. The amount of recycled material ~~plastic waste recycled~~ must be cross-checked by:

  …

Background

Verra has replaced some references to the term "recycled plastic waste" and related language with "recycled material" to consolidate terminology and enhance the clarity of requirements.

Clarification 3: Update Definition for "Region"

Document and section references: *Plastic Waste Recycling Methodology, v1.1,* Section 3

Region

The spatial extent that covers at least the geographic area containing the source of the plastic waste and~~,~~ the project activity~~, and the end destination of the plastic waste collected and/or recycled by the project activity~~; and at most covers the ~~host~~ country or countries in which the source of the plastic waste and the project activity ~~and the end destination~~ are located. The applicable geographic area may be an administrative unit (e.g., municipality, district, state or country), based on the availability of data.

Background:

The *Plastic Waste Recycling Methodology, v1.1* included a definition for "region" that required project proponents to include the geographic area of the plastic waste source, the project activity and the end destination of the plastic waste recycled by the project activity in the project region. For projects exporting recycled material, it was inappropriate to include other countries in the project region.

Verra has revised the definition of "region" to include only the geographic area of the plastic waste source and the project activity to make it feasible for projects to demonstrate conformance with the methodology requirements.

Clarification 4: Updated Applicability Condition 7

Document and section references: *Plastic Waste Recycling Methodology, v1.1,* Section 4(7)

Note *– Following Clarification 2 in this document, some references to the term "recycled plastic waste" were updated to "recycled material." In the redlined version below, the term "recycled material" is in green for ease of reading.*

7) The quality of the recycled material allows it to be used as feedstock in the manufacture of recycled products, thereby displacing the use of virgin plastic. Properties of the recycled material (e.g., presence and/or type of contamination, characteristics of macromolecules, chemical stability) may be used to demonstrate quality. Only the recycled material ~~fraction of the output of the recycling facility~~ that is or can be used to displace the use of virgin ~~produce recycled~~ plastics is eligible for WRCs. Any output that is used as a fuel, for energy recovery and/or as a chemical for any purpose other than plastic production is not eligible for WRCs.

Background

Verra has updated the language in Applicability Condition 7 in Section 4 of the *Plastic Waste Recycling Methodology, v1.1* to enhance the clarity of the requirement.

Clarification 5: Guidance for Demonstrating Regulatory Surplus

Document and section references: *Plastic Waste Recycling Methodology, v1.1,* Section 7, Step 1: Regulatory Surplus

The project proponent must demonstrate that the project activity proactively exceeds the current regulations or the regulatory compliance scenario based on the following guidance.

The project proponent must list all relevant national, regional and local laws and regulations for plastic waste treatment and end use specific to recycling in the relevant region. This does not include national and local policies that do not have a legally binding status. Project proponents must demonstrate whether, based on an examination of current practice in the region in which the law or regulation applies, those applicable legal or regulatory requirements are ~~systematically enforced and whether noncompliance with those requirements is widespread in the host country~~ fully effective.[4]

[4] The law or regulation is fully effective where it achieves its desired result (e.g., increasing recycling in the region). A law that is not systematically enforced or where there is widespread non-compliance cannot achieve its desired outcomes. For example, a project proponent may demonstrate that an EPR law or regulation is not fully effective at the time of the project start date by showing that the recycling rate for the relevant materials is low in the applicable region or by showing there is widespread non-compliance by using government or other third-party data. The effectiveness of the EPR scheme will be reassessed at the crediting period renewal.

This list must also include all mandatory extended producer responsibility (EPR) schemes relevant to the project activity and material type(s) in the region.[5] ~~The existence of relevant EPR schemes must not be used to indicate an existing legal requirement for the project activity unless the specific EPR scheme is mandatory.~~ Mandatory schemes may include, among others, those required by law, those that could result in legal redress, and those that enable authorities at the national, regional or local level to require brands or private companies to undertake recycling of the relevant material type(s). Evidence, such as compliance rates, recycling rates or other relevant third-party data must be provided to support the conclusion of effectiveness of the laws and regulations.

An assessment must be conducted for each material type included in the project activity to determine if legal or regulatory requirements for recycling are applicable. Recycling of a certain material type is not considered additional if it is mandatory. If the project proponent can demonstrate that the legal or regulatory requirements for recycling a particular material type are not fully effective ~~their project activity will exceed a specific mandatory threshold for recycling of a certain material type~~, then project activities associated with the recycling of that material type may be considered additional.

Under no circumstances may a project generate Waste Recycling Credits (WRCs) for amounts of recycled plastic that have already been directly financed through a relevant EPR scheme.

Step 1 outcomes
Outcome 1: There are no laws or regulations that enforce recycling of the relevant material type(s) or the laws or regulations are not fully effective ~~systematically enforced and noncompliance is widespread~~ in the relevant country or region. Proceed to Step **Error! Reference source not found.**.
Outcome 2: There are laws and/or regulations that enforce recycling of some (but not all) of the material types recycled in the project activity, unless it can be demonstrated that these laws and regulations are not fully effective in the relevant region. ~~The recycling of these material types is not additional.~~ Exclude the material types for which recycling is not additional and proceed to Step **Error! Reference source not found.**.
Outcome 3: There are laws and/or regulations that enforce recycling of all of the material types recycled in the project activity. The laws and regulations are fully effective in the relevant region. Recycling of the material type(s) and the project activity are not additional.

Background

Verra has clarified that mandated EPR schemes must be considered in the demonstration of regulatory surplus for plastic waste recycling activities by all project proponents including those that are not the direct subject of an EPR scheme. For example, a recycler must consider mandatory EPR

[5] Project proponents that are not the direct subject of an EPR scheme must still consider EPR laws in their assessment. For example, a recycler must consider a mandatory EPR law in their assessment, even where a brand or private company is the subject of the legislation.

in their assessment, even where a brand or private company is the subject of the legislation. This clarification provides simplified guidance about demonstrating regulatory surplus for plastic waste recycling projects operating in regions with mandated EPR schemes.