RECYCLING PARTNERSHIP GRANT AGREEMENT

This agreement ("Grant Agreement") is hereby made and entered into on the last date of execution below ("Effective Date"), by and between The Recycling Partnership, Inc. ("The Partnership") and Mecklenburg County, North Carolina ("Grantee"), which are referred to collectively herein as ("the Parties"), and individually as ("a Party").

RECITALS

WHEREAS, The Partnership is a tax-exempt organization under Section 501(a) of the Internal Revenue Code of 1986, as amended ("Code"), as an organization described in Code Section 501(c)(3) and is classified as a public charity described in Code Section 170(b)(1)(A)(vi);

WHEREAS, the purposes of The Partnership include furthering charitable and educational purposes within the meaning of Code Section 501(c)(3) by engaging in activities related to increasing recycling;

WHEREAS, the Grantee is a local government that operates one or more Material Recovery Facilities sorting residential recyclables (collectively, "MRFs" and individually, a "MRF"), including a MRF located at 1007 Amble Drive, Charlotte, NC 28206 (hereafter "Grantee MRF");

WHEREAS, the Grantee desires to purchase equipment as described under Attachment A, Section j, Project Background and Description, to increase the collection, recycling and circularity of polyethylene terephthalate ("PET"), including PET bottles as well as other rigid PET recyclable packaging such as thermoforms, and to permit the Grantee to increase the scale of collection and delivery of PET to an end market (hereafter, "Purchase");

WHEREAS, the Parties have determined the Purchase will result in increases in the collection, recycling and circularity of PET and allow the Grantee to increase the scale of collection and delivery of PET to an end market;

WHEREAS, The Partnership has determined the Purchase will increase PET recycling and provide environmental benefits and thereby further charitable purposes within the meaning of Code Section 501(c)(3);

WHEREAS, The Partnership desires to further its charitable purposes by granting funds to the Grantee to facilitate the Purchase; and

WHEREAS, the Grantee is willing to accept grant funds from The Partnership under the terms and conditions of this Grant Agreement, including, but not limited to, sharing recycling data and other information related to the equipment that is the subject of the Purchase with The Partnership and others as the Parties shall reasonably agree and recognizing the provision of grant funds by The Partnership and/or donors to The Partnership's PET Recycling Coalition (hereafter, "Coalition") in such manner and under such terms as the Parties shall reasonably agree.

THEREFORE, in consideration of the mutual promises and covenants contained in this Grant Agreement, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

- 1. Grant Agreement Documents; Entire Agreement: This Grant Agreement consists of this document and Attachment A hereto captioned Terms and Conditions and Grantee Work Plan. This Grant Agreement comprises the entire agreement between the Parties and supersedes any and all previous and contemporaneous agreements and representations, whether oral or written.
- 2. Term: This Grant Agreement shall be effective during the Grant Period, which begins on the Effective Date and ends thirty-six (36) months following the date of the initial operation of the equipment that is the subject of the Purchase, unless the Parties agree to extend the Grant Period by amending this Grant Agreement as provided in Paragraph 7 hereof.
- and conditions of this Grant Agreement, The Partnership shall make cash grants to the Grantee in an amount not to exceed THREE HUNDRED FIFTY THOUSAND DOLLARS (\$350,000) to support the Purchase ("Purchase Grants") and in an amount not to exceed SEVENTY-FIVE THOUSAND DOLLARS (\$75,000) to support community outreach activities ("Community Outreach Grants"). Purchase Grants and Community Outreach Grants, if any, are collectively referred to herein as "Cash Grants" and Cash Grants may be distributed to the Grantee by check or direct deposit, as the Parties shall mutually agree. In exchange for the Cash Grants, the Grantee will (i) take reasonable steps to promptly complete the Purchase and to conduct community outreach activities under the terms and conditions hereof, (ii) commit reasonable employee time and resources to comply with the terms and conditions of this Grant Agreement, (iii) provide such recycling data and other information to The Partnership as set out in this Grant Agreement and as the Parties shall reasonably agree, and (iv) provide such recognition to The Partnership and/or donors to the Coalition in such manner and under such terms as the Parties shall reasonably agree
- **Cash Grant Distribution Provisions**: The Partnership shall distribute Cash Grants to the Grantee in support of actual allowable expenditures the Grantee has made or otherwise will incur during the Grant Period (collectively, "Allowable Expenditures" and individually, an "Allowable Expenditure"). An Allowable Expenditure for Purchase Grants is one associated with work performed or goods or services acquired to complete the Purchase as determined by The Partnership in its sole and absolute discretion. An Allowable Expenditure for Community Outreach Grants, if any, is one associated with work performed or goods or services acquired to support community outreach activities of the Grantee related to the acceptance of PET at the Grantee MRF as determined by The Partnership in its sole and absolute discretion. As described in Section 1 of Attachment A, the Grantee shall submit requests for the distribution of Cash Grants to The Partnership as certain project milestones are accomplished. If the Grantee has been awarded Community Outreach Grants, then in order to be eligible for the distribution of the full amount of Cash Grants, the Grantee must demonstrate Allowable Expenditures for Community Outreach Grants that equal or exceed the amount of Community Outreach Grants that were awarded as described in Paragraph 3 hereof. If the Grantee does not demonstrate Allowable Expenditures for Community Outreach Grants that equal or exceed the amount of Community Outreach Grants awarded, then the final amount of Cash Grants distributed shall be reduced by an amount equal to the amount of Community Outreach Grants awarded minus the amount of Allowable Expenditures for Community Outreach Grants demonstrated. The Partnership shall make distributions of Cash Grants to the Grantee within thirty (30) days of receiving from the Grantee one or more invoices prepared as described in Paragraph 5 hereof documenting Allowable Expenditures. Initial Cash Grants from The Partnership for Allowable Expenditures will not exceed

ninety-five percent (95%) of the total Cash Grants amount and the remaining amount of Cash Grants to be distributed for Allowable Expenditures, if any, but not more than five percent (5%) of the total Cash Grants amount shall be paid as described in Section 1 Part iv of Attachment A hereof.

- 5. Invoices: The Grantee shall submit requests for the distribution of Cash Grants to The Partnership in the form of an invoice using a template provided by The Partnership. Requests for distribution of Cash Grants shall include copies of invoices or documents associated with Allowable Expenditures or summarizing the achievement of the milestone for which the Grantee is seeking distribution. The Grantee shall provide reasonable and appropriate evidence for The Partnership to determine the actual amounts paid or to be paid by the Grantee for work and services associated with each Allowable Expenditure, and documentation that provides evidence of achievement of milestones by the Grantee for each Allowable Expenditure submitted. Requests for the distribution of Cash Grants associated with Community Outreach Grants shall include copies of invoices or documents associated with each Allowable Expenditure for Community Outreach Grants and must also be accompanied by documentation that provides evidence of payment by the Grantee for each such Allowable Expenditure. Grantee's failure to demonstrate the expenditure of the full amount of Community Outreach Grants, if any, shall result in a reduction of the total Cash Grants to be paid as stipulated in Paragraph 4 hereof.
 - **6. Contacts**: Contacts for purposes of this Grant Agreement are set forth below.

Primary Partnership Contact:	Secondary Partnership Contact:	Grantee Contact:
Rob Taylor, VP of Grants and	Spence Davenport, Senior Director of	Martin Sanford
Community Development	Processing Advancement	Project Manager
Telephone: (919) 777-3964	Telephone: (919) 619-5580	Telephone: (980) 613-1549
Email:	Email:	Email:
rtaylor@recyclingpartnership.org	sdavenport@recyclingpartnership.org	martin.sanford@mecklenburgcountync.gov

- 7. Amendments and Changes to Cash Grants Amount: This Grant Agreement may be amended in a writing signed by the Parties. Notwithstanding the foregoing, the amount of the Cash Grants may be increased or decreased in a writing signed by an authorized person of the Grantee and a Partnership contact as set out in Paragraph 6 hereof.
- 8. Assignment, Successors and Assigns: Neither Party may transfer, delegate or assign this Grant Agreement, or its rights or obligations hereunder, without the prior written consent of the other Party. Any assignment in violation of this Paragraph will be void. Subject to the restrictions on assignability herein, the terms and conditions of this Grant Agreement will inure to the benefit and will be binding upon the Grantee and The Partnership and their respective permitted successors and assigns.
- 9. Signature Warranty: Each of the undersigned represents and warrants that he or she is authorized to execute this Grant Agreement.

[signature page follows]

MECKLENBURG COUNTY, NORTH CAROLINA

By: _____

Dr. Leslie Johnson
Deputy County Manager

Date: _____

Approved as to Form:

Susan Hall
Assistant County Attorney
Mecklenburg County

ATTACHMENT A: TERMS AND CONDITIONS AND GRANTEE WORK PLAN

- a. Termination: Either Party may terminate this Grant Agreement in writing with thirty (30) days' notice to the other Party. If the Grantee fails to substantially fulfill its obligations under this Grant Agreement in a timely and proper manner, The Partnership may provide written notice to the Grantee of its intent to terminate this Grant Agreement. Such notice shall specify the reasons for termination and allow the Grantee thirty (30) days to mitigate any specified reasons. If the Grantee fails to cure, as determined by The Partnership in its sole discretion, The Partnership may terminate this Grant Agreement by giving written notice to the Grantee of such termination and the effective date of such termination. In such case, the Grantee may retain such amount of the Cash Grants distributed by The Partnership equal to the total amount of actual Allowable Expenditures incurred plus Community Outreach Grants, if any, received prior to the termination effective date.
- **b. Notices**: All notices required by the terms of this Grant Agreement to be sent to The Partnership must be delivered by email with a read receipt requested to The Partnership's primary and secondary contacts set out in Paragraph 6 hereof. All notices required by the terms of this Grant Agreement to be sent to the Grantee must be delivered by email with a read receipt requested to the Grantee's contact set out in Paragraph 6 hereof.
- c. Lobbying and Political Activity: The Grantee shall not use or appropriate Cash Grants to (i) carry on propaganda or otherwise attempt to influence legislation or (ii) participate in or intervene in (including the publishing or distribution of statements) any political campaign on behalf of or in opposition to any candidate for public office.
- **d. Extensions**: The Partnership may grant extensions for the Grantee to perform its obligations hereunder, but such extensions are not guaranteed. If the Grantee desires an extension, the Grantee shall submit a written request to The Partnership's primary and secondary contacts as set out in Paragraph 6 hereof at least sixty (60) days prior to the due date of an obligation.
- e. Retroactive Costs: Costs incurred before the Grant Period will not be treated as Allowable Expenditures unless approved in writing by a primary or secondary contact of The Partnership as set out in Paragraph 6 hereof. The Partnership understands that prior to the Grant Period the Grantee has already undertaken expenditures associated with the Purchase including a payment to a Grantee-hired vendor for equipment to sort PET thermoforms and agrees to treat costs associated with this equipment as an Allowable Expenditure for Purchase Grants.
- **f. Travel Expenses**: Cash Grants may not be used for travel expenses without prior written approval from a primary or secondary contact of The Partnership as set out in Paragraph 6 hereof.
- g. Press Events, Educational Materials and Logo Usage: The Grantee agrees to cooperate with reasonable efforts by The Partnership to publicize the grant, including, but not limited to (i) designating a suitable representative to appear on behalf of the Grantee at publicity events, (ii) providing relevant and pertinent information to be included in press releases and distributions, (iii) allowing, only after written permission has been provided by the Grantee, for Grantee or Partnership generated images or content associated with the grant to be included in newsletters or other publications produced by The Partnership, and (iv) responding as appropriate to relevant and

pertinent press inquiries. The foregoing may include, as the Parties shall reasonably agree, one or more donors to Coalition. The Grantee further agrees to permit, as the Parties shall reasonably agree, the use of the names and/or logos of the Grantee, The Partnership and/or one or more donors to such Coalition on one or more educational materials related to the project that is the subject of this Grant Agreement. Grantee's logo shall not be used without prior written approval by the Grantee. The Partnership agrees to give reasonable notice to the Grantee's contact set out in Paragraph 6 hereof regarding any such press events and educational materials.

The Grantee further agrees to provide The Partnership with reasonable notice in advance of any efforts by the Grantee to publicize the project benefiting from Cash Grants for the purpose of allowing the Parties to coordinate any public announcements about the project.

If the Grantee has been awarded Community Outreach Grants, then the Grantee shall use The Partnership logo with the phrase "Funded in part by" on all education materials developed and/or implemented in association with Community Outreach Grant funding unless otherwise agreed by the Parties or prohibited by law. Prior to finalization of such educational materials, The Partnership requires proof review of any campaign materials developed by the Grantee or a third party that uses campaign images, graphics or logos of The Partnership. Upon presentation of materials for review, The Partnership agrees to review proofs and provide feedback within five (5) business days, or it shall lose the right to require the use of The Partnership logo and associated use of the "Funded in part by" phrasing. The purpose of the logo usage requirement is to publicly recognize The Partnership's support for the Community Outreach Grant funded efforts.

- h. Electronic Signatures and Electronic Records: The Partnership consents to the use of electronic signatures by the Grantee in such manner as determined appropriate by the Grantee. The Parties agree not to deny the legal effect or enforceability of this Grant Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of this Grant Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.
- i. Reporting and Additional Post-Award Requirements: The Grantee shall comply with the following requirements:
 - i. Sending The Partnership, within fifteen (15) days of the Effective Date, a notice as set out in Section b of Appendix A hereof with the Grantee's employer identification number, as that term is defined in Treasury Regulations section 301.7701-12, and was assigned to the Grantee by the Internal Revenue Service pursuant to (i) Code Section 6011(b), (ii) corresponding provisions of prior law, or (iii) Code Section 6109, and which consists of nine digits separated by a hyphen in the following format: 00-0000000.
 - ii. Maintaining the primary use of the equipment that is the subject of the Purchase for the acceptance, sortation and marketing of PET for a minimum of three (3) years following the first date of operation of such equipment. Any use of alternative equipment for the

acceptance, sortation and marketing of PET during such three (3) year period shall require the prior written approval of The Partnership based on sufficient evidence, as determined by The Partnership in its sole discretion, that such alternative equipment will result in equal or greater capture capability and quality than the equipment that is the subject of the Purchase. Additionally, if a request to use alternative equipment is approved, the equipment that is the subject of the Purchase shall then be utilized for the sorting of other marketable recyclables, as determined by The Partnership in its sole discretion.

- 111. Delivering semi-annual project reports (collectively, "Semi-Annual Project Reports" and individually, a "Semi-Annual Project Report") to The Partnership for three (3) years following the initial operation of the equipment that is the subject of the Purchase, which shall include (i) the dates the equipment that is the subject of the Purchase was installed and became operable, (ii) submitting for review by The Partnership a complete list of the communities served by the Grantee MRF and an estimate of the total households served within each community, (iii) the total tons of PET captured and baled at the Grantee MRF per month for the semi-annual period in question, with these tons broken down into PET bottle and PET Thermoform tons as possible, (iv) the total tons of inbound commingled residential material received per month at the Grantee MRF for the semi-annual period in question, (v) an assessment of the prevalence of PET bottles and PET thermoforms as a percentage of the overall residential stream received during the semi-annual period in question, (vi) reporting on the end market(s) used for the PET material shipped from the Grantee MRF during the semi-annual period in question, and (vii) such other information as The Partnership and the Grantee shall reasonably agree.
- iv. Submitting to interviews and providing audit and other information regarding the installation and operation of the equipment that is the subject of the Purchase as the Parties shall reasonably agree.
- v. Participating during the Grant Period as reasonably requested in the education of (i) city partners and others regarding the acceptance of PET bottles and PET Thermoforms and (ii) residents regarding such acceptance.
- vi. Submitting for review by The Partnership a draft final project report (hereafter "Final Project Report") at least thirty (30) days prior to the end of the Grant Period. The Partnership will provide the required format for the Final Project Report. The Partnership will also provide feedback to the Grantee regarding the draft Final Project Report, including necessary changes and points of clarification, within fourteen (14) days of receipt of the draft Final Project Report, and the Final Project Report shall be delivered to The Partnership within sixty (60) days of the end of the Grant Period unless the Parties agree in writing to extend such period.
- vii. Delivering to The Partnership within (30) days of the end of the twelve (12) months following the first date of operation of the equipment that is the subject of the Purchase a community outreach report (hereafter "Community Outreach Report") summarizing the use of Community Outreach Grants, if any, and including a listing of the communities served

by the Grantee MRF whose residents have been targeted by the Community Outreach Grant funded efforts.

j. Project Background and Description: The Grantee owns the Grantee MRF which is located in Charlotte North Carolina. The Grantee MRF is operated by a Grantee-contracted operator. The Grantee MRF receives commingled recyclable materials from community recycling programs and residential units in and around Charlotte, North Carolina. It is estimated by the Grantee that the Grantee MRF receives approximately 86,000 tons of recyclable materials annually from a service area that consists of approximately 435,000 households.

The Grantee is rebuilding the Grantee MRF, and the full scale retrofit of this fifteen (15) year old facility will include the latest technology for efficient sorting of recyclables from residential, commercial and industrial customers in this fast growing area of North Carolina. The goal of this project will be to increase the capture of PET while also enabling the Grantee to create two specific subcategories of the PET commodity: PET bottles and PET thermoforms. This ability to uniquely market PET bottles and PET thermoforms will simultaneously allow the Grantee to support additional capture of new materials by the residential recycling programs feeding the facility while also bolstering local market demand for these materials as feedstocks for circular manufacturing within the state. By separating these subtypes of PET, it is likely that the Grantee will also see greater demand for their recyclable PET commodities.

With the support of the Grant from The Partnership, the Grantee will invest in an innovative approach to sorting PET. While the prior process included a single optical sorter focusing on all PET, this approach required labor to hand sort any lost PET items on the residue lines. The reliance on human sortation also prevented the Grantee from capturing PET thermoforms along with PET bottles. With this retrofit, the Grantee will install three PET optical sorters. The primary optical sorter will extract all PET from the material stream. The second PET optical sorter will remove any non-PET items from the PET stream. The third and final PET optical sorter will separate PET bottles from PET thermoforms. As markets dictate, the Grantee can adjust any of these three optical sorters to target colored and opaque PET if desired. Grant support from The Partnership has enabled the project to include these additional investments as well as the auxiliary equipment required to support these optical units, including conveyors and bunkers. Cash Grants will be used to support the retrofit of these three new opticals which are likely to be installed in the Fall of 2024.

To further support the recovery of PET at the Grantee MRF, the grant project also includes \$75,000 in Community Outreach Grant funding for educating residents among the communities that deliver recyclable material to the Grantee MRF. Community Outreach Grant funded education efforts will include outreach for residents about the acceptance of PET bottles and PET thermoforms as recyclable materials as described in Section k hereof, can include mailers, digital campaigns and / or other outreach methods as agreed upon by the Parties, and must be completed within twelve (12) months of operation of the equipment that is the subject of the Purchase.

The Purchase and the associated community education and outreach are expected to yield result in the recovery of 2,400 new tons of PET bottles and 400 new tons of PET thermoforms per year. The

actual amount of PET successfully recycled will be confirmed through Grantee reports as described in Section i, Reporting and Post-Award Requirements, hereof.

- **k. Public Outreach Requirements**: Regardless of whether the Grantee has been awarded Community Outreach Grant funding, the Grantee will work in coordination with The Partnership to promote the collection, recycling and circularity of PET as follows:
 - i. By informing the community recycling programs delivering recyclable materials to the Grantee MRF that the Grantee has the capacity to accept and sort PET bottles and PET thermoforms;
 - ii. By updating its web site to explicitly reflect that PET bottles and PET thermoforms are accepted at the Grantee MRF; and
 - iii. By connecting the program managers of the communities whose recyclables are processed at the Grantee MRF with The Partnership's PET outreach resources and urging said communities to update their own websites and outreach materials to reflect that PET bottles and PET thermoforms are accepted by their recycling programs.
- **l. Distribution Schedule and Requirements**: Cash Grants will be distributed by The Partnership as follows:
 - i. Thirty-two percent (32%) of the total Cash Grants amount shall be distributed within thirty (30) days of The Partnership receiving sufficient evidence, as determined by The Partnership in its sole discretion, that the equipment that is subject of the Purchase has been ordered and shipped from the equipment supplier, and that a complete list of the communities served by the Grantee MRF and an estimate of the total households served within each community has been submitted.
 - ii. Thirty-two percent (32%) of the total Cash Grants amount shall be distributed within thirty (30) days of The Partnership receiving sufficient evidence, as determined by The Partnership in its sole discretion, that the equipment that is subject of the Purchase has been installed and is operable.
 - iii. Thirty-one percent (31%) of the total Cash Grants amount shall be distributed within thirty (30) days of The Partnership receiving sufficient evidence, as determined by The Partnership in its sole discretion, that the Grantee has submitted a satisfactory Semi-Annual Project Report as described in Section i Part iii hereof for the period of time covering the first twelve (12) months of operation of the equipment that is the subject of the Purchase, and that the Grantee has completed all required public outreach requirements as set out in Section k hereof. In addition, if the Grantee has been awarded Community Outreach Grant funding, then the Grantee must also submit the Community Outreach Report as described in Section i Part vii hereof and, as provided for in Paragraph 4 hereof, the amount of Cash Grants distributed shall be reduced if the Grantee does not demonstrate Allowable

- Expenditures for Community Outreach Grants that equal or exceed the amount of Community Outreach Grants that were awarded.
- iv. The remaining amount of Cash Grants, if any, but not more than five percent (5%) of the total Cash Grants amount shall be distributed within thirty (30) days of The Partnership determining in its sole discretion that the Grantee has submitted a satisfactory Semi-Annual Project Report as described in Section i Part iii hereof for the period of time covering the initial twenty-four (24) months following the first date of operation of the equipment that is the subject of the Purchase, and that the Grantee has completed all other grant-related activities due as of the date the Grantee submits such Report.

Notwithstanding anything herein to the contrary,

- v. The Partnership may withhold making one or more Cash Grants if the Grantee does not meet its reporting obligations or additional post-award requirements as set out in Section i hereof; and
- vi. In the event the Grantee breaches Section i Part ii hereof by not maintaining (i) the primary use of the equipment that is the subject of the Purchase for the acceptance, sortation and marketing of PET or (ii) such alternative equipment for such purposes as approved by The Partnership for a minimum of three (3) years following the installation of the equipment that is the subject of the Purchase, as determined by The Partnership in its sole discretion, the Grantee acknowledges and agrees that The Partnership shall be entitled to recover from the Grantee fifteen percent (15%) of the total Purchase Grants amount, as well as all reasonable attorneys' fees and costs incurred by The Partnership in a successful proceeding to enforce this Paragraph. Before bringing a proceeding alleging breach of Section i Part ii hereof, The Partnership must provide written notice to the Grantee of its belief that such breach occurred within thirty (30) days of The Partnership's knowledge of the existence of the conditions giving rise to such belief, and the notice shall describe the conditions believed to constitute a breach. The Grantee shall have thirty (30) days to respond to such notice and, if practicable, to remedy such conditions.
- **m.** Project Budget and Grant Funding: The amounts set forth in the table below represent The Partnership's intended total distribution of Cash Grants to the Grantee:

Grant Element	Description	Grant Amount
Equipment and Technology (Purchase Grants)	Grant funding to support the purchase and installation of equipment by the Grantee to enable and enhance PET recovery at the Grantee MRF.	\$350,000
Outreach Support (Community Outreach Grants)	Grant funding, if any, to support education and outreach activities that raise public awareness about Grantee's ability to accept and recycle PET bottles and PET thermoforms at the Grantee MRF and to encourage participation in PET bottle and thermoform recycling.	\$75,000
Total		\$425,000

Upon mutual agreement of the Parties, the final allocation of Cash Grants may be adjusted between expense categories as necessary. As specified in Section 1 hereof, Cash Grants will be distributed as

the Grantee accomplishes certain milestones associated with the Purchase. The table below sets out such milestones and the related anticipated Cash Grants distribution amounts:

Expenditure / Achievement Milestone*	Grant Distribution Percentage	Grant Distribution Amount		
Equipment Ordered and Shipped from Supplier	32%	\$136,000		
Equipment Installed and Operable	32%	\$136,000		
Semi-Annual Project Reports Submitted for the First Year of Operation	31%	\$131,750		
Semi-Annual Project Reports Submitted for First Two (2) Years of Operation	5%	\$21,250		
TOTAL:	100%	\$425,000		
*Milestones and associated obligations are described in detail in Section l of Attachment A hereof.				

As specified in Paragraph 4 hereof, if the Grantee has been awarded Community Outreach Grants, then the amount of Cash Grants distributed may be reduced if the Grantee does not demonstrate Allowable Expenditures for Community Outreach Grants that equal or exceed the amount of Community Outreach Grants that were awarded. All costs associated with implementation of the project that is the subject of this Grant Agreement beyond the grant funding provided by The Partnership are solely the responsibility of the Grantee.

- n. Management of Recyclable Materials: The Parties agree that recyclable materials meeting reasonable contamination standards established by the Grantee that have been delivered to the Grantee MRF to be processed using equipment associated with the Purchase will managed responsibly for recycling, recovery, and remanufacturing into new products. The Grantee shall work in good faith with The Partnership to address any issues related to the recycling and/or recovery of such materials with the goal that properly prepared recyclable materials received and processed by the Grantee at the Grantee MRF will be managed responsibly.
- o. Compliance with Laws and Non-Compliance Notification: The Grantee hereby certifies that as of the Effective Date, the Grantee MRF is not knowingly in violation of any applicable law, ordinance, code, or regulation that could materially affect the Grantee's ability to perform its obligations under this Grant Agreement. The Grantee further certifies that as of the Effective Date, the Grantee MRF is not knowingly subject to any order or judgement of any court, tribunal or government agency that materially and adversely affects the operation of the Grantee MRF. If the Grantee MRF (i) violates any applicable law, ordinance, code, or regulation that could materially affect the Grantee's ability to perform its obligations under this Grant Agreement or (ii) becomes subject to any order or judgement of any court, tribunal or government agency that materially and adversely affects the operation of the Grantee MRF, the Grantee shall provide prompt written notice to the primary and secondary contacts of The Partnership set out in Paragraph 6 hereto.

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MECKLENBURG COUNTY Land Use & Environmental Services Agency

<u>Polyethylene terephthalate Recycling Coalition Grant Application:</u> Mecklenburg County MRF Retrofit Processing Improvements

Section 1 – Key Contacts and Project Highlights:

- Project Director
 - o Martin Sanford, P.E., PMP
 - o Mecklenburg County Land Use and Environmental Services Agency
 - o 2145 Suttle Avenue, Charlotte, NC 28208
 - o (980) 613-1549
 - o <u>martin.sanford@mecklenburgcountync.gov</u>
- Project Alternate Contact
 - o Joe Hack, Solid Waste Engineering Manager
 - Mecklenburg County Land Use and Environmental Services Agency
 - o 2145 Suttle Avenue, Charlotte, NC 28208
 - 0 (980) 314-3864
 - o Joe.Hack@mecklenburgcountync.gov

Key Project Highlights Table

	Households Served			
Number of Households Served by MRF (enter number)	520,270			
	Yes	No	Other	
Are PET Non-Bottle rigids Currently Accepted?		Х		
	Yes	No	Other	
Is Pigmented/Opaque PET Currently Accepted?		Х		
	Baled with PET bottles	Baled with mixed plastics	Baled in a dedicated stream	Residual
Current Fate of Received PET Non- bottle Rigids (check applicable)	х			

	Baled with PET bottles	Baled with mixed plastics	Baled in a dedicated stream	Residual
Current Fate of Received Pigmented/Opaque PET (check applicable)	X (opaque)			X (pigmented)
	Number of Tons	Estimate or Actual		
Current Annual Inbound Tons (enter number of total tons of all material and indicate if estimate or actual)	86,168	FY22 actual		
	Number of Outbound Tons	Estimate or Actual		
Current Annual Outbound PET Tons (enter number of tons and indicate if estimate or actual)	1,963	FY22 actual		
	Number of New Inbound Tons	Number of New Outbound Tons		
Projected Increase in Annual PET Tons as a Result of Project (enter estimated number of new tons, if applicable)		2,811 (est. 90% recovery)		

Note: The projected increase in annual PET tons as a result of the project assumes 90% recovery of the marketable PET received at the MRF in FY24/25, which means an increase of 2,810 tons post-retrofit compared to FY22 recovery tonnages, not accounting for any increase to the incoming tonnage. Three years after the retrofit project the MRF is anticipated to receive 115,000 TPY, which is estimated to yield 7,130 tons of recovered PET which is an annual increase of 5,170 tons over FY22 tonnages.

Section 2 – Project Description

Mecklenburg County (County) owns the Metrolina Recycling Facility (MRF) including all the equipment within the building that processes single-stream residential, commercial, and institutional recyclable materials. The facility is operated by Republic Industries, a private contractor. The MRF is over 15 years old and is experiencing operational challenges relative to availability, efficiency, and effective recovery of some materials. The County is planning a full-scale retrofit of the MRF to provide the best methods and separation technology to recycle more efficiently and productively, utilizing modern and efficient standards. The planned retrofit equipment will support improved recovery of polyethylene terephthalate (PET) materials.

Section 2.1 – Description of how PET is Currently Managed by the Applicant

How is PET currently processed in the facility? What types of sortation and processing equipment are used? Please provide a brief description of the flow of PET through the facility.

PET bottles are currently processed/recovered at the MRF using one MSS optical sorter, human sorters for quality control, conveyors, and a storage bunker. Any PET bottles that are not captured at the optical sorter are attempted to be collected by hand sorters prior to conveyance to the residue compactors. The captured PET bottles are stored in a PET bunker until they are baled and shipped out to market. The recovered PET is sold to end-market buyers for manufacturing of carpet and clothing fiber, and new bottles. PET thermoforms/containers are classified as "non-

program" materials and are not targeted for recovery at the MRF. Any PET containers received at the MRF are collected either with PET bottles or end up in the residual stream which is ultimately sent to a landfill.

Will the project enable an increase in the capture, yield, and/or overall tonnage of PET processed? Please provide a description of how the project will enable an increase in PET recycling.

The addition of a new PET optical sorter, PET QC sorter, PET thermoform optical sorter, and associated conveyors, platforms, and bunker modifications to separate PET thermoforms from PET bottles will increase the capture and overall tonnage of PET bottles and thermoforms processed at the MRF.

The MRF retrofit will incorporate new screening and optical sorter technology that will provide improved recovery of PET materials. PET bottles and containers will be removed utilizing a Tomra optical sorter with a 2nd Tomra optical sorter utilized as a quality control (QC) station for PET. After the PET materials have passed through the PET QC optical sorter, they will be conveyed to a 3rd Tomra optical sorter that will separate PET bottles and thermoforms and convey the bottles and thermoforms to separate bunkers. The captured PET bottles and thermoforms will be stored in separate bunkers until they are baled and shipped out to market.

Are PET non-bottle rigids and pigmented/opaque PET currently accepted and processed?

PET non-bottle rigids and pigmented/opaque PET are currently not acceptable program materials for the MRF; however, the MRF does receive these materials (as non-program materials) through curbside collection programs. Any of these non-bottle PET materials received are not processed for targeted recovery. Non bottled rigid PET is baled with regular PET. Pigmented PET is not recovered and opaque PET ends up in our PET bales. Within the current operating process, PET materials also end up as residuals and are conveyed to the residue compactors and sent to a landfill for disposal.

For all formats currently not accepted or processed, how will the project affect their acceptance and processing?

The incorporation of three new Tomra optical sorters and associated conveyors, platforms, and bunker modification will increase the rate of processing and recovery of PET materials at the MRF. In addition to improved processing capacity, the new optical sorters will allow for separate recovery of PET bottles and thermoforms. The ability to efficiently process thermoforms will allow for our recycling program to educate residents about the acceptance of new PET materials in their curbside recycling programs, and market these materials to new regional end-user customers.

What PET formats do you intend to accept and process as a result of this project?

PET clamshells, PET cups, PET trays, and opaque bottles will be accepted as program materials at the MRF.

How will this project help you market each format either as separate commodities or a unified stream of PET?

The ability to actively recover the material will allow the MRF to produce quality bales of PET bottles and PET thermoforms that meet plastic reclaimer specifications.

Section 2.2 – Description of Investment that is Proposed

The equipment proposed to be used for recovering PET bottles and thermoforms separately will include the following: Three new Tomra optical sorters, discharge conveyors, related electrical and control components, and an additional bunker for the PET thermoforms. The addition of new Tomra optical sorters, within the retrofit design, will allow for increased PET bottle recovery and separate recovery of PET thermoforms from bottles. The MRF is planned to undergo a complete retrofit of the processing equipment and overall process. The grant funding investment will allow for higher recovery of PET and separate recovery and marketing of PET Thermoform bales. Without the funding, any limited amount of PET thermoforms recovered at the MRF will be captured and baled with PET bottles.

Section 2.3 – Description of Overall Funding and Business Analysis of the Project

The expenditures required for the PET sorting equipment required to improve recovery of PET bottles and add non-bottle PET materials to the list of program materials for the MRF include the following:

PET Thermoform Optical Sorter and Bunker: \$705,335 delivered and installed

PET Optical Sorter: \$475k delivered and installed

PET QC Optical Sorter: \$165,000

Platforms, bunkers, and controls: \$225,000

The full-scale MRF retrofit costs will be funded from both Solid Waste Division funds and proceeds from a low-interest bond issuance. The \$1,570,335 for the PET sorting and storage equipment will be funded from the overall retrofit funding sources.

The PET QC optical sorter will result in labor savings of approximately \$84,000 per year due to the reduction in manual QC staff. The annual maintenance cost for the new PET equipment is estimated to be \$47,000.

Assuming an overall combined value of \$250 per ton for all recovered PET materials, the estimated payback period is approximately 2 years.

Section 2.4 - Description of Project Effect on Community Recycling Programs and PET Recycling Access

The Metrolina MRF processes recyclable material from Mecklenburg County including the following cities and towns: City of Charlotte, Town of Cornelius, Town of Davidson, Town of Huntersville, Town of Matthews, Town of Mint Hill, and Town of Pineville. The Metrolina MRF also provides processing services to Cabarrus County (including City of Concord and City of Kannapolis), Town of Waxhaw, and periodically from Union County and Gaston County. The installation of new optical sorters and associated equipment will increase PET recovery including the separate recovery of PET thermoforms. Separate recovery and baling of PET thermoforms will allow PET thermoforms to be delivered to a new, nearby PET thermoform recycling facility. The ability to separate thermoforms from bottles will allow the County to begin advertising the inclusion of PET thermoforms as acceptable material in the curbside recycling programs for the City of Charlotte and six other local governments which represent over 1.1 million people and 435,000 households plus additional households in Cabarrus, Union, and Gaston counties.

Section 2.5 - Description of Other Parties Involved or Funding Sources

Mecklenburg County is the sole stakeholder providing funding support for the project. There are no additional essential stakeholders.

Section 2.6 – Description of How the Project Sets an Example or Helps Replicate Other Potential Projects

Technology is a key component of modern MRFs. The use of technology to enhance operations allows for identification, separation, and recovery of a variety of recyclable plastic materials. MRF retrofits are critical projects that improve the efficiency and cost-effectiveness of recovering more plastic materials from curbside collection programs and drop-off facilities. Optical sorters and robots, along with artificial intelligence, are the technological tools that are available and adaptable to existing MRFs that are interested in expanding and increasing the recovery of PET bottles and containers. Our MRF retrofit project will be a replicable example of a MRFs transformation to modern approaches to increased recycling of PET.

Section 2.7 – Describe how up to \$75,000 would be used to enhance public knowledge and awareness of PET recycling and to increase the capture of PET from households in the areas served by the MRF.

The additional \$75,000 in funding would be used to enhance the existing Recycle Right education program that Mecklenburg County operates. Specific enhancements will need to be made to revise the acceptable materials list at

our MRF. The education enhancements will highlight the recyclability of PET bottles and containers that can be placed in their curbside single-stream carts. Outreach materials will provide both English and Spanish educational materials such as brochures, posters, handouts, and social and traditional media announcements. The Solid Waste Division has a social media presence on Facebook, Twitter, LinkedIn and YouTube, which will allow the PET recyclability message to be distributed through these social media communication channels. Our public education and outreach campaign will create messaging that targets PET materials; however, there will be campaigns that target PET along with other recyclable commodities. Mecklenburg County Solid Waste directly provides recyclable collection service to the Charlotte-Mecklenburg School (CMS) system. As part of a public awareness campaign, the County will work with CMS to highlight the recyclability of PET materials that may be used in their cafeterias.

In addition to printed and digital material, the funding will be utilized to develop a video of MRF operations showing the process of separating and baling recyclable commodities including PET. The video would be posted on the County's Solid Waste website and possibly YouTube. Mecklenburg County will share the education materials with the City of Charlotte and six towns within the County.

Section 3 - Budget

Project Components	Total Cost	Requested Partnership Funding	Mecklenburg County Funding	Other Sources of Funding
PET Bottle Optical Sorter	\$475,000	\$100,000	\$375,000	\$0
PET QC Optical Sorter	\$165,000	\$50,000	\$115,000	\$0
PET platforms, bunker, and controls	\$225,000	\$50,000	\$175,000	
PET Thermoform Optical Sorter plus required conveyors and platforms	\$705,335	\$150,000	\$555,335	\$0
Optional Public Outreach	\$100,000	\$75,000	\$25,000	\$0
Totals	\$1,670,335	\$425,000	\$1,245,335	\$0

Section 4 - Timeline

Given the required timeline for design, manufacturing, shipment, and installation, start-up operation of the MRF retrofit which will include the three optical sorters to be utilized for sorting and quality control of PET bottles and containers will take approximately 17 months with an anticipated startup in November 2024.

- Grant Application Due June 13, 2023
- Grant Contract Complete September 14, 2023
- Design/Engineering October 6, 2023
- Manufacturing and Shipping April 2024
- Installation and Start Up November 2024
- Final Report May 2025

Section 5 - Measurement Activities and Planning

Mecklenburg County will provide informal progress reports during project development. Mecklenburg County will also provide a final report that includes a discussion on the General Project Results, Final Project Budget, and Final Project Timeline.

Section 6 – Provision of Equipment Quotes

The equipment costs for the PET Thermoform sorting and storage equipment is attached to this grant proposal. The costs for the PET optical sorter and PET QC optical sorter are part of the overall MRF Retrofit project; therefore, the costs provided are a close estimate provided by Van Dyk.

Section 7 – Letter of Support from other Funding Sources or Partnerships

Mecklenburg County is the sole will not receive any additional funding support from No letters of support are included with this grant application.



Signature Page

Contract Number: 43958107

Amendment Number: 00

Contractor Name: THE RECYCLING PARTNERSHIP INC

MECKLENBURG COUNTY:

ATTEST:

Leslie Johnson

Assistant County Manager

James E. Yeager County Attorney

APPROVED AS TO INSURANCE REQUIREMENTS: