

CLARK COUNTY STAFF REPORT

DEPARTMENT: Environmental Services

DATE: May 4, 2016

REQUESTED ACTION:

Execute a professional services agreement with Green Solutions, LLC in the amount of \$17,200 for evaluating contamination in the residential recycling waste stream.

Consent Hearing County Manager

BACKGROUND

The County is entering into a Professional Services Agreement with Green Solutions, LLC to conduct a recycling contamination study. This study is included in the scope of the County's Coordinated Prevention Grant with the Washington State Department of Ecology. The outcomes of the study will provide information about the contents of the contamination of the recycling stream in order to guide future outreach and program management. Request for quotes were solicited from three professional service companies. Green Solutions was selected.

COUNCIL POLICY IMPLICATIONS

Not applicable

ADMINISTRATIVE POLICY IMPLICATIONS

Not applicable

COMMUNITY OUTREACH

The agreement is consistent with program services for County residents identified in the Solid Waste Management Plan. The Solid Waste Advisory Commission has been advised and is in support of the Program. As the Solid Waste Program is regional, the County will coordinate with all local municipalities.

BUDGET IMPLICATIONS

YES	NO	
X		Action falls within existing budget capacity.
	X	Action falls within existing budget capacity but requires a change of purpose within existing appropriation
	X	Additional budget capacity is necessary and will be requested at the next supplemental. If YES, please complete the budget impact statement. If YES, this action will be referred to the county council with a recommendation from the county manager.

BUDGET DETAILS

Local Fund Dollar Amount	\$4,300
Grant Fund Dollar Amount	\$12,900
Account	Fund 4014 / Solid Waste
Company Name	Green Solutions, LLC



Don Benton
Environmental Services Director



Pete DuBois
Solid Waste and Environmental Outreach Manager

APPROVED: 
Mark McCauley, Acting County Manager

DATE: 6/9/16

BUDGET IMPACT ATTACHMENT

Part I: Narrative Explanation

I. A – Explanation of what the request does that has fiscal impact and the assumptions for developing revenue and costing information

The program is primarily funded by a State grant. The fiscal impact of the Program to the County is the grant match requirement, which impacts the Solid Waste Fund 4014.

Part II: Estimated Revenues

Fund #/Title	Current Biennium		Next Biennium		Second Biennium	
	GF	Total	GF	Total	GF	Total
4014 Solid Waste Fund		\$4,300				
WDOE CPG		\$12,900				
Total		\$17,200				

II. A – Describe the type of revenue (grant, fees, etc.)

Seventy five percent (75%) of revenue to operate the Program comes from the Grant. County grant match is twenty five percent (25%). The Solid Waste Enterprise Fund 4014 is the source of county revenue for the grant match.

Part III: Estimated Expenditures

III. A – Expenditures summed up

Fund #/Title	FTE's	Current Biennium		Next Biennium		Second Biennium	
		GF	Total	GF	Total	GF	Total
4014 / Solid Waste			\$4,300				
WDOE CPG			\$12,900				
Total			\$17,200				

III. B – Expenditure by object category

Fund #/Title	Current Biennium		Next Biennium		Second Biennium	
	GF	Total	GF	Total	GF	Total
Salary/Benefits						
Contractual		\$17,200				
Supplies						
Travel						
Other controllables						
Capital Outlays						
Inter-fund Transfers						
Debt Service						
Total		\$17,200				

Professional Services Agreement

Agreement Purchase No. _____

THIS AGREEMENT, entered this _____ day of _____ 2016, by and between CLARK COUNTY, after this called "County," a political subdivision of the State of Washington, and Green Solutions, LLC after this called "Contractor."

WITNESSETH

WHEREAS, the Contractor has been chosen through a competitive bid process by the County and has the expertise to provide professional services for Clark County and to perform those services more particularly set out in the proposal attached hereto and incorporated herein by this reference as Exhibit "A".

WHEREAS, Clark County does not have available staff to provide such services for the benefit of the services of Clark County,

NOW, THEREFORE, THE COUNTY AND THE CONTRACTOR MUTUALLY AGREE AS FOLLOWS:

1. Services. The Contractor shall perform services as set forth in Exhibit "A".
2. Time. The agreement shall be effective beginning May 9th, 2016 and ending September 30, 2016.
3. Compensation. Fees paid to the Contractor shall not exceed \$17,200 without prior written approval of the County. County shall pay the Contractor for performing said services upon receipt of a written invoice according to the schedule set forth in Exhibit "A", which is attached hereto and incorporated herein by this reference. The parties mutually agree that in no event shall the amount billing exceed the dollar amount in Exhibit "A" without prior approval of the County.

4. Termination. The County may terminate this Agreement immediately upon any breach by Contractor in the duties of Contractor as set forth in Agreement. The waiver by the County of one or more breaches shall not be construed as a waiver of any subsequent breach or breaches. Further, County may terminate this Agreement upon immediate notice to Contractor in the event that the funding for the project ceases or is reduced in amount. The Contractor will be reimbursed for services expended up to the date of termination.

5. Independent Contractor. The Contractor shall always be an independent Contractor and not an employee of the County, and shall not be entitled to compensation or benefits of any kind except as specifically provided herein.

6. Indemnification / Hold Harmless. The Consultant shall defend, indemnify and hold the County, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the acts, errors or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the County. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the County, its officers, officials, employees, and volunteers, the Consultant's liability, including the duty and cost to defend, hereunder shall be only to the extent of the Consultant's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the

purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

7. Wage and hour compliance. Contractor shall comply with all applicable provisions of the Fair Labor Standards Act and any other legislation affecting its employees and the rules and regulations issued thereunder insofar as applicable to its employees and shall always save County free, clear and harmless from all actions, claims, demands and expenses arising out of said act and the rules and regulations that are or may be promulgated in connection therewith.

8. Social Security and Other Taxes. The Contractor assumes full responsibility for the payment of all payroll taxes, use, sales, income or other form of taxes, fees, licenses, excises, or payments required by any city, federal or state legislation that is now or may during the term of this agreement be enacted as to all persons employed by the Contractor in performance of the work pursuant to this Agreement and shall assume exclusive liability therefore, and meet all requirements thereunder pursuant to any rules and regulations that are now and may be promulgated in connection therewith.

9. Contract Documents: Contract documents consist of this Agreement, and Exhibit "A", a scope of work and budget which consists of a quote (Exhibit "C") based on RFQ #4643 (Exhibit "B").

10. Equal Employment Opportunity: The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, gender, sexual orientation, age, disability, marital status or national origin.

11. Changes: County may, from time to time, require changes in the scope of the services to be performed hereunder. Such changes, including any increase or decrease in the amount of the Contractor's compensation, which are mutually agreed upon by and between County and the Contractor, shall be in writing, signed by both parties and incorporated in the written amendments to the Agreement.

12. Public records act: Notwithstanding the provisions of this Agreement to the contrary, to the extent any record, including any electronic, audio, paper or other media, is required to be kept or indexed as a public record in accordance with the Washington Public Records Act, RCW Chapter 42.56, as may hereafter be amended, Contractor agrees to maintain all records constituting public records and to produce or assist Clark County in producing such records, within the time frames and parameters set forth in state law. Contractor further agrees that upon receipt of any written public record request, Contractor shall, within two business days, notify Clark County by providing a copy of the request to the Clark County Public Records Officer/Department of Public Works.

13. Governing Law. This agreement shall be governed by the laws of the State of Washington. Venue for any litigation shall be in Superior Court for the State of Washington in Clark County, Washington.

14. Confidentiality. With respect to all information relating to County that is confidential and clearly so designated, the Contractor agrees to keep such information confidential.

15. Conflict of Interest. The Contractor covenants that it has had no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or

degree with the performance of services hereunder. The Contractor further covenants that no person having such interest shall be employed by it, or shall perform services as an independent contractor with it, in the performance of this Agreement.

16. Consent and Understanding. This agreement contains a complete and integrated understanding of the Agreement between the parties and supersedes any understandings, contract, or negotiations, whether oral or written, not set forth herein or in written amendments hereto duly executed by both parties.

17. Severability. If any provision of this Agreement is held invalid, the remainder would then continue to conform to the terms and requirements of applicable law.

IN WITNESS THEREOF, County and the Contractor have executed this Agreement on the date first above written.

CLARK COUNTY



Mark McCauley,
Acting County Manager

GREEN SOLUTIONS, LLC

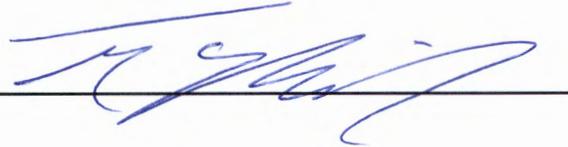
By _____

Printed Name _____

Title _____

APPROVED AS TO FORM ONLY

Taylor Hallvik
Clark County Deputy Prosecuting Attorney



Vendor/Contractor:

Have you or any of your employees who will be directly compensated retired from a Washington State Retirement System using the 2008 Early Retirement Factor?

Yes

No

If yes, please provide the name and social security number for each retiree to Clark County Purchasing.

Exhibit A
2016 Residuals Characterization Study
Project Scope of Work

Background

Clark County Department of Environmental Services is entering into an agreement with Green Solutions, LLC to complete a characterization study of residual materials from the 2016 Allocation Study performed by Waste Connections of Washington (WCW) in May and June 2016. The Residuals Characterization Study (Study) will involve the sorting of residual materials collected by WCW from all four residential sources in Clark County as part of the regional curbside recycling program: Single-Family, Multifamily, Camas/Washougal, and Ridgefield/Rural. The collected recycling materials are transported to and processed at West Van Materials Recovery Center (WestVan) as part of the annual Allocation Study and residual materials will be set aside by WCW. The residual materials for one of the four sources will be studied for the Residue Study within six days from the Allocation Study sort for that source. The study of residual materials will be conducted at WestVan.

The proposed Studies will be held on or within 6 days from the following dates:

- May 21st – Multifamily
- June 11th – Single-Family
- June 18th – Camas/Washougal
- June 25th – Ridgefield/Rural

The residual materials collected for the Study will be sorted into roughly 30 material types. A tentative list of material categories is shown in **Attachment “A”** of the RFQ document (**Exhibit “B”**). Green Solutions will work with DES staff to provide input about these categories.

The primary objective of the Study is to provide data about the unacceptable materials collected curbside in the blue recycling cart. The Study will be used to assist DES, WCW, and the City of Vancouver (CoV) staff to tailor recycling education programs and outreach and identify the types and characterization of the contamination present in curbside recycling streams.

Clark County will:

- Provide 4-6 staff for sort crews
- Coordinate with Green Solutions and WCW regarding project logistics
- Provide personal safety equipment for sorting staff

Green Solutions will:

- Provide sorting equipment
- Arrive ahead of sorting staff to set up for the day
- Provide training for the sorting staff and supervise sorting staff during sorts
- Coordinate with County and WCW for project logistics and protocols for sampling and analysis
- Compile and analyze data
- Provide interim data reports for each source
- Produce a final report with data, analysis, and findings

Budget and Timeline:

Total compensation for the scope of work described herein is budgeted at \$17,200. Payment schedule is as follows:

- Task 1: Multifamily sort: \$3,800
- Task 2: Single-Family sort: \$3,800
- Task 3: Camas/Washougal sort: \$3,800
- Task 4: Ridgefield/Rural sort: \$3,800
- Task 5: Data Analysis and Final Report (due 20 working days from final sort): \$2,000

REQUEST FOR QUOTE TO CONDUCT CHARACTERIZATION STUDY OF RESIDUAL MATERIALS COLLECTED FROM RESIDENTIAL RECYCLING ALLOCATION STUDY

Introduction Clark County Environmental Services (DES) is issuing this Request for Quotes (RFQ) to select a company (Vendor) to complete a characterization study in June 2016 (Study). The Study will involve the sorting of residual materials collected by Waste Connections of Washington (WCW) from residents in Clark County as part of the County's recycling program. An RFQ is required for contract work with the County that is estimated to be within the \$5,000 to \$25,000 range.

Background Annually, WCW is contractually required to conduct an allocation study of the recycling materials that are processed at their facility from curbside collection. Only program recyclable materials and non-program recyclable materials are targeted for study, any additional items are categorized as "residue." The residue includes fines, contaminates, and non-program as well as non-recyclables delivered from recycling routes.

Program materials include those required by the contracts between regional solid waste partner agencies and WCW and described in recycling outreach and education materials provided to the public. Non-program recyclables include materials that are not in the contracts nor communicated to the public, but are none-the-less baled and sold as a recyclable material commodity by WCW.

Recycling routes throughout Clark County and its cities and town utilize blue recycling carts (Carts) for the collection of mixed recyclables as specified in the regional program. The Cart is not to be used for the collection of glass, household batteries, antifreeze or oil; these materials are collected curbside as program recyclables, but are not to be placed inside the Cart.

The materials for the allocation study are collected by WCW and transported and processed at West Van Materials Recovery Center (WestVan). WestVan is a transfer station and recyclables processing facility that is owned and operated by Columbia Resource Company (CRC) and located at 6601 NW Old Lower River Rd. Vancouver, WA 98660.

The allocation study has four sources of recycling materials that are of interest:

- Single-family
- Multi-family
- Camas/Washougal
- Ridgefield/Rural

Each source is sampled and stockpiled over four subsequent weeks with the sorting occurring on the Saturday. The sorting process at WestVan uses mechanical sorting equipment as well as crews to handpick target recyclable materials from the processing line to be baled or prepared for market (positive sort). Crews will also pull out some contaminants (negative sort) and occasionally some non-program recyclables for recycling when markets allow.

The residue from the allocation study includes three sub streams: fines, hand-pulled, and end-of-belt. Fines include materials that have dropped through screens along the processing line. Hand-pulled includes materials that sorting crews picked out from the processing line and set aside as contaminants. End-of-belt includes anything that was not

pulled by sorters for recycling and allowed to pass to the end of the line.

The following table is the residue totals for each source in the last allocation study for 2015:

Source	Total Tons Sorted	Percent Residue	Est. Tons of Residue
Single-Family	133.09	19.14%	25.47
Multi-family	30.79	23.23%	7.15
Camas/Washougal	68.05	13.42%	9.13
Ridgefield/Rural	53.85	19.49%	10.50

Scope of Project

The Solid Waste and Environmental Outreach Division (SWEO) has goals to reduce contamination in the recycling stream, target appropriate outreach messages to households and multi-family residents, increase the recycling rate, increase the total diversion rate, and reduce total waste generated per person, per day. In order to work towards those goals, SWEO has a comprehensive Recycling Done Right program. The primary objective of this Study is to provide reliable and statistically-sound data about the contamination/residue collected curbside in the Carts to help assist DES, WCW and City of Vancouver (COV) staff in evaluating the effectiveness of existing recycling programs, and to identify the types and amounts of contamination present in curbside recycling streams to better tailor campaigns and programs to most effectively reach division goals and assure high quality materials are sent to available markets.

Single-family and multi-family source categories are required for the Study. The Camas/Washougal and Ridgefield/Rural sources will be optional for study, dependent on budget and submitted quote estimates. Proposers are to submit estimates for including or excluding those two optional sources for the Study.

Project Funding

The anticipated budget for the services described herein is not expected to exceed \$25,000.

The Proposers quote shall include the Proposers true estimated cost to perform the work irrespective of the estimated cost or budget for this work.

Timeline

The following dates are the intended timeline:

Quotes Due	April 8 th
Proposal Review/Evaluation period	April 11-12 th
Selection for Quote, following County policies	April 12 th
Notice to selected Vendor	April 13 th
Professional Services Agreement	April 20 th

County Performed Work

County will assist in coordinating with WCW and CRC for the Study.

County will help to provide volunteers and possibly staff or temporary employees to assist with the sorting elements of the Study.

County will submit payment when invoiced by vendor and is expected to pay within thirty days from the date invoice is received.

Deliverables The selected Vendor will supervise and direct a sorting crew of sufficient size to sort and process residue produced in weekly samplings from the aforementioned sources. The residue, or a portion of it, will be stockpiled in a drop box(es) that could allow for the sorts to be done on the same day or subsequent days after the Allocation Study. The Vendor will provide and direct the strategy to composite samples of sufficient size to conduct characterization. The Vendor will provide all sampling equipment and complete a Data Form for each sort. This form shall include the identification of the materials by type (see **Attachment A**), weight, volume and any additional comments that are pertinent to the Study. The selected Vendor will create the Data Form with input and approval from County staff.

The selected Vendor will provide completed Data Forms to DES staff within 10 working days from the completion of the sorts and provide a brief progress report on how the sort/s went. The Data Forms are to be created by the Vendor with input and approval from DES staff.

The selected Vendor will prepare and provide an unlocked Excel Spreadsheet of the data to DES.

In addition, the selected Vendor will prepare a Final Report in concert with DES:

Final Report

The selected Vendor will prepare a draft final report including: an overview of methodologies used; a detailed description of the residue materials including type of material, quantity, volume, percentage of total; statistical confidence of the Study; and recommendations for fine-tuning County outreach and communications programs as well as collection and processing efforts.

The Final Report will include a final analysis and report of findings in consultation with County staff. DES and COV staff will review the draft, and work with the selected Vendor in preparing the Final Report. The completed Final Report will be delivered to DES staff in an electronic file format that is compatible with DES software within 20 working days from the completion of the final sort of the Study. The report will be free to share with other municipalities and the public. The Final Report will be owned by DES.

All quotes are due to the Project Manager, Kim Harless – kim.harless@clark.wa.gov – by 5:00 pm on Friday, April 8th, 2016. Quotes may either be emailed or delivered in hard copy. Quote is based upon a total cost for the Study, including a final report, and the cost to include the two optional sources in the Study. **In addition, please notify Kim if you decide not to participate in the Request for Quote process.** If you have any questions please contact her at 360-397-2121 x5957 or kim.harless@clark.wa.gov.

The quote for conducting the Study/Studies should be based upon the selected Vendor completing the following Tasks:

- Task 1 - Planning and Project Design:**
- Review WCW/CRC recycling tonnage data
 - Determine the amount of residual material and equipment needed to complete the sort in a single day for each source of material and residue type, all with respect to maintaining statistical relevance
 - Determine the number of staff needed to complete the sorts
 - Meet with DES and/or COV staff to determine final sort categories using **Attachment A** as a starting point
 - Finalize reporting forms
- Task 2 - Study Preparations:**
- Meet with DES staff to determine the size of samples and the locations they are chosen from with regard to the residual materials collected from each source and residue type
 - Meet with DES to determine a sufficient number of sorting staff to complete all aspects of the sort, and coordinate with DES for volunteers and staff time needed
 - Train sorting staff on the procedures (including safety protocols) needed to complete all aspects of the sorting
 - Provide equipment and tools needed for the sort, including supplies for crews, such as gloves
 - Arrange with CRC staff for the storage of the residual materials to be used in the sort
 - Coordinate with WCW/CRC for Allocation Study dates and dates of the Study sorts; these dates will predominated be determined by WCW/CRC.
 - Arrange with CRC staff for placement of sorting containers and scales on day(s) of the sort(s)
- Task 3 - Sorting:**
- Coordinate with CRC staff for the initial setup of sorting area
 - Complete Data Form
 - Remain on-site to supervise sort staff
 - Coordinate and verify the removal of any materials or equipment associated with the sort, prior to leaving the site
 - Ensure that all sorted materials are recycled or properly disposed after sorting and measuring is complete
- Task 4 - Follow-up Activities:**
- Completed data forms to the DES staff within 10 working days from the completion of each sort with a Progress Report
 - Data in an Excel Spreadsheet (or some other electronic format that is acceptable to DES) to DES staff within 10 working days from the completion of the sorts
- Task 5 - Final Report:**
- Create a final report with input from DES, WCW, CRC and COV staff
 - Deliver the completed final report, in an electronic file format that is compatible with DES software, within 20 working days from the completion of the final sort of the Study

QUOTE

The Proposer's quote shall include the Proposer's true estimated cost to perform the work irrespective of the budgeted funds for this work.

A quote for total costs of the work described herein:

\$ _____ Date: _____

Legal Name of Applicant/Company/Agency _____

Street Address _____ City _____ State _____ Zip _____

Contact Person _____ Title _____

Phone (_____) _____ Fax (_____) _____

Email address _____

Tax Identification Number _____

Other Specific Information _____

ATTACHMENT A

List of Material Types for Residue Characterization Study

TARGET RECYCLABLES	Paper – Mixed (Magazines, Junk Mail, Phone Books, Paper Bags, Cereal Boxes, Gift and Shoe Boxes, Writing and Printing Paper), Newspaper, Cardboard, Shredded (contained in paper bag), Cartons and Tetrapak (Milk Cartons, Drink Boxes, Soy Milk, and Soup/Broth Boxes)
	Plastic – Bottles, Tubs (no lids), Buckets (5-gallon or less), nursery pots (no dirt)
	Metal – Aluminum, Tin, Steel, Aerosol Cans (empty, no lids), Other (Less than 35 pounds; No larger than 24 inches in any dimension; no plastic, rubber, or wood)
NON-TARGET (Contamination)	Paper – Shredded, loose
	Paper – Non-recyclable (shiny, waxed, metal-lined)
	Paper – Non-recyclable (wet-strength, frozen food packaging)
	Cardboard – Contaminated (i.e. unclean pizza boxes)
	Plastic – Clamshells
	Plastic – Packaging (blister packaging, rigid, not film)
	Plastic – Film – Bags, bagged (plastic bag of plastic bags)
	Plastic – Film – Bags, loose (grocery)
	Plastic – Film – Bags, loose (other than grocery)
	Plastic – Film – Other (not bags)
	Aerosol Cans – Not Empty
	Metal (non-recyclable)
	Glass
	Block Foam – Including peanuts, expanded polystyrene, Styrofoam
	Fines or Too Small – (e.g., metal or plastic lids)*
	<u>Special Wastes – Make a note if present, describe, and weigh if possible:</u>
	Garbage – Bagged (i.e. bag of garbage)
	Antifreeze (note if in proper container or not)
	Motor Oil (note if in proper container or not) & empty motor oil bottles
	Medical Waste – Medications
	Medical Waste – Sharps
	Batteries – Bagged or Loose (note # of bags)
	E-waste
	Food-Contaminated Waste, including Food Waste
	Yard Debris
Wood and Construction/Demo	
Textiles – Clothing, bedding	
Other – note item, describe, and weight if possible (i.e. diapers)	

*Except for study of Fines



GREEN SOLUTIONS

PO Box 680, South Prairie, WA 98385-0680

Phone: 360-897-9533

Fax: 360-897-2348

April 8, 2016

Kim Harless
Clark County Environmental Services
PO Box 9810
Vancouver, WA 98666-9810

RE: Quote for the 2016 Residuals Characterization Study

Dear Kim:

Thank you for the opportunity to submit a quote for this project. My quote for this project is \$17,200 to test all four sources, or \$11,900 to test only 2 sources (see attached). This quote is based on the approach described in your request, and is also based on the following assumptions:

- I will be the only consultant conducting the work, and will be assisted by Clark County staff and volunteers arranged by the county. I will provide all of the necessary equipment for the sorting activities (not including heavy equipment and roll-off containers to be provided by the facility for the initial sampling of the residuals). I will use an approach similar to last year's study, including arriving early at West Van to set up equipment, providing training for volunteers prior to and during sorting, supervising the sorting activities, recording weights (and later, conducting data entry), removing sorting equipment at the end of the day, and ensuring proper disposal or recycling (with help from Waste Connections) of sorted materials.
- My quote assumes one meeting to determine the final list of sorting categories, the size of samples, the schedule and other details (Tasks 1 and 2), and further assumes that no meetings will be needed to review the draft report (Task 5).
- The quote assumes four days of fieldwork (or just two days of fieldwork if only the single-family and multi-family sources are tested), either on Saturday if residuals are available by mid-morning, or on a Sunday. This approach allows the residuals to be tested on the same day (or the next day if necessary) as they are generated. This strategy avoids the need for Waste Connections to temporarily store residuals, but alternatively we could ask them to store the residuals for a few days or a week and conduct the sorting tests later if that is preferred (that would not change the cost quoted, unless we could sort residuals from more than one source in one day, which would reduce the cost).

Quote for 2016 Residuals Characterization Study
April 8, 2016
Page Two

- The quote is based on sorting the residuals from each source (single-family, multi-family, Camas/Washougal, and rural/Ridgefield) in one day for each source (i.e., four days of sorting, or just two days if only the first two sources are tested). This should allow 3 to 4 100-pound samples to be sorted for each of the hand-pulled and the end-of-the-belt residuals, or 6 to 8 samples sorted each day (24 to 32 samples total for four days of fieldwork). This will allow the statistical meaningfulness of the results to be calculated, although this number of samples may not be sufficient to determine if there is a difference in the residuals from different sources, unless that difference is quite large.
- The fines were visually inspected and estimated in the 2012 allocation study and this approach can be done again if this is adequate for your interests. My cost quote, however, is based on more work being done for the fines. A few hours have been allocated for each source to take a sample of the fines to be sorted later to provide a simple breakdown (broken glass, shredded paper, metal lids, plastic caps and other plastics, batteries, larger objects and possibly 2 to 3 other categories). Sorting the samples of fines later reduces the demands on staff and volunteer time for a task that doesn't require a large sorting crew.
- For the final report, I am proposing to provide a draft report within 10 working days of the completion of the final test, and a final report within 5 working days of receiving all comments on it. The quote assumes a simple report similar to the report prepared for the 2015 Recycling Characterization Study.
- It appears that this work is expected to take place in June, so I should mention that I am available for all weekends in June except for June 11 and 12.

I would be happy to work with you to further refine the approach for this work. Please feel free to call or email me if you have any questions about this quote.

Sincerely,



Rick Hlavka
Green Solutions

QUOTE

The Proposer's quote shall include the Proposer's true estimated cost to perform the work irrespective of the budgeted funds for this work.

A quote for total costs of the work described herein:

\$17,200 for 4 sources, \$11,900 for 2 sources Date: April 8, 2016

Legal Name of Applicant/Company/Agency Green Solutions, LLC

Street Address 14615 229th Ave E City Orting State WA Zip 98360

Contact Person Rick Hlavka Title Consultant

Phone (360) 897-9533 Fax (360) 897-2348

Email address rick@green-solutions.biz

Tax Identification Number 33-1204645

Other Specific Information Mailing address is PO Box 680, South Prairie, WA, 98385