#### 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 polypropylene ("PP"), including PP rigid recyclable packaging, and to permit the Grantee to increase the scale of collection and delivery of PP to an end market (hereafter, "Purchase");

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

WHEREAS, The Partnership has determined the Purchase will increase PP 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 Polypropylene 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 sixty (60) 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 SEVENTY-FIVE THOUSAND DOLLARS (\$375,000) to support the Purchase ("Purchase Grants") and in an amount not to exceed SEVENTY-FIVE THOUSAND DOLLARS (\$75,000) to support the Purchase ("Formunity 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
- 4. **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") or as otherwise allowed pursuant to this Agreement. An Allowable Expenditure for Purchase Grants is one associated with work performed or goods or services acquired to complete the Purchase as mutually agreed upon by the parties. 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 PP at the Grantee MRF as determined as mutually agreed upon by the parties. 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 PP containers 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 PP for a minimum of five (5) years following the first date of operation of such equipment. Any use of alternative equipment for the

acceptance, sortation and marketing of PP during such five (5) 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.

- iii. Delivering semi-annual project reports (collectively, "Semi-Annual Project Reports" and individually, a "Semi-Annual Project Report") to The Partnership for five (5) 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 PP captured and baled at the Grantee MRF per month for the semi-annual period in question, (iv) the total tons of inbound comingled residential material received per month at the Grantee MRF for the semi-annual period in question, (v) PP prevalence analysis and composition and/or PP 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 PP 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 PP and (ii) residents regarding such acceptance.
- vi. Submitting for review by The Partnership a draft of the 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. 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 purpose of the grant project that is the subject of this Grant Agreement is to support equipment upgrades and to optimize the sortation, recovery, and marketing of PP rigid recyclable packaging and other recyclable materials at the Grantee MRF. The Grantee intends to install eight optical sorters on the container line, and one optical sorter at the end of the container line to monitor and recirculate PP and other plastic materials missed due to improper sortation. Capture of recyclables on the container line will be improved by utilizing dual eject opticals targeting PET, PP, and HDPE as well as an optical sorter to capture any missed items prior to residue. Cash Grants will provide capital for the Grantee to support the installation of one (1) dual eject optical targeting PP including supporting structures and storage bunker. The expected timeline for the start of installation is Fall 2024.

To further support the recovery of PP 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 PP as a recyclable material 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 Grantee expects to capture an additional 480 new tons of PP annually as a result of this project. The actual amount of PP successfully recycled will be confirmed through Grantee reports as described in Section i, Reporting and Additional 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 PP 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 PP;
  - ii. By updating its web site to explicitly reflect that PP is an accepted material 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 PP outreach resources and urging said communities to update their own websites and outreach materials to reflect that PP is 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 PP or (ii) such alternative equipment for such purposes as approved by The

Partnership for a minimum of five (5) 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,. 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:

<b>Grant Element</b>	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 PP recovery at the Grantee MRF.	\$375,000
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 PP at the Grantee MRF and to encourage participation in PP recycling.	\$75,000
Total		\$450,000

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%	\$144,000		
Equipment Installed and Operable	32%	\$144,000		
Semi-Annual Project Reports Submitted for the First Year of Operation	31%	\$139,500		
Semi-Annual Project Reports Submitted for First Two (2) Years of Operation	5%	\$22,500		
TOTAL:	100%	\$450,000		
*Milestones and associated obligations are described in detail in Section 1 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

Polypropylene Recycling Coalition Grant Application: Mecklenburg County MRF Retrofit Processing Improvements

# Section 1 – Key Contacts and Project Highlights:

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

	Single-Stream	Dual-Stream	Mixed Waste
MRF Type	Х		
Current Annual Inbound Tons (enter number of total tons of all material and indicate if estimate or actual)	86,168		
	Households Served		
Number of Households Served by MRF (enter number)	520,270		
	Yes	No	Other
Is PP Currently Accepted at MRF?		Х	
	Marketed as PP bale	Marketed as 1- 7 or 3-7 bale	Landfill/disposal
Current Fate of Received PP (check applicable)			Х

	Number of Tons	Estimate or Actual
Current Annual PP Tons (enter number of tons)	0	FY22 actual
	Number of New Inbound Tons	Number of New Outbound Tons
Projected Annual PP Tons as a Result of Project (enter number of tons)		690 (est. 90% recovery)

Note: The projected annual PP tons as a result of the project assumes 90% recovery of the marketable PP bottles and containers received at the MRF in FY24/25. Three years after the retrofit project the MRF is anticipated to receive 115,000 TPY, which is estimated to yield 1,030 tons of recovered PP.

### 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 be able to support improved recovery of polypropylene (PP) materials.

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

#### Is polypropylene currently accepted and processed at the MRF?

PP materials are not considered acceptable curbside single-stream recycling program materials; therefore, they are not currently processed/recovered at the MRF. Any PP materials received at the MRF are processed as residuals which are ultimately sent to a landfill.

#### If polypropylene is currently not accepted or processed, how will the project make this possible?

The MRF retrofit will incorporate new optical sorter technology that will provide improved recovery of PP materials. PP materials will be removed utilizing a Tomra optical sorter with a 2<sup>nd</sup> Tomra optical sorter utilized as a quality control (QC) station for PP. The captured PP materials will be stored in a separate bunker until they are baled and shipped out to market.

The addition of a new PP optical sorter, PP QC sorter, bunker, and associated conveyors and platforms will allow for the MRF to process, sort, and market PP materials. The ability to efficiently process PP will allow for our recycling program to educate residents about the acceptance of PP materials in their curbside recycling programs and market the materials to reclaimer processing markets.

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

PP bottles/jugs, PP tubs, PP trays, PP clamshells, and PP cups will be accepted as program materials at the MRF.

# How will this project help you market polypropylene as a separated commodity?

The ability to actively recover PP material will allow the MRF to produce quality PP bales that meet plastic reclaimer specifications.

#### Section 2.2 - Description of Investment that is Proposed

The MRF is planned to undergo a complete retrofit of the processing equipment and overall sorting process. The equipment proposed to be used for recovering PP will include the following: two new Tomra optical sorters, discharge conveyors, and related electrical and control components. The addition of the new Tomra optical sorters, within the retrofit design, will allow for the MRF to begin accepting and recovering PP materials. The grant funding investment will allow for recovery and marketing of PP bales.

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

The expenditures required for the PP sorting equipment required to allow recovery of PP materials at the MRF include the following:

PP Optical Sorter: \$425k

• PP QC Optical Sorter: \$165,000

Platforms, bunkers, and controls: \$185,000

The full-scale MRF retrofit costs will be funded from both Solid Waste Division funds and proceeds from a low-interest bond issuance. The \$777,000 for the PP sorting and support equipment will be funded from the overall retrofit funding sources.

Since PP is not currently accepted or recovered at the MRF, the installation of new optical sorters doesn't result in labor savings. The annual maintenance cost for the new PP equipment is estimated to be \$23,310.

Assuming an overall combined value of \$250 per ton for all recovered PP materials, the estimated payback period is approximately 4.5 years.

#### Section 2.4 - Description of Project Effect on Community Recycling Programs and Polypropylene 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 ability to recover PP material will allow the County to begin advertising the inclusion of PP materials 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 PP materials. Our MRF retrofit project will be a replicable example of a MRFs transformation to modern approaches to increased recycling of PP.

Section 2.7 – Describe how up to \$75,000 would be used to enhance public knowledge and awareness of Polypropylene recycling and to increase the capture of Polypropylene 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 PP materials 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 PP recyclability message to be distributed through these social media communication channels. Our public education and outreach campaign will create messaging that targets PP materials; however, there will be campaigns that target PP 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 PP 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 PP. 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	Total Cost	Requested	Mecklenburg	Other Sources of
Components		Partnership	County Funding	Funding
		Funding		
PP Optical Sorter	\$425,000	\$175,000	\$200,000	\$0
PP QC Optical	\$165,000	\$75,000	\$92,000	\$0
Sorter				_
Ancillary controls, conveyors, platform, platform	\$185,000	\$50,000	\$135,000	
Optional Public	\$100,000	\$75,000	\$25,000	\$0
Outreach				
Totals	\$875,000	\$375,000	\$452,000	\$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 two optical sorters to be utilized for sorting and quality control of PP 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 costs for the PP optical sorter and PP 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: 43958397

**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: