

FINAL REPORT



City of Belmont Review of Solid Waste Rates December 2013

Prepared by:
HDR Engineering, Inc.





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December 18, 2013

Mr. Afshin Oskoui
Public Works Director
City of Belmont
One Twin Pines Lane Suite 385
Belmont, California 94002

Subject: Review of the City of Belmont Solid Waste Rates

Dear Mr. Oskoui:

HDR Engineering, Inc. (HDR) was retained by the City of Belmont (City) to provide professional and technical rate services as they relate to the City's solid waste utility. HDR's draft final report provides a summary of HDR's findings, conclusions and recommendations on this matter.

The City is a member of the South Bayside Waste Management Authority (SBWMA). The City signed a franchise agreement with Recology of San Mateo County (Recology) for solid waste collection services, including the collection of recycling and organic materials. Through the franchise agreement, the annual compensation for Recology's services is contractually determined. At the same time, the franchise agreement calls for the City to establish their own solid waste retail rates, but not at a level which exceeds the Contractor's "Maximum Rates for Regularly Scheduled Services". As a part of this study, HDR provided technical assistance to the City by providing a review and limited audit of Recology's data and analysis with the intent of determining compliance with the City's franchise agreement and all associated amendments to that agreement. HDR provided a similar review last year for the City.

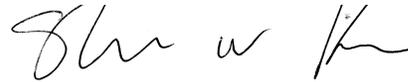
The main objective of this report is to determine the maximum rates for the City's regularly scheduled solid waste services. Recology has provided to the City their calculation of the maximum rates for regularly scheduled service and HDR has, within this report, provided a limited review and audit of those calculations. This report and HDR's technical review was developed utilizing the City's and Recology's accounting, operating and management records. HDR has relied upon this information to conduct our limited review, which provides the basis for our findings, conclusions and recommendations.

We appreciate the assistance provided by City staff in the development of this study. More importantly, we appreciate working with City of Belmont's staff, management and City Council on this project.

Sincerely yours,
HDR Engineering, Inc.



Tom Gould
Vice President
HDR's Business Leader
for Finance and Rates



Shawn Koorn
Associate Vice President



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Executive Summary

Introduction

The City of Belmont (City) is a member of the South Bayside Waste Management Authority (SBWMA). In 2010, the City signed a franchise agreement with Recology of San Mateo County (Recology) for solid waste collection services, including the collection of recycling and organic materials. Through the franchise agreement, the annual compensation for Recology's collection and recycling services is contractually determined. At the same time, the franchise agreement calls for the City to establish and adopt their own solid waste rates, but not at a level which exceeds the Contractor's "Maximum Rates for Regularly Scheduled Services". Ultimately, Recology bills the City's customers for the solid waste services at the rates established by the City of Belmont City Council.

As a part of the overall rate setting process, Recology's data and information is reviewed by an outside party prior to its use within the calculation of the City's maximum rates. Once that data and information is confirmed, Recology calculates the "maximum rates for regularly scheduled services" and provides a copy of those calculations to the City for their review and acceptance. HDR Engineering, Inc. (HDR) provided the review for rate year 2013 and now has been requested by the City to provide a review of the Recology rate calculations for rate year 2014 as they pertain to the City's solid waste retail rates.

The franchise agreement between the parties, along with the related amendments to the original agreement, contains specific language and exhibits related to the development of the maximum rates for a given year. This study has reviewed the applicable portions of the franchise agreements and related amendments as they pertain to the 2014 rate year. From this basic understanding of the requirements for establishing the rates in the previous year, HDR reviewed Recology's submittal to the City for the 2014 rate year. This study discusses the review undertaken by HDR for the 2014 rate year, along with our findings, conclusions and recommendations.

Limitations of HDR's Review

HDR has provided a limited review of Recology's maximum rate calculations for the 2014 rate year. As noted above, the data and information used by Recology to calculate the City's maximum rates were independently reviewed by another outside firm. Given that outside review of Recology's data and information, HDR has assumed that the data and information input into Recology's rate calculations are reasonable and appropriate. HDR did cross-check and verify the inputs into Recology's model from the database of previously reviewed basic input data and information.

Within HDR's review, three key items were being reviewed and verified. These included:

- A review of Recology's methodology for compliance with our understanding of the required methodology specific for the 2014 rate year.
- A review of the data inputs and information used within the methodology to confirm use of the appropriate costs and adjustment factors which complies with the methodology for the 2014 rate year.
- Confirmation/verification of the calculations (formulas) within the methodology as they apply to the 2014 rate year.

Overview of the Franchise Agreement and Amendments

On June 15, 2010, the City of Belmont entered into a franchise agreement with Recology San Mateo County (Recology) to provide the Belmont community a comprehensive set of high quality waste collection, waste reduction, recycling and composting programs. In order to maximize the quality of services and waste-diversion potential, the City granted to Recology an exclusive right to provide these services within the City. In order to balance that exclusive right to provide these solid waste services against the costs/rates associate with that program, the parties needed to develop an approach or methodology that fairly compensated (and limited) the charges that Recology could charge the City's customers. To address this requirement, the franchise agreement contains specific language and a methodology, within Article 11 of the franchise agreement, for annually establishing the maximum rates for the up-coming calendar year.

The franchise agreement provides for an orderly process and approach to establish rates for the City and compensation for Recology. The review being undertaken by the City and HDR is a part of that orderly process, and the City is performing its due diligence to verify and confirm that the maximum rates calculated by Recology are in accordance with the franchise agreement and associated amendments. The major components of the costing methodology include the following:

"The review being undertaken by the City and HDR is a part of that orderly process, and the City is performing its due diligence to verify and confirm that the maximum rates calculated by Recology are in accordance with the franchise agreement."

- **Cost Indexing** – Article 11 of the franchise agreement provides the framework or methodology for the determination of the maximum rate for the upcoming year. In very simple terms, the agreement calls for Recology to annually take the existing maximum rate that is in effect and multiply each rate by an "adjustment percentage". The adjustment percentage is essentially a cost index.
- **Migration Adjustment** – The franchise agreement provides a mechanism for establishing cost-based solid waste rates, but it also provided certain protections to Recology for differences between projected revenues and actual revenues. More specifically, the original franchise agreement recognized the potential for customers to migrate from larger can or bin sizes to smaller can or bin sizes. The franchise agreement

anticipated that for 2012 and 2013 only, Recology would be entitled to a “Migration Recovery Surcharge”.

Amendment 2 to the franchise agreement was adopted as Resolution Number 10455 by the Belmont City Council. As a part of 2012’s rate process, the calculated maximum rate adjustment was approximately 29%. The City Council directed City staff to find solutions to help minimize the overall magnitude of the adjustment. City staff explored a number of different ideas in late 2011 and Recology and the City agreed to amend the franchise agreement. The amendment, in part, provided for the following:

- *The Migration Recovery Surcharge originally due to take effect in 2012 will be spread over 2012 – 2016, with interest at prime plus one percent;*
- *A one-time credit of \$182,334 in 2012 rates will occur and that amount will be added to the Migration Recovery Surcharge to be spread over 2013 – 2016; and*
- *The second Migration Recovery Surcharge and Migration Adjustment to take effect in 2013 will be delayed to 2014.”¹*

Amendment 2 provides relatively clear language and examples of the methodology to be used for the migration recovery surcharge and migration adjustment. In the review of the 2014 calculated maximum rates, particular attention was paid to the migration adjustment and the migration recovery surcharge which is carried forward to 2014 as specified in Amendment 2.

Review of Recology’s Calculated Maximum Rates

On July 31, 2013, Recology provided to the City a letter and the detailed worksheet outlining their calculation of the rate index for rate period 2014. The City retained HDR Engineering to provide the same rate review for the proposed 2014 rates as they performed in 2013. HDR was retained to confirm that the overall methodology is in conformance with the Franchise Agreement and Amendment 2. In addition, HDR also verified or confirmed that the proper data appeared to be used within the analysis, and that the mathematical calculations are correct. In providing this review, HDR attempted to independently calculate the rate index, and in those cases where appropriate, independently confirm certain data inputs (e.g., prime interest rate).

Recology provided an updated analysis of the calculated maximum rates for the 2014 rate period. The July 31, 2013 calculation indicated the need for a maximum adjustment of 12.15% over and above the 2013 regularly scheduled rates. The rate index of 12.15% is composed of four cost elements. These are as follows:

¹ Amendment 2, Recitals, p. 1

CPI Cost Adjustment	-0.38%
Migration Surcharge 2014 (Delayed 2013)	6.45%
Migration Adjustment for 2014 (Delayed 2013)	6.45%
Migration Recovery Surcharge 2014	<u>-0.37%</u>
Total Rate Index Adjustment	12.15%

Based upon HDR’s detailed review of Recology’s rate index calculation for 2014 rate year, HDR concluded that the rate index used the appropriate data and information for the time period and the calculations within the methodology were correct. As a result of our detailed review, in summary, HDR concluded that based upon the existing Franchise Agreement and Amendments, the City’s maximum solid waste rates for 2014 should be calculated using the 12.15% rate index. Provided below is a more detailed discussion of each of the elements of the calculation of the rate index and the basis for HDR’s summary conclusion.

Review of Rate Index Multiplier

As noted above, from HDR’s review of Recology’s rate index analysis, it was concluded that the analysis developed by Recology appears to comply with the City’s Franchise Agreement and Amendment. The overall maximum adjustment to rates for 2014 is 12.15% over the existing solid waste rates. In developing the calculated maximum rates, Recology provided a schedule of the various solid waste rates. HDR reviewed the calculated maximum rates to confirm that they use the appropriate multiplier.

“... HDR concluded that based upon the existing Franchise Agreement and Amendments, the City’s maximum solid waste rates for 2014 should be calculated using the 12.15% rate index.”

Residential Regularly Scheduled Service

The present residential is composed of four different bin sizes which range from 20 gallons to 96 gallons. The structure of the rate is a flat monthly rate. Presented below in Table ES-1 are the present monthly residential rate and the calculated maximum for 2014. The calculated maximum rate assumes a 12.15% adjustment over the present monthly rate.

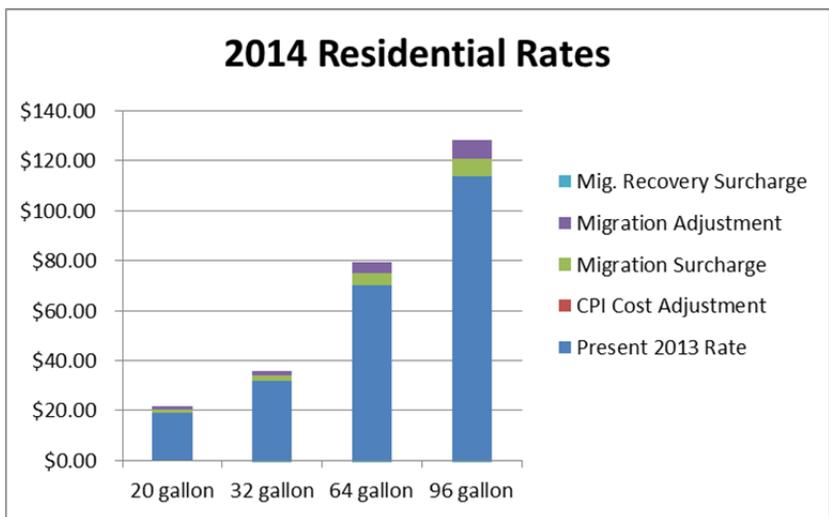
Table ES – 1
Summary of the Present and Calculated Maximum Residential Solid Waste Rates
(Regularly Scheduled - \$/Month)

Schedule	Schedule Description	Present Monthly Rate	Calculated Maximum 2014 Rate	\$/Month Change
R20G	Residential Waste - 20 Gallons	\$19.27	\$21.61	\$2.34
R32G	Residential Waste - 32 Gallons	\$31.91	\$35.79	\$3.88
R64G	Residential Waste - 64 Gallons	\$70.32	\$78.86	\$8.54
R96G	Residential Waste - 96 Gallons	\$113.68	\$127.49	\$13.81

As can be seen, the dollar/month change varies by bin size. Provided below in Table ES-2 is a summary of the adjustment by cost component. As noted above, the total adjustment to rates is a function of the CPI adjustment, migration surcharge, migration adjustment and a migration recovery surcharge.

Table ES – 2
Summary of the Residential Rate Adjustment By Adjustment Component
(Regularly Scheduled - \$/Month)

Present 2013 Rate	CPI (Cost) Adjustment	Migration Surcharge	Migration Adjustment	Migration Recovery Surcharge	Calculated Maximum 2014 Rate
\$19.27	(\$0.07)	\$1.24	\$1.24	(\$0.07)	\$21.61
\$31.91	(\$0.12)	\$2.06	\$2.06	(\$0.12)	\$35.79
\$70.32	(\$0.27)	\$4.54	\$4.54	(\$0.26)	\$78.86
\$113.68	(\$0.43)	\$7.33	\$7.33	(\$0.42)	\$127.49



As can be seen in Table ES- 2, the four components of the overall adjustment are not equal. The CPI and Migration Recovery Surcharge is a negative adjustment for 2014. The migration surcharge and the migration adjustment is about 53% each of the total overall adjustment. The graph to the left illustrates the relative proportions over and above the present 2013

residential solid waste rates. It should be noted that the CIP and Migration Recovery Surcharge are negative and do not show (appear) on the overall graph.

Other Regularly Scheduled Solid Waste Rates

In addition to the above residential rate for regularly scheduled service, the City and Recology have a number of other rate schedules for regularly scheduled solid waste services. These include the following:

- Commercial Waste Carts (20 gallons to 96 gallons)
- Commercial Waste Bins (1 yard to 6 yards; 1 day to 7 days per week pickup)
- Commercial Organics (1 yard to 6 yards; 1 day to 7 days per week pickup)
- Commercial Organics Carts (20 gallons to 96 gallons; 1 day to 7 days per week pickup)
- Commercial Waste 3 Yard Compactor
- Solid Waste Compactor (per yard)
- Household Hazardous Waste (Per Multi-Family Living Unit)

A more detailed discussion of these other regularly scheduled services can be found in Section 4 of the report and also within the Technical Appendices as Attachment R rate schedules.

Unscheduled Solid Waste Rates (Attachment Q)

In addition to the regularly scheduled rates, there are also rates for unscheduled services. The rates for unscheduled services are contained in Attachment Q of the Franchise Agreement and are annually updated in accordance with the Franchise Agreement.

Summary Conclusions and Recommendations

Based upon the limited review undertaken, it was the conclusion of HDR that the maximum rates, as calculated by Recology, were in conformance with the City's Franchise Agreement. In reaching this conclusion, HDR has relied upon the data and information as supplied by the City and Recology. Given that conclusion, HDR would recommend that the City adopt the maximum rates for scheduled services (Attachment R), and unscheduled services (Attachment Q) as stated by Recology and as reviewed within this report.

Looking Ahead – Potential 2015 Rate Adjustment

As noted above, Amendment 2 deferred a portion of the 2012 rate adjustment to be spread over the 2012 through 2016 rate periods and also delayed the Migration Surcharge in 2013 to a Migration Surcharge in 2014. As a result, a migration recovery surcharge was created to defer and spread that adjustment over a longer time horizon. After 2014, the Migration Surcharge and Migration Adjustment will be completed. For 2015 the rate calculation will have a CPI adjustment and the continuing of the 2012 Migration Recovery Surcharge which is spread out through 2016.

Summary of the Review of Solid Waste Rates

This completes the review and analysis for the City's solid waste rates. A full and complete discussion of the review of Recology's solid waste rates can be found in following sections of this report.



Section 1 Introduction

1.1 Introduction

The City of Belmont (City) is a member of the South Bayside Waste Management Authority (SBWMA). In 2010, the City signed a franchise agreement with Recology of San Mateo County (Recology) for solid waste collection services, including the collection of recycling and organic materials. Through the franchise agreement, the annual compensation for Recology's collection and recycling services is contractually determined. At the same time, the franchise agreement calls for the City to establish and adopt their own solid waste rates, but not at a level which exceeds the Contractor's "Maximum Rates for Regularly Scheduled Services". Ultimately, Recology bills the City's customers for the solid waste services at the rates established by the City of Belmont City Council.

As a part of the overall rate setting process, Recology's data and information is reviewed by an outside party prior to its use within the calculation of the City's maximum rates. Once that data and information is confirmed, Recology calculates the "maximum rates for regularly scheduled services" and provides a copy of those calculations to the City for their review and acceptance. HDR Engineering, Inc. (HDR) provided the review for rate year 2013 and now has been requested by the City to provide a review of the Recology rate calculations for rate year 2014 as they pertain to the City's solid waste retail rates.

The franchise agreement between the parties, along with the related amendments to the original agreement, contains specific language and exhibits related to the development of the maximum rates for a given year. This study has reviewed the applicable portions of the franchise agreements and related amendments as they pertain to the 2014 rate year. From this foundational understanding of the requirements for establishing the rates in the previous year, HDR reviewed Recology's submittal to the City for the 2014 rate year. This study discusses the review undertaken by HDR for the 2014 rate year, along with our findings, conclusions and recommendations.

1.2 Limitations of HDR's Review

It is important to understand that HDR has provided a limited review of Recology's maximum rate calculations for the 2014 rate year. As noted above, the data and information used by Recology to calculate the City's maximum rates were reviewed by another outside firm. HDR did not provide a review of this basic input data as a part of this study. Therefore, HDR has assumed that the data and information input into Recology's rate calculations are reasonable and appropriate. Having said that, HDR did a limited cross-check to verify the inputs into Recology's model from the database of previously reviewed basic input data and information.

Within HDR's review, three key items were being reviewed and verified. First, the overall methodology is generally well-laid out within the franchise agreement and related amendments. However, HDR would note that the methodology is still relatively complex during the period of migration recovery. Given that, HDR reviewed Recology's methodology for compliance with our understanding of the required methodology for the 2014 rate year. At the same time, HDR also reviewed the data inputs and information used within the methodology as applied to the 2014 rate year. While the data and information was previously reviewed, the selection and use of the appropriate costs and adjustment factors must comply with the methodology. Finally, HDR confirmed/verified the calculations (formulas) used within the methodology as applied to the 2014 rate year were accurate. As a part of HDR's review, these three aspects of Recology's rate filing were reviewed and verified.

1.3 Organization of the Report

This report is organized in a manner that reflects the general approach used by HDR to review Recology's maximum rates for scheduled service. The next section of this report provides a brief overview of the relevant portions of the franchise agreement and the amendments. Section 3 then provides a discussion and overview of the technical review undertaken by HDR of the Recology rate calculations. From that review, HDR was then able to review and verify the proposed maximum rates for scheduled service. The proposed maximum rates are discussed and shown in Section 4. Finally, Section 5 provides a summary of HDR's findings, conclusions and recommendations from this study.



Section 2 – Overview of the Franchise Agreements and Amendments

2.1 Introduction

An important starting point for reviewing the City’s solid waste rates is to gain an understanding of the existing franchise agreements and the two amendments to that agreement. Since the prior rate analysis, the City has also entered into a compromise and settlement agreement. This section of the report is intended to provide a brief overview of the relevant portions of the franchise agreement, amendments and the settlement agreement to help the reader better understand the basis for this review of the rates.

The review and discussion contained herein is not intended to be comprehensive in nature, nor provide any legal interpretation or opinion regarding the relevant portions of this agreement as it relates to this study.

2.2 Overview of the Franchise Agreement and Amendments

On June 15, 2010, the City of Belmont entered into a franchise agreement with Recology San Mateo County (Recology) to provide to the Belmont community a comprehensive set of high quality waste collection, waste reduction, recycling and composting programs. In order to maximize the quality of services and waste-diversion potential, the City granted to Recology an exclusive right to provide these services within the City. In order to balance that exclusive right to provide these solid waste services against the costs/rates associate with that program, the parties needed to develop an approach or methodology that fairly compensated (and limited) the charges that Recology could charge the City. To address this requirement, the franchise agreement contains specific language and a methodology, within Article 11 of the franchise agreement, for annually establishing the maximum rates for the up-coming calendar year.

“The review being undertaken by the City and HDR is a part of that orderly process, and the City is performing its due diligence to verify and confirm that the maximum rates calculated by Recology are in accordance with the franchise agreement.”

The franchise agreement provides for an orderly process and approach to establish rates for the City and compensation for Recology. The review being undertaken by the City and HDR is a part of that orderly process, and the City is performing its due diligence to verify and confirm that the maximum rates calculated by Recology are in accordance with the franchise agreement for the 2014 rate year.

Cost Indexing – Article 11 of the Franchise agreement provides the framework or methodology for the determination of the maximum rate for the upcoming year. In very simple terms, the

agreement calls for Recology to annually take the existing maximum rate that is in effect and multiply each rate by an “adjustment percentage”. The adjustment percentage is essentially a cost index. More specifically, the franchise agreement notes the following:

“ . . . the Adjustment Percentage used to calculate the Maximum Rates that will be effective in Calendar Year 2013 shall be calculated during 2012 by dividing the Cost Index for 2012 (calculated during 2012) by the Cost Index for 2011 (calculated during 2011).”²

The franchise agreement provides the cost index for the various components. The cost index is stated in total dollars. For example, the total cost index for 2010 was \$5,950,514. Going forward, for each year the cost index is calculated by adding together the various component costs which are composed of the following cost elements:

- Wage Component
- Fuel Component
- General Expense Component
- Disposal Costs Component
- Performance-Based Component
- Household Hazardous Waste Component, and
- Agency Payments Components

For each cost component, the franchise agreement provides a detailed discussion around the component and its adjustment over time.

Migration Recovery Surcharge – As can be seen from the above discussion, the franchise agreement provides a mechanism for establishing cost-based solid waste rates, but it also provided certain protections to Recology for differences between projected revenues and actual revenues. More specifically, the original franchise agreement recognized the potential for customers to migrate from larger can sizes to smaller cans. The franchise agreement anticipated that for 2012 and 2013 only, Recology would be entitled to a “Migration Recovery Surcharge”. Specifically, the franchise agreement states the following:

“D. During calendar years 2012 and 2013 only, the Contractor shall be entitled to charge a Migration Recovery Surcharge on each of its rates that are limited by Attachment R. The rate of the surcharge shall be the Migration Adjustment percentage calculated pursuant to Paragraph 11.02.E for that year. For example, if the Migration Adjustment for 2012 is 3%, then the Migration Recovery Surcharge on a rate that is \$50.00 per month would be \$1.50 per month. . . .For the avoidance of doubt, the Migration Recovery Surcharge contemplated by Paragraph 11.01.D is in addition to the Migration Adjustment calculated in Paragraph 11.03.E”³

The upcoming 2014 rate period will contain the migration recovery surcharge which was delayed from the 2013 rate period. During the 2012 year’s solid waste rate review process, the impacts of the migration surcharge were significant and the City was able to negotiate an

² Franchise Agreement, Section 11.02(B), Annual Adjustment of Maximum Rates for Scheduled Services, p. 89-90.

³ Ibid, Section 11.01(D), 11.01, Overview, p. 89

amendment to their franchise agreement (Amendment 2) to help dampen the impacts from customer migration surcharge and migration adjustment. However, as a result of that negotiated change, a portion of the past migration recovery surcharges are being carried forward each year to 2016.

Amendment 2 to the franchise agreement was adopted as Resolution Number 10455 by the Belmont City Council as a result. Specifically, Amendment 2 states the following:

“AGENCY and CONTRACTOR wish to amend the Franchise Agreement to implement the migration-related adjustments required thereunder over a longer period of time, and specifically to reflect the parties’ intent that:

- *The Migration Recovery Surcharge originally due to take effect in 2012 will be spread over 2012 – 2016, with interest at prime plus one percent;*
- *A one-time credit of \$182,334 in 2012 rates will occur and that amount will be added to the Migration Recovery Surcharge to be spread over 2013-2016; and*
- *The second Migration Recovery Surcharge and Migration Adjustment to take effect in 2013 will be delayed to 2014.”⁴*

Amendment 2 further provides detailed information concerning the future migration adjustments. In part, the relevant portions for purposes of this review include the following:

“ . . . AGENCY AND CONTRACTOR agree as follows:

1. *Subsection E of Section 11.02 “ANNUAL ADJUSTMENT OF MAXIMUM RATES FOR SCHEDULED SERVICES, Migration Adjustment” is amended to read:*

“Migration Adjustment – . . . The Migration Adjustment for Calendar Year 2013 shall be +3.49%. The Migration Adjustment for Calendar Year 2014 shall be calculated by first calculating total estimated annual billings for 2013 (based on the actual Customer Census of June 2013 and the rates on the initial Attachment R) and then determining the percentage difference between that total and the total estimated annual billings for 2011 (calculated as set forth in the first sentence of this paragraph).

2. *Subsection D of Section 11.01 “OVERVIEW” is amended to read:*

(1) During the calendar years 2012 and 2014 only, the Contractor shall be entitled to charge a Migration recovery Surcharge on each of its rates that are limited by Attachment R. The rate of the surcharge shall be the Migration Adjustment percentage calculated pursuant to Paragraph 11.02(E) for that year....for the avoidance of doubt, the Migration Recovery Surcharge contemplated by Paragraph 11.01.D is in addition to the Migration Adjustment calculated in Paragraph 11.02.E, and the Migration Recovery Surcharge contemplated by Paragraph 11.01.D(1) is in addition to the Migration Recovery Surcharge calculated in Paragraph 11.01(D)(2).

⁴ Amendment 2, Recitals, p. 1

(2) Contractor will defer collection of the 2012 Migration Recovery Surcharge to 2013, 2014, 2015 and 2016 as follows. In each of 2013, 2014, 2015 and 2016 the Contractor shall be entitled to charge a Migration Recovery Surcharge, the basis of which shall be obtained by adding \$227,918 to interest on the uncollected balance of the 2012 Migration Recovery Surcharge at the rate of prime (as of June 30 of the prior year) plus 1%. Such uncollected balance shall equal \$729,337 for 2013 (i.e. used to calculate the 2013 surcharge), . . . For 2013 only, the basis shall be increased by 50% of the interest calculated per the preceding sentence. The rate of the Migration Recovery Surcharge for 2013, 2014, 2015 and 2016 shall be calculated by dividing the basis for that year by the estimated billings for the prior year based on the actual Customer Census as of June of the prior year and Maximum Rates in effect that prior year. For example, in calculating the Migration Recovery Surcharge to be added into 2013 Rates, and assuming the Customer Census and Maximum Rates in effect yield estimated 2012 billings of \$5,762,188 with a prime rate in effect of 3%, the Migration Recovery Surcharge for 2013 would be 4.71% ($(\$227,918 + (729,337 * .04) * 1.5) / \$5,762,188 = 4.71\%$).

3. Subsection (B) of Section 11.02 "ANNUAL ADJUSTMENT OF MAXIMUM RATES FOR SCHEDULED SERVICES" is amended to conform with the changes above to read:

"The base Adjustment Percentage used to calculate the Maximum Rates that will be effective in a year shall be calculated by dividing the Cost Index (calculated pursuant to subdivision C of this section) for the year prior to that year by the Cost Index for the year two years prior to that year. For example, the base Adjustment Percentage used to calculate the Maximum Rates that will be effective in Calendar Year 2013 shall be calculated during 2012 by dividing the Cost Index for 2012 (calculated during 2012) by the Cost Index for 2011 (calculated during 2011). The Migration Adjustment Percentage calculated pursuant to Section 11.01(E) and the Migration Recovery Surcharge(s) shall be subtracted therefrom, and the resulting Adjustment Percentage shall be used to calculate the Maximum Rates that will be effective in the following year. Continuing the examples in Sections 11.01(D) and 11.02(E), if the Cost Index for 2011 is \$6,028,139 and the Cost Index for 2012 is \$6,088,420, then the base Adjustment Percentage for 2013 would be 1.00% ($\$6,088,420 / \$6,028,139 - 1.010$), the Adjustment Percentage used to calculate 2013 Maximum Rates would be 9.21% ($1.00\% + 3.49\% + 4.71\% = 9.21\%$ (with rounding)), and each 2013 Maximum Rate would be obtained by multiplying the equivalent 2012 Maximum Rate by 1.0921."

As can be seen from the above, Amendment 2 provides relatively clear language and examples of the methodology to be used for the migration recovery surcharge. In the review of the 2014 calculated maximum rates, particular attention is paid to the migration surcharge and migration adjustment as specified in Amendment 2 for the 2014 rate period.

2.3 Summary

This section of the report has provided a brief overview of the relevant portions of the franchise agreement and amendment with Recology. While this overview of the agreement and amendments has been necessarily abbreviated, it does provide a good understanding of the basic framework or methodology used to calculate the maximum rate for regularly scheduled service.



Section 3 – Review of Recology’s Calculated “Maximum Rates for Regularly Scheduled Service”

3.1 Introduction

As a part of the franchise agreement, Recology calculates the maximum rates for the up-coming calendar year. The calculated maximum rates are formula driven, and as noted in the prior section of the report, there is relatively clear language and numeric examples of the rate indexing process. The purpose of this section of the report is to provide an overview of Recology’s rate filing to the City for the 2014 rate year, along with HDR’s technical review of that filing.

3.2 Overview of Recology’s 2014 Rate Index Calculation

On July 31, 2013, Recology provided to the City a letter and the detailed worksheet outlining their calculation of the rate index. The letter of July 31, 2013 indicated a 12.15% maximum adjustment. HDR reviewed that calculation and determined based upon the information provided that it was in agreement with the Franchise Agreement. Provided below in Table 3-1 is an overview of Recology’s rate index calculation. In summary form, this calculation indicates a maximum adjustment of 12.15%, over and above the 2013 regularly scheduled rates.

**Table 3 – 1
Overview of Recology’s Rate Index Calculation**

	Cost Component Dollars (\$)	2009 CPI Index	2013 CPI Index	2013 Cost Index	2012 Cost Index
Wage Component	\$1,380,122	110.9	117.7	\$1,464,746	\$1,437,368
Fuel Component	211,727	3.45	3.97	243,639	243,026
General Expense Component	1,528,563	214.537	229.540	1,625,115	1,595,265
Agency Components				1,647,608	1,653,889
Disposal Cost Component (i)				1,328,961	1,364,468
Disposal Cost Component (ii)				1,304,777	1,235,831
Disposal Cost Component (iii)				(1,364,468)	(1,279,371)
Performance Based Component					
- Incentives				21,900	52,654
- Disincentives				(1,134)	(6,624)
Hazardous Household Waste Component				65,811	64,607
Total				\$6,336,955	\$6,361,113
				Cost Index 2013 -	\$6,336,955
				Annual Increase Divided by Cost Index 2012 -	\$6,361,113
				Annual Percentage Equals -	-0.38%
				Add: Migration Surcharge 2014	6.45%
				Add: Migration Adjustment 2014	6.45%
				Add: Migration Recovery Surcharge 2014	-0.37%
				Maximum Rates to be Multiplied by:	12.15%

In a more simplified manner, the rate index of 12.15% is composed of four cost elements. These are as follows:

CPI Cost Adjustment	-0.38%
Migration Surcharge 2014 (Delayed 2013)	6.45%
Migration Adjustment for 2014 (Delayed 2013)	6.45%
Migration Recovery Surcharge 2014	<u>-0.37%</u>
Total Rate Index Adjustment	12.15%

As noted above, the City retained HDR Engineering to review the Recology calculations (Table 3-1) to confirm that the proper data appeared to be used within the analysis, and that the mathematical calculations were correct for the 2014 rate year. While Table 3-1 appears rather simple and straight-forward, the calculations are, in some cases, much more complex with other detailed worksheets behind them.

Provided below is a more detailed discussion of the analytical steps taken to review the Recology calculations and the results of our review.

3.3 Overview of General Approach Used To Review Calculations

As noted in Section 2, an important starting point for reviewing the rate index calculation is understanding the Franchise Agreement and Amendment 2. In addition to reviewing those documents, HDR also reviewed the 2012 and 2013 staff reports to City Council and the deliberations around the 2012 rate adjustment which resulted in Amendment 2 and the delay of the 2013 Migration Surcharge and Adjustment to Year 2014.

Given the review of the documents, HDR then independently reviewed the rate index calculation. HDR developed spreadsheets to review and attempt to duplicate the Recology calculations for 2014. In this way, HDR could review the data sources used and verify their appropriateness, while at the same time, verifying the formulas used within the calculations.

3.4 Summary Conclusions of HDR's Review of the Rate Index Calculations

Based upon HDR's detailed review of Recology's rate index calculation, HDR concluded that the rate index used the appropriate data and information for the time period and the calculations within the methodology were correct. As a result of our detailed review, in summary, HDR concluded that based upon the existing Franchise Agreement and Amendments, the maximum rates should be calculated using the 12.15% rate index. Provided below is a more detailed discussion of each of the elements of the calculation of the rate index and the basis for HDR's summary conclusion.

3.5 HDR's Detailed Review of the Rate Index Calculations

As previously discussed, the focus of HDR's review was on the calculations used to establish the rate index for the "Maximum Rates for Regularly Scheduled Services". Article 11 of the Franchise Agreement and Amendment No. 2 form the basis for the calculations.

As shown in Table 3-1, there are four main calculations to the rate index calculation. They are the (CPI) Adjustment Percentage, the Migration Surcharge, the Migration Adjustment, and the Migration Recovery Surcharge. The four components added together are the Maximum Rates to be multiplied by. As a reference point, the calculation of the Adjustment Percentage is detailed in Article 11 and the Migration Surcharge, Migration Adjustment and Migration Recovery Surcharge is detailed in Amendment No. 2.

"... HDR concluded that based upon the existing Franchise Agreement and Amendments, the maximum rates should be calculated using the 12.15% rate index."

3.5.1 CPI Cost (Index) Adjustment

The rate setting process based on Article 11 and the Amendments is a rolling forward index. For example the Maximum Rate for 2014 would be calculated in 2013 by reviewing the 2013 and 2009 cost indices. Therefore, as a part of HDR's review process, both 2013 and 2014 rate setting calculations were reviewed.

In simplified terms, general operating costs are adjusted annually by the use of a cost index. The CPI Cost Index is segregated into seven different cost components. They are as follows:

- **Wages** - The wages for base year 2009 is multiplied by the difference between the 2009 base year Employment Cost Index and the current year Employment Cost Index published for the 4th quarter of the year immediately preceding the Calendar Year of the Cost index. This is the particular component that HDR noticed an issue with in our 2013 review. In very simplified terms, the agreement uses the wages at the start of the agreement and then simply adjusts wages by a CPI amount. In our review in rate year 2013, HDR noted correspondence from Recology indicating some recent reductions in personnel and labor costs. The City confirmed with Recology that those savings (\$16,260) should flow through to the City and as a result, Recology adjusted (corrected) the maximum adjustment from their July 31, 2012 letter to establish the final maximum adjustment of 13.84% for 2013.
- **Fuel** – The fuel for base year 2009 is multiplied by the difference between the 2009 average price per gallon and the average price per gallon of fuel for the twelve month period ending March 31 of the Calendar Year.
- **General Expense** – The general expense base for 2009 is multiplied by the difference between the base year Consumer Price Index and the current year Consumer Price Index.
- **Disposal Costs** – (i) The Contractor's projected costs for April 1 of that calendar year through March 31 of the following year plus (ii) the Contractors' actual costs April 1 of the year prior through March 31 of the calendar year minus (iii) the contractor's previous projection.
- **Performance-Based** – Is the sum of incentives and disincentives the year immediately preceding the Calendar Year of the Cost Index. The determination of incentives and disincentives is independently determined by another outside party.
- **Household Hazardous Waste** – The amount currently paid of \$5,235.60 per month plus ninety percent of the change in the Consumer Price Index. This component is detailed in Article 10.
- **Agency Payment** – The anticipated amount of total Agency payments as detailed in Article 10 divided by $(1 - 0.26)$ then multiplying the result by 0.26.

For each of the above components, HDR reviewed the source data and information used within Recology's calculations. As a part of Recology's packet of information, the source data used by Recology was attached as an amendment. While much of the cost data and information had previously been audited by another outside independent consultant, in those cases where

other key assumptions to the analysis were needed (e.g. CPI index), HDR independently reviewed them.

In summary form, HDR independently confirmed the calculation of the CPI cost adjustment of negative -0.38%. In providing this independent confirmation, HDR did note the Consumer Price Index publishes by month, annual, and bi-annually. By definition within the agreement, the annual CPI is to be used.

3.5.2 Migration Adjustment

The migration adjustment for 2014 is 6.45%. As a part of Amendment 2, the migration adjustment for 2014 was specifically stated. In particular, Amendment 2 states the following:

“ . . . AGENCY AND CONTRACTOR agree as follows:

Subsection E of Section 11.02 “ANNUAL ADJUSTMENT OF MAXIMUM RATES FOR SCHEDULED SERVICES, Migration Adjustment” is amended to read:

“Migration Adjustment – . . . The Migration Adjustment for Calendar Year 2014 shall be calculated by first calculating total estimated annual billings for 2013 (based on the actual Customer Census of June 2013 and the rates on the initial Attachment R) and then determining the percentage difference between that total and the total estimated annual billings for 2011 (calculated as set forth in the first sentence of this paragraph).”

The annual billings for 2011 were \$5,221,177. The estimated June billings for 2013 based on actual June 2013 Customer Census of June 2013 and initial rates were \$\$4,904,789. The difference is \$316,388. The difference of \$316,388 divided by the June 2013 Census results in a 6.45% adjustment.

3.5.3 Migration Recovery Surcharge

The migration adjustment for 2014 is also 6.45%. In particular, Amendment 2 states the following:

“ . . . AGENCY AND CONTRACTOR agree as follows:

Subsection D of Section 11.01 “ANNUAL ADJUSTMENT OF MAXIMUM RATES FOR SCHEDULED SERVICES, Migration Adjustment” is amended to read:

“Migration Recovery Surcharge – . . . (1) During the calendar years 2012 and 2014 only, the Contractor shall be entitled to charge a Migration Recovery Surcharge on each of its rates that are limited by Attachment R. The rate of the surcharge shall be the Migration Adjustment percentage calculated pursuant to Paragraph 11.02(E) for that year.....for the avoidance of doubt, the Migration Recovery Surcharge contemplated by Paragraph 11.01.D is in addition to the Migration Adjustment calculated in Paragraph 11.02.E, and the Migration Recovery Surcharge contemplated by Paragraph 11.01.D(1) is in addition to the Migration Recovery Surcharge calculated in Paragraph 11.01(D)(2).”

This, as explained in the Migration Adjustment, resulted in a 6.45% adjustment. The Migration Recovery Surcharge is in addition the Migration Adjustment. This results in a 6.45% adjustment for the Migration Recovery Surcharge and a 6.45% adjustment for the Migration Adjustment.

3.5.4 Migration Recovery Surcharge

The migration recovery surcharge is a part of Amendment 2. The purpose of the migration recovery surcharge is to collect the deferred adjustment from 2012, plus a carrying cost (interest). Provided below in Table 3-2 is an overview of the development of the migration recovery surcharge for the 2014 rate year.

**Table 3 – 2
Development of the Migration Recovery Surcharge**

Prime Rate June 30, 2013	3.25%	
Plus: 1%	1.00%	
Interest Rate on Migration Surcharge	4.25%	
2014 Migration Recovery Surcharge		\$547,002
Interest Rate on Migration Surcharge		4.25%
Interest Calculation		\$23,248
2014 Interest		\$23,248
2013 Migration Recovery Surcharge Amount		(274,413)
Plus: 2014 Surcharge Amount		227,918
2014 Total		(\$23,248)
Estimated Annual Billings		\$6,229,569
2014 Migration Recovery Surcharge		-0.37%

As can be seen in Table 3-2, the analysis begins by determining the interest rate to be charged for the carrying cost. Then, that interest rate is applied to the uncollected balance of the 2014 migration recovery surcharge. The total interest cost is then added to the amount of the 2014 migration recovery surcharge to be collected in the current (2014) time period. That total balance is then divided by the estimated billings to produce the surcharge percent. In this case, the percentage adjustment for 2014 is –0.37%.

To better understand the values and assumptions within this calculation, HDR reviewed the language of Amendment 2, along with the data inputs for the model. The review of the various components to this calculation is as follows:

- Determining the Interest Rate:** Amendment 2 specifies the method to determine the interest rate. Amendment 2 states the following: “2.(2) . . . interest on the uncollected balance of the 2012 Migration Recovery Surcharge at the rate of prime (as of June 30 of

the prior year) plus 1%.” In the review conducted by HDR, the prime interest rate was verified to be 3.25%. While Recology provide a print-out of their data source for this rate, HDR confirmed the prime interest rate via an alternative information source. Given the prime rate of 3.25%, the final interest rate simply added the 1%.

- **Balance of the Uncollected Balance of the 2014 Migration Recovery Surcharge:** Within the formula, a balance of \$729,337 is utilized. Amendment 2 specifically provides the balance to be used for 2013. It states the following: *“2.(2) . . . Such uncollected balance shall equal \$729,337 for 2013 (i.e. used to calculate the 2013 surcharge), . . .”* It should be noted that in the following years of 2014, 2015 and 2016, the balance declines by the amount of the deferral paid in the prior year. For example, in 2014, the amount will be \$547,002 (\$729,337 - \$227,918).
- **Interest Payment Before Adjustments:** The interest payment to be included within the surcharge, before adjustment, is a simple multiplication of 2014 balance (\$547,002) and the 4.25% interest rate. HDR verified the calculation and interest payment of \$23,248.
- **Additional 50% on Interest Payment:** The methodology included an additional 50% adjustment on the interest payment for 2013 only. Amendment 2 specifically addresses this adjustment and notes the following: *“2.(2) . . . For 2013 only, the basis shall be increase by 50% of the interest calculated in the preceding sentence.”* This was a one-time adjustment and will not appear or be included in the 2014 calculation.
- **Interest 2014 –** From the above, the interest for 2014 was calculated to be \$23,348. HDR independently confirmed the calculation of this amount.
- **2014 Migration Recovery Surcharge Amount:** The formula includes an amount of \$227,918 to be recovered in this time period. Amendment 2 specifies this amount and states the following: *“2.(2) . . . In each of 2013, 2014, 2015 and 2016, the Contractor shall be entitled to charge a Migration Recovery Surcharge, the basis of which shall be obtained by adding \$227,918 to interest on the uncollected balance of the 2012 Migration Recovery Surcharge . . .”* Given that language from Amendment 2, the \$227,918 is a fixed value within the determination of the Migration Recovery Surcharge.
- **2014 Total:** The 2014 total is simply the sum of the interest cost, less the previous years balance of \$274,413 plus the \$227,918 Mitigation Recovery Surcharge.
- **Estimated Annual Billings:** Amendment 2 specifies the methodology to be used to determine the estimated annual billings. Specifically, Amendment 2 notes the following: *“2.(2) . . . The rate for the Migration Recovery Surcharge for 2013, 2014, 2015 and 2016 shall be calculated by dividing the basis for that year by the estimated billings for the prior year based on the actual Customer Census as of June of the prior year and the Maximum Rates in effect in that prior year.”* Within the review process, HDR verified the estimated annual billing amount used within the calculation.

While HDR confirmed the values used within the Migration Recovery Surcharge, the remaining element reviewed was to confirm that the methodology appeared to be in-keeping with Amendment 2. Again, Amendment 2 is fairly clear on the methodology by providing an example calculation. Amendment 2 notes the following:

“For example, in calculating the Migration Recovery Surcharge to be added into the 2013 Maximum Rates, and assuming the Customer Census and Maximum Rates in effect yield

*estimated billings of \$5,762,188 with a prime rate in effect of 3%, the Migration Recovery Surcharge for 2013 would be 4.71% $((\$227,918 + (729,337 * .04) * 1.5) / \$5,762,188 = 4.71\%)$ "*

Based upon the above example, HDR concluded that Recology's calculation methodology for the Migration Recovery Surcharge for the 2014 rate year was in-keeping with the intent of Amendment 2.

3.6 Conclusions Regarding the Calculation of the Rate Index

Based upon the review of the Recology rate calculation HDR concluded that the calculation as provided by Recology appears appropriate and in keeping with the original Franchise Agreement and Amendment No. 2. In reaching this conclusion, HDR reviewed and verified the data inputs into the calculation, while also confirming the overall methodology and calculations. Based upon our conclusions, the calculated Maximum Rate Index for 2014 is 12.15%.



Section 4 – Review of Maximum Solid Waste Rates

4.1 Introduction

In the previous section of this report, the rate indexing for the City’s 2014 solid waste rates was reviewed. This analysis provides the basis for determining the City’s maximum rates. This section of the report will review the maximum solid waste rates for regularly scheduled service (Attachment R) and Unscheduled Services (Attachment Q).

4.2 Review of Rate Index Multiplier

From the review of the rate index multiplier, it was concluded that the analysis developed by Recology appears to comply with the City’s franchise agreement. The overall adjustment to rates for 2014 is 12.15% over the existing rates. In developing the calculated maximum rates, Recology provided a schedule of the rates. HDR reviewed the calculated maximum rates to confirm that they use the appropriate multiplier. Presented below is a discussion of the present solid waste rates and the calculated maximum rates.

4.3 Residential Regularly Scheduled Service

The present residential is composed of four different bin sizes which range from 20 gallons to 96 gallons. The structure of the rate is a flat monthly rate. Presented below in Table 4-1 are the present monthly residential rate and the calculated maximum for 2014. The calculated maximum assumes a 12.15% adjustment over the present monthly rate.

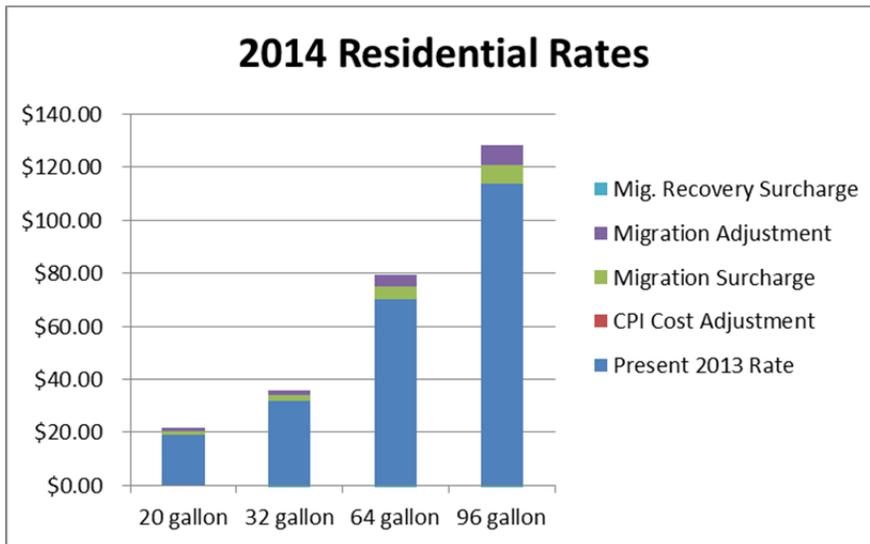
**Table 4 – 1
Summary of the Present and Calculated Maximum Residential Solid Waste Rates
(Regularly Scheduled - \$/Month)**

Schedule	Schedule Description	Present Monthly Rate	Calculated Maximum 2014 Rate	\$/Month Change
R20G	Residential Waste - 20 Gallons	\$19.27	\$21.61	\$2.34
R32G	Residential Waste - 32 Gallons	\$31.91	\$35.79	\$3.88
R64G	Residential Waste - 64 Gallons	\$70.32	\$78.86	\$8.54
R96G	Residential Waste - 96 Gallons	\$113.68	\$127.49	\$13.81

As can be seen, the dollar/month change varies by container size. Provided below in Table 4-2 is a summary of the adjustment by cost component. As may be recalled from the prior section of the report, the total adjustment to rates is a function of the CPI adjustment, a migration surcharge, a migration adjustment and a migration recovery surcharge.

Table 4 – 2
Summary of the Residential Rate Adjustment By Adjustment Component
(Regularly Scheduled - \$/Month)

Present 2013 Rate	CPI (Cost) Adjustment	Migration Surcharge	Migration Adjustment	Migration Recovery Surcharge	Calculated Maximum 2014 Rate
\$19.27	(\$0.07)	\$1.24	\$1.24	(\$0.07)	\$21.61
\$31.91	(\$0.12)	\$2.06	\$2.06	(\$0.12)	\$35.79
\$70.32	(\$0.27)	\$4.54	\$4.54	(\$0.26)	\$78.86
\$113.68	(\$0.43)	\$7.33	\$7.33	(\$0.42)	\$127.49



As can be seen in Table 4-2, the four components of the overall adjustment are not equal. The CPI and Migration Recovery Surcharge are negative adjustments for 2014. The migration surcharge and the migration adjustment is about 53% each of the total overall adjustment. The graph to the left illustrates the relative proportions over and above the present

2013 residential solid waste rates. It should be noted that the CIP and Migration Recovery Surcharge are negative and, as such, do not appear on the overall graph.

4.4 Commercial Waste Carts Regularly Scheduled Service

Some commercial waste customers have similar service to the residential customers in that they have cart sizes that range from 20 gallons to 96 gallons. However, the difference between the residential and commercial service is the number of pick-ups per week. A commercial customer can choose their level of service (number of pick-ups per week). Presented below in Table 4-3 is a summary of the present commercial rates and the calculated maximum rate for 2014. The maximum calculated rate assumes a 12.15% adjustment to the present rates. Some minor rounding of the rates may occur for purposes of ease of administration.

Table 4 – 3
Summary of the Present and Calculated Maximum Commercial Solid Waste Rates
(By Gallon Cart Size; Regularly Scheduled - \$/Month)

Schedule	Schedule Description	Collection - Times Per Week						
		1	2	3	4	5	6	7
C20G	Commercial Waste - 20 Gallon							
	Present 2013 Monthly Rate	\$34.82	\$71.63	\$106.63	\$146.43	\$185.26	\$231.81	\$282.38
	Calculated Maximum 2014 Rate	\$39.05	\$80.33	\$119.59	\$164.22	\$207.77	\$259.97	\$316.69
	\$/Month Change	\$4.23	\$8.70	\$12.96	\$17.79	\$22.51	\$28.16	\$34.31
C32G	Commercial Waste - 32 Gallon							
	Present 2013 Monthly Rate	\$38.68	\$79.60	\$118.48	\$162.69	\$205.84	\$257.57	\$313.75
	Calculated Maximum 2014 Rate	\$43.38	\$89.27	\$132.88	\$182.46	\$230.85	\$288.86	\$351.87
	\$/Month Change	\$4.70	\$9.67	\$14.40	\$19.77	\$25.01	\$31.29	\$38.12
C64G	Commercial Waste - 64 Gallon							
	Present 2013 Monthly Rate	\$74.78	\$150.88	\$228.91	\$307.80	\$391.26	\$476.77	\$558.15
	Calculated Maximum 2014 Rate	\$83.87	\$169.21	\$256.72	\$345.20	\$438.80	\$534.70	\$625.97
	\$/Month Change	\$9.09	\$18.33	\$27.81	\$37.40	\$47.54	\$57.93	\$67.82
C96G	Commercial Waste - 96 Gallon							
	Present 2013 Monthly Rate	\$108.08	\$221.37	\$335.94	\$454.42	\$574.52	\$723.20	\$843.73
	Calculated Maximum 2014 Rate	\$121.21	\$248.27	\$376.76	\$509.63	\$644.32	\$811.07	\$946.24
	\$/Month Change	\$13.13	\$26.90	\$40.82	\$55.21	\$69.80	\$87.87	\$102.51

As can be seen, the rates have maintained the existing structure for commercial waste customers with carts.

4.5 Commercial Waste Bin Regularly Scheduled Service

Some commercial customers have larger bins and the bins range in size from 1 yard to 6 yards. Commercial waste customers also have the option of different levels of service and can select the number of pick-ups per week. Presented below in Table 4-4 is a summary of the present commercial waste bin rates and the calculated maximum rate for 2014. The maximum calculated rate assumes a 12.15% adjustment to the present rates. Some minor rounding of the rates may occur for purposes of ease of administration.

Table 4 – 4
Summary of the Present and Calculated Maximum Commercial Solid Waste Rates
(By Bin Size inYards; Regularly Scheduled - \$/Month)

Schedule	Schedule Description	Collection - Times Per Week						
		1	2	3	4	5	6	7
C1YG	Commercial Waste - 1 Yard							
	Present 2013 Monthly Rate	\$181.35	\$369.20	\$560.29	\$753.60	\$948.45	\$1,183.72	\$1,396.65
	Calculated Maximum 2014 Rate	\$203.38	\$414.06	\$628.37	\$845.16	\$1,063.69	\$1,327.54	\$1,566.34
	\$/Month Change	\$22.03	\$44.86	\$68.08	\$91.56	\$115.24	\$143.82	\$169.69
C2YG	Commercial Waste - 2 Yard							
	Present 2013 Monthly Rate	\$364.78	\$735.54	\$1,109.81	\$1,486.80	\$1,869.12	\$2,206.62	\$2,613.36
	Calculated Maximum 2014 Rate	\$409.10	\$824.91	\$1,244.65	\$1,667.45	\$2,096.22	\$2,474.72	\$2,930.88
	\$/Month Change	\$44.32	\$89.37	\$134.84	\$180.65	\$227.10	\$268.10	\$317.52
C3YG	Commercial Waste - 3 Yard							
	Present 2013 Monthly Rate	\$550.16	\$1,106.95	\$1,666.98	\$2,228.71	\$2,792.38	\$3,389.82	\$3,991.43
	Calculated Maximum 2014 Rate	\$617.00	\$1,241.44	\$1,869.52	\$2,499.50	\$3,131.65	\$3,801.68	\$4,476.39
	\$/Month Change	\$66.84	\$134.49	\$202.54	\$270.79	\$339.27	\$411.86	\$484.96
C4YG	Commercial Waste - 4 Yard							
	Present 2013 Monthly Rate	\$751.00	\$1,514.99	\$2,278.98	\$3,051.67	\$3,827.62	\$4,635.77	\$5,460.82
	Calculated Maximum 2014 Rate	\$842.25	\$1,699.06	\$2,555.88	\$3,422.45	\$4,292.68	\$5,199.02	\$6,124.31
	\$/Month Change	\$91.25	\$184.07	\$276.90	\$370.78	\$465.06	\$563.25	\$663.49
C6YG	Commercial Waste - 6 Yard							
	Present 2013 Monthly Rate	\$1,155.01	\$2,342.50	\$3,521.16	\$4,689.81	\$5,875.10	\$7,102.47	\$8,318.67
	Calculated Maximum 2014 Rate	\$1,295.34	\$2,627.11	\$3,948.98	\$5,259.62	\$6,588.92	\$7,965.42	\$9,329.39
	\$/Month Change	\$140.33	\$284.61	\$427.82	\$569.81	\$713.82	\$862.95	\$1,010.72

The commercial waste rates for customers with bins have maintained the existing rate structure and rate relationships.

4.6 Commercial Organics Bins Regularly Scheduled Service

The rate charged for commercial organics is tied to the commercial waste rate. Commercial organics rates are charged at 70% of the commercial waste rate, for a comparable size bin. Similar to the commercial waste bin customers, commercial organics customers have bins which range in size from 1 yard to 6 yards. Similar to the commercial waste customer, the commercial organics customers also have the option of different levels of service and can select the number of pick-ups per week. Presented below in Table 4-5 is a summary of the present commercial organics bin rates and the calculated maximum rate for 2014. The maximum calculated rate assumes a 12.15% adjustment to the present rates. Some rounding of the rates may occur for purposes of ease of administration.

Table 4 – 5
Summary of the Present and Calculated Maximum Commercial Organics
Solid Waste Rates (By Bin Size in Yards; Regularly Scheduled - \$/Month)

Schedule	Schedule Description	Collection - Times Per Week						
		1	2	3	4	5	6	7
C1YO	Commercial Organics - 1 Yard							
	Present 2013 Monthly Rate	\$126.95	\$258.44	\$392.20	\$527.52	\$663.92	\$828.61	\$977.66
	Calculated Maximum 2014 Rate	\$142.37	\$289.84	\$439.85	\$591.61	\$744.59	\$929.29	\$1,096.45
	\$/Month Change	\$15.42	\$31.40	\$47.65	\$64.09	\$80.67	\$100.68	\$118.79
C2YO	Commercial Organics - 2 Yard							
	Present 2013 Monthly Rate	\$255.35	\$514.88	\$776.87	\$1,040.76	\$1,308.38	\$1,544.63	\$1,829.35
	Calculated Maximum 2014 Rate	\$286.38	\$577.44	\$871.26	\$1,167.21	\$1,467.35	\$1,732.30	\$2,051.62
	\$/Month Change	\$31.03	\$62.56	\$94.39	\$126.45	\$158.97	\$187.67	\$222.27
C3YO	Commercial Organics - 3 Yard							
	Present 2013 Monthly Rate	\$385.11	\$774.87	\$1,166.89	\$1,560.09	\$1,954.66	\$2,372.88	\$2,794.00
	Calculated Maximum 2014 Rate	\$431.90	\$869.02	\$1,308.67	\$1,749.64	\$2,192.15	\$2,661.18	\$3,133.47
	\$/Month Change	\$46.79	\$94.15	\$141.78	\$189.55	\$237.49	\$288.30	\$339.47
C4YO	Commercial Organics - 4 Yard							
	Present 2013 Monthly Rate	\$525.70	\$1,060.49	\$1,595.28	\$2,136.17	\$2,679.33	\$3,245.05	\$3,822.57
	Calculated Maximum 2014 Rate	\$589.57	\$1,189.34	\$1,789.11	\$2,395.71	\$3,004.87	\$3,639.32	\$4,287.01
	\$/Month Change	\$63.87	\$128.85	\$193.83	\$259.54	\$325.54	\$394.27	\$464.44
C6YO	Commercial Organics - 6 Yard							
	Present 2013 Monthly Rate	\$808.51	\$1,639.75	\$2,464.81	\$3,282.87	\$4,112.57	\$4,971.73	\$5,823.07
	Calculated Maximum 2014 Rate	\$906.74	\$1,838.98	\$2,764.28	\$3,681.74	\$4,612.25	\$5,575.80	\$6,530.57
	\$/Month Change	\$98.23	\$199.23	\$299.47	\$398.87	\$499.68	\$604.07	\$707.50

The commercial organics bin rates have maintained the existing rate structure and rate relationships.

4.7 Commercial Organics Carts Regularly Scheduled Service

Commercial customers can also have the smaller gallon-sized carts for organic waste. Presented below in Table 4-6 is a summary of the present commercial organics cart rates and the calculated maximum rate for 2014. The maximum calculated rate assumes a 12.15% adjustment to the present rates. Some minor rounding of the rates may occur for purposes of ease of administration.

Table 4 – 6
Summary of the Present and Calculated Maximum Commercial Organics
Solid Waste Rates (By Gallon Cart Size; Regularly Scheduled - \$/Month)

Schedule	Schedule Description	Collection - Times Per Week						
		1	2	3	4	5	6	7
C320	Commercial Organics - 32 Gallon							
	Present 2013 Monthly Rate	\$27.08	\$55.72	\$82.94	\$113.89	\$144.09	\$180.29	\$219.63
	Calculated Maximum 2014 Rate	\$30.37	\$62.49	\$93.02	\$127.73	\$161.60	\$202.20	\$246.32
	\$/Month Change	\$3.29	\$6.77	\$10.08	\$13.84	\$17.51	\$21.91	\$26.69
C640	Commercial Organics - 64 Gallon							
	Present 2013 Monthly Rate	\$52.36	\$105.61	\$160.23	\$215.46	\$273.89	\$333.73	\$390.70
	Calculated Maximum 2014 Rate	\$58.72	\$118.44	\$179.70	\$241.64	\$307.17	\$374.28	\$438.17
	\$/Month Change	\$6.36	\$12.83	\$19.47	\$26.18	\$33.28	\$40.55	\$47.47
C960	Commercial Organics - 96 Gallon							
	Present 2013 Monthly Rate	\$75.66	\$154.95	\$235.16	\$318.09	\$402.16	\$506.24	\$590.61
	Calculated Maximum 2014 Rate	\$84.85	\$173.78	\$263.73	\$356.74	\$451.02	\$567.75	\$662.37
	\$/Month Change	\$9.19	\$18.83	\$28.57	\$38.65	\$48.86	\$61.51	\$71.76

The commercial organics cart rates have maintained the existing rate structure and rate relationships.

4.8 Other Miscellaneous Solid Waste Rates

The solid waste rates also include a compactor rate and a household hazardous waste rate for multi-family customers. These rates are shown below in Table 4-7

Table 4 – 7
Summary of the Present and Calculated Maximum Other Miscellaneous
Solid Waste Rates (Regularly Scheduled - \$/Month)

Schedule	Schedule Description	
C3CG	Commercial Waste 3 Yard Compactor	
	Present 2013 Monthly Rate	\$1,321.06
	Calculated Maximum 2014 Rate	\$1,481.57
	\$/Month Change	\$160.51
	Solid Waste Compactor Rate Per Yard	
	Present 2013 Monthly Rate	\$101.64
	Calculated Maximum 2014 Rate	\$113.99
	\$/Month Change	\$12.35
HHW	HHW Fee Per Unit	
	Present 2013 Monthly Rate	\$0.32
	Calculated Maximum 2014 Rate	\$0.36
	\$/Month Change	\$0.04

4.9 Other Unscheduled Services (Attachment Q)

Recology also provides a number of services that are not considered regular service and not included as a part of the Attachment R rates discussed above. The rate for unscheduled services is contained in Attachment Q of the Franchise Agreement and are annually updated in accordance with the Franchise Agreement. Attached as a part of the technical appendices are the proposed Attachment Q rates for unscheduled services.

4.10 Summary

This section of the report has reviewed the present solid waste rates and the 2014 calculated maximum rates. Detailed exhibits of the Attachment R and Attachment Q rates can be found in Technical Appendix A and B, respectively.



Section 5 – Summary of Solid Waste Rate Findings, Conclusions and Recommendations

5.1 Introduction

This report has reviewed the calculated Maximum Rate as developed by Recology. HDR used a systematic process to review the calculation of the rate index, along with the resulting maximum rates for regularly scheduled service.

5.2 Summary Findings, Conclusions and Recommendations

HDR reviewed the Recology rate calculation and concluded that the rate index and resulting maximum solid waste rates for 2014 were calculated in a manner which reflected the intent of the Franchise Agreement and Amendment 2. HDR would recommend that the City accept the Calculated Maximum Solid Waste Rates as submitted by Recology.

5.3 Looking Ahead – Potential 2015 Rate Adjustment

As noted above, Amendment 2 deferred a portion of the 2012 rate adjustment. As a result, a migration recovery surcharge was created to defer and spread that adjustment over a longer time horizon. The Migration Surcharge and Migration Adjustment was only included for 2012 and 2013. In which 2013 was delayed to 2014. Therefore the estimated 2015 rate adjustment would be the CPI adjustment and the Migration Surcharge Recovery which will continue until 2016.

5.4 Summary

This completes the review conducted by HDR Engineering, Inc. for the City of Belmont on the 2014 Solid Waste rates. This report has met the City's requirement to conduct a due diligence on the rate index and resulting solid waste rates as submitted by Recology.



Technical Appendix A – Attachment R Rates Regularly Scheduled Service

The following Attachment R rates are the calculated maximum rates.
By agreement, the City can charge up to maximum rate, but no greater.

Attachment R
Maximum Rate Schedule
Effective January 1, 2014 to December 31, 2014
Monthly Rate

RESIDENTIAL CARTS

	Cart Size (in Gallons)			
	20	32	64	96
1 Pickup Per Week	\$21.61	\$35.79	\$78.86	\$127.49

Residential customers are billed based on their Garbage Cart size.

The monthly rate above includes the following:

- One (1) Garbage Cart provided to customer
- Curbside Household Hazardous Waste Collection
- One (1) 64-Gallon Recycling Cart and (1) 96-Gallon Yard Waste Cart

**Attachment R
Maximum Rate Schedule
Effective January 1, 2014 to December 31, 2014
Monthly Rate**

COMMERCIAL CARTS

		Cart Size (in Gallons)			
		20	32	64	96
# of Pickups Per Week	1	\$39.05	\$43.38	\$83.87	\$121.21
	2	80.33	89.27	169.21	248.27
	3	119.59	132.88	256.72	376.76
	4	164.22	182.46	345.20	509.63
	5	207.77	230.85	438.80	644.32
	6	259.97	288.86	534.70	811.07
	7	316.69	351.87	625.97	946.24

The monthly rate above includes the following:

One (1) Garbage Cart

Recycling Cart

Multi-Family Customers are charged \$0.36 * Residential Units for Household Hazardous Waste Collection in addition to above

COMMERCIAL CARTS ORGANICS

		Cart Size (in Gallons)		
		32	64	96
# of Pickups Per Week	1	\$30.37	\$58.72	\$84.85
	2	62.49	118.44	173.78
	3	93.02	179.70	263.73
	4	127.73	241.64	356.74
	5	161.60	307.17	451.02
	6	202.20	374.28	567.75
	7	246.32	438.17	662.37

Note: Organics containers are charged at seventy percent (70%) of the similar Garbage commercial cart rate above container size and service levels for Garbage, representing a thirty percent (30%) discount

Attachment R
Maximum Rate Schedule
Effective January 1, 2014 to December 31, 2014
Monthly Rate

COMMERCIAL BINS

		Bin Size (in Cubic Yards)				
		1	2	3	4	6
# of Pickups Per Week	1	\$203.38	\$409.10	\$617.00	\$842.25	\$1,295.34
	2	414.06	824.91	1,241.44	1,699.06	2,627.11
	3	628.37	1,244.65	1,869.52	2,555.88	3,948.98
	4	845.16	1,667.45	2,499.50	3,422.45	5,259.62
	5	1,063.69	2,096.22	3,131.65	4,292.68	6,588.92
	6	1,327.54	2,474.72	3,801.68	5,199.02	7,965.42
	7	1,566.34	2,930.88	4,476.39	6,124.31	9,329.39

The monthly rate above includes the following:

One (1) Garbage Bin

Recycling container at customer's requested size

COMMERCIAL BINS ORGANICS

		Bin Size (in Cubic Yards)				
		1	2	3	4	6
# of Pickups Per Week	1	\$142.37	\$286.38	\$431.90	\$589.57	\$906.74
	2	289.84	577.44	869.02	1,189.34	1,838.98
	3	439.85	871.26	1,308.67	1,789.11	2,764.28
	4	591.61	1,167.21	1,749.64	2,395.71	3,681.74
	5	744.59	1,467.35	2,192.15	3,004.87	4,612.25
	6	929.29	1,732.30	2,661.18	3,639.32	5,575.80
	7	1,096.45	2,051.62	3,133.47	4,287.01	6,530.57

Note: Organics containers are charged at seventy percent (70%) of the similar garbage container size above and service level for garbage, representing a thirty percent (30%) discount

**Attachment R
Maximum Rate Schedule
Effective January 1, 2014 to December 31, 2014
Monthly Rate**

GARBAGE COMPACTORS

Commercial Waste 3 Yard Compactor	\$1,481.57
Per Yard Pulled Monthly	\$113.99

The monthly fee above includes the following:
Recycling container at customer's requested size



Technical Appendix B – Attachment Q Rates Unscheduled Services

Attachment Q Unscheduled Services

The following table specifies Maximum Allowable Rates for Unscheduled Services. These Maximum Rates shall be adjusted annually in accordance with Article 11.

Unscheduled Service Category	Reference	Cost	Description of Cost
Single-Family Dwelling Backyard Collection Service	Section 5.02.A	See Table Below	See Table Below
Distance Charge for MFD and Commercial Accounts More than 50 Feet From the Curb	Section 5.02.B and 5.02.C	A - 10% of Base monthly rate B - 25% of Base monthly Rate	A - 51 to 100 feet from Curbside B - 101 feet or more from Curbside
Extra Pick-up Cost for MFD and Commercial Customers	Section 5.02.B and 5.02.C	30% of base monthly Rate for the size of Container Collected once per week	Per Collection event
Single-Family Return Trip Cost (i.e. request to provide Collection service on other than the regularly scheduled Collection day)	Section 5.02.A	\$19.28	Per Collection event
Additional Targeted Recyclable Materials or Organic Materials Cart Rental	Sections 5.03.A and 5.04.A	A - \$1.29 B - \$3.86	A - Monthly rental fee for Targeted Recycling Cart (any size) B - Monthly rental fee for Organics/Yard Waste Cart (any size)
Additional E-Scrap Pickup Trip	Section 5.505.B4	Varies by number of items	\$32.13 for each trip (up to five items) \$12.85 per item for each additional item on the same trip \$109.25 per item for large console TV's

Unscheduled Service Category	Reference	Cost	Description of Cost
Additional Confidential Document Destruction Service Event	Section 5.07	\$1,542.29	Per Event
Litter Abatement and Collection Service	Section 5.09B	\$87.40 per hour with an eight (8) hour minimum per service person (includes truck)	Per Event
Additional Compost Material Delivery	Section 5.11	A - \$160.65 B - \$321.38	A - one way delivery (compost left on site) B - two way delivery (Drop box left on site)
Fee for Service On-Call Bulky Item Collection Service	Section 5.12	\$104.82	Per Event
Additional Community Drop-Off Events	Section 5.13	\$26,218.88 Additional \$1.29 per household for post card announcement if requested by Agency	Per event targeting approximately 6,000 households. Does not include disposal.
Collection for Additional Agency-Sponsored and Non-Agency sponsored Large Events (other than the number of events specified in Attachment C)	Section 5.08	A - \$3,855.72 B - \$6,426.20 C - \$9,639.29	A - one-day events with a projected 2,500 or fewer attendees B - one (1) or two (2) day events less than 7,500 attendees per day, that does not qualify for Category A above C - one (1) or two (2) day events with a projected 7,501 to 10,000 attendees per day
Emergency Services	Section 7.08	\$160.65/hour	Cost includes refuse collection vehicle and driver

Unscheduled Service Category	Reference	Cost	Description of Cost
Fee to Collect Contaminated Targeted Recyclable Materials or Organic Materials Container	Section 6.03.A and 8.02.F	25% of the base monthly Rate for the size of Container Collected once per week plus: \$19.28	Per Collection Event
Key Service	Section 8.02.B	A - \$10.92 B - \$12.21	Monthly cost: A - Residential Customers B - Commercial Customers
Lock purchase fee (replacement at no additional cost)	Section 8.02.B	\$21.85	One-time per Account cost.
Overage Fee (Unless Overage Bags purchased)	Section 8.02.G	100% of the base monthly Rate	Per Collection event
Overage Bags Cost (includes Collection)	Section 8.02.G	\$10.28	Per bag
Container Cleaning Fee	Section 8.05.D	A - \$64.26 B - \$109.25	A - per Cart B - per Bin or Drop-Box
Dirty Cart Replacement Cost	Section 8.05.D	A - \$83.54 B - \$96.39 C - \$109.25	A - per 32 gallon Cart B - per 64 gallon Cart C - per 96 gallon Cart

Backyard Collection Service Distance Costs for Single Family Dwellings (Section 5.02.A)				
Distance from Curbside	One (1) Solid Waste Cart	Two (2) Solid Waste Carts	Three (3) Solid Waste Carts	Four (4) Solid Waste Carts
0 - 50 feet	\$23.14	\$36.91	\$73.83	\$110.74
51 - 100 feet	26.99	40.77	77.68	114.59
101 - 150 feet	30.84	44.62	81.53	118.45
151 - 200 feet	0.36	48.48	85.39	122.30
201 - 250 feet	38.56	52.34	89.25	1,247.66
251 - 300 feet	42.42	56.19	93.11	130.02
301 feet or more	46.27	60.05	96.95	133.87

Note: In the development of the draft report and the public hearing, the rate for one (1) solid waste cart at 151 – 200 feet and for four (4) solid waste carts from 201 – 250 feet were erroneously included within the schedule. No customers are currently served under those schedules.