

**FINAL REPORT**

**Collection Services and Facility Operations  
Reports and Systems Review for 2016**



**SUBMITTED TO:**

**RethinkWaste (SBWMA)**

June 8, 2017

Report Submitted Digitally

**R3**

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# Section 1. Introduction

## Background

The South Bayside Waste Management Authority (RethinkWaste) is a joint powers authority of twelve Member Agencies (Atherton, Belmont, Burlingame, East Palo Alto, Foster City, Hillsborough, Menlo Park, Redwood City, San Carlos, San Mateo, the County of San Mateo and the West Bay Sanitary District) in San Mateo County. The twelve RethinkWaste Member Agencies have exclusive franchise agreements with Recology San Mateo County (Recology) for the collection of solid waste, recyclable materials and organic materials. Recology provides collection services to approximately 93,000 households and 9,000 businesses in the RethinkWaste service area.

RethinkWaste owns and manages the Shoreway Environmental Center which is operated by South Bay Recycling (SBR). The Shoreway Environmental Center receives all of the recyclables, organics and garbage collected by Recology under its franchise agreements with each of RethinkWaste's Member Agencies, as well as other self-haul and non-franchised material delivered to that facility.

Recology and SBR are required to track, compile and report various data related to their performance and develop various reports per the franchise agreements and operating agreement. The primary nature of the quantitative data presented in the reports is self-reported. Therefore, the goal for this review is to determine the accuracy of the information contained in those reports.

## Work Scope

RethinkWaste retained R3 Consulting Group (R3) to review, test and verify the accuracy of the information contained in the reports, and provide any recommendations for improvement. Our work scope included, but was not limited to the following tasks:

- Verify the completeness and mathematical accuracy of the Quarterly and Annual Reports;
- Interview the contractors to determine the sources of the reported data;
- Verify the accuracy of the tonnage data reported quarterly by Recology;
- Verify the accuracy of Recology's reported customer service data;
- Verify the accuracy of Recology's reported liquidated damages, incentive and disincentive payments;
- Verify the accuracy of SBR's reported in-bound tonnage data; and
- Verify the accuracy of SBR's reported liquidated damage payments.

The logo for R3 Consulting Group, featuring the letters 'R3' in a stylized, blue, handwritten font.

## Section 2

Completeness  
and  
Mathematical  
Accuracy

## Section 2. Completeness and Mathematical Accuracy

The objectives of this task were to determine if the Quarterly and Annual Reports submitted by the Contractors:

- Are complete and contain all of the reporting requirements specified in Article 9.06 (Quarterly Reports) and 9.07 (Annual Reports) of Recology's franchise agreements and Article 9.05 (Quarterly Reporting Requirements) and 9.06 (Annual Reporting Requirements) of SBR's operating agreement; and
- Are mathematically accurate and logically consistent (that the columns and rows add correctly and tie to supporting schedules within the report).

### Completeness of Reports - Recology

#### Quarterly Reports

To assess the completeness of Recology's Quarterly Reports, R3 completed a review of the 2<sup>nd</sup> quarter 2016 report as compared to the Quarterly Reporting requirements of Article 9.06 of Recology's franchise agreements. R3 then compared the contents of the 2<sup>nd</sup> quarter report to the contents of Recology's other 2016 Quarterly Reports in order to determine if the contents of all of the Quarterly Reports are consistent.

#### Findings:

Appendix A includes the findings of our review of Recology's 2<sup>nd</sup> quarter report. As shown, the report satisfies the reporting requirements of Article 9.06 with the exception of the following requirement that was not included:

- **Call Center Data** (Section 9.06.E) – The report does not specifically note the percentage of calls answered in ninety (90) seconds as required in the Franchise Agreements; however, the required data is included, and Recology reported that the report format is consistent with what was agreed upon at the onset of the contract.

#### Annual Report

To assess the accuracy of Recology's Annual Report, R3 compared the contents of that report to the requirements of Section 9.07 (Annual Reports) of Recology's franchise agreement.

#### Findings:

Appendix A includes the findings of our review of Recology's 2016 Annual Report. As shown, the report satisfies the reporting requirements of Article 9.07 with the exception of the following requirement that was not included, and was also identified as part of the prior review:

- **Customer Account Information** (Section 9.07.B) – This detailed information is not included in the Annual report but is included in the source files provided to RethinkWaste. The "MSW Accounts by Service Sector" table of the Operational

Information section of the Annual Report does, however, provide the number of single-family, multi-family and commercial and Member Agency Facilities accounts in each Member Agency. Additional account summary information by Member Agency is also provided in the Annual Report supporting Excel spreadsheets and Recology reported that the required detailed information is available upon request. Recology also reported that the report format is consistent with what was agreed upon at the onset of the contract.

## Section 2

### Completeness and Mathematical Accuracy

## Completeness of Reports – SBR

### Quarterly Reports

To assess the completeness of SBR’s Quarterly Reports, R3 completed a review of the June 2016 2<sup>nd</sup> quarter report as compared to the Quarterly Reporting requirements of Article 9.05 of the SBR Operating Agreement. R3 then compared the contents of the June 2016 report to the contents of SBR’s other 2016 reports to determine if the contents of all of the Quarterly Reports are consistent.

#### Findings:

Appendix B includes the findings of our review of SBR’s June 2016 report. As shown, the report satisfies all of the reporting requirements of Article 9.05 with the exception of the following discrepancies noted by R3:

- **Operational Changes** (Section 9.05.E.5) and **Hazardous Spills Reporting** (Section 9.05.E.7) – In terms of “Operational Changes”, SBR’s report does not include some of the Operating Agreement’s required information on equipment levels/changes; however, SBR stated that the “Operational Changes” and “Hazardous Spills Reporting” sections have been combined and changed into one “Facility Reporting” section at the request of RethinkWaste.
- **Programs and Summary Assessment** (Sections 9.05.G and 9.05.H) – The report provides a brief monthly summary of “MRF Recovery Effectiveness”. This summary description could be interpreted as satisfying the requirements of Sections 9.05.G and 9.05.H, but only to a minimal extent.

### Annual Report

To assess the accuracy of SBR’s Annual Report, R3 compared the contents of that report to the requirements of Section 9.06 (Annual Reporting Requirements) of SBR’s operating agreement.

#### Findings:

Appendix B includes the findings of our review of SBR’s 2016 Annual Report. As shown, the report satisfies all of the reporting requirements of Article 9.06.<sup>1</sup>

<sup>1</sup> It is noted that the Annual Report includes a quarterly mass balance, similar to that which was previously provided in the Monthly Reports.

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## Section 2

Completeness  
and  
Mathematical  
Accuracy

## Mathematical Accuracy and Logical Consistency – Recology

### Quarterly Reports

To test the mathematical accuracy and logical consistency of Recology's Quarterly Reports, R3 compared Recology's reported year-to-date 2016 tonnage figures for the 1<sup>st</sup> quarter report of 2016 to the values presented on the reports previously submitted for the months of January, February, March (i.e., 1<sup>st</sup> quarter).

#### Findings:

- ✓ R3 verified each subtotal, total and calculation was properly stated, including that the quarterly data accurately reflects the sum of data from the previous three months.

### Annual Reports

To test the mathematical accuracy and logical consistency of Recology's Annual Report, which included data for the each of the twelve months of 2016, we compared the quarterly figures reported in the Annual Report to the corresponding figures in the Quarterly Reports.

#### Findings:

- ✓ R3 verified each subtotal, total and calculation was properly stated, including that the annual data accurately reflects the sum of data from each of the four quarters.

## Mathematical Accuracy and Logical Consistency - SBR

### Quarterly Reports

SBR does not issue separate Quarterly Reports; rather, the data is rolled up into year-to-date quarterly totals that are reported as part of the Monthly Reports (as an example, the March 2016 Monthly Reports includes the totals for the first quarter of 2016).

To test the mathematical accuracy and logical consistency of SBR's reports, R3 compared SBR's reported year-to-date 2016 values (December 2016 report) to the values presented on the reports previously submitted for the months of January, February and March (i.e., 1<sup>st</sup> quarter).

#### Findings:

- ✓ R3 verified each subtotal, total and calculation was properly stated, including that the quarterly data accurately reflects the sum of data from the previous three months.

### Annual Reports

To test the mathematical accuracy and logical consistency of SBR's Annual Report, which includes data for the each of the four quarters of 2016, we compared the quarterly Inbound (Attachment 2) and Outbound (Attachment 3) figures reported in the Annual Report to the corresponding figures in the Quarterly Reports. As shown in Table 1 (Inbound) and Table 2 (Outbound) below, we identified minor discrepancies in the 3<sup>rd</sup> quarter data compared to the Annual Report data, which appear to be reporting inconsistencies that resulted from the fire which occurred at the Shoreway facility in September 2016.

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**Table 1**  
**SEC Quarterly and Annual Report Inbound Tonnage Comparison**

OVERALL TOTAL			
Quarter	Quarterly Report	Annual Report	Variance (Annual v. Quarterly)
1	121,272.26	121,272.26	-
2	122,923.56	122,923.56	-
3	120,710.59	120,725.26	14.67
4	112,929.80	112,929.80	-
<b>Total</b>	<b>477,836.21</b>	<b>477,850.88</b>	<b>14.67</b>

**Table 2**  
**SEC Quarterly and Annual Report Outbound Tonnage Comparison**

OVERALL TOTAL			
Quarter	Quarterly Report	Annual Report	Variance (Annual v. Quarterly)
1	121,292.22	121,292.22	-
2	122,937.35	122,937.35	-
3	120,728.60	120,743.27	14.67
4	112,937.81	112,937.81	-
<b>Total</b>	<b>477,895.98</b>	<b>477,910.65</b>	<b>14.67</b>

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## Section 3

Review of  
Recology  
Tonnage Data

## Section 3. Review of Recology Tonnage Data

The objectives of this task were to verify the accuracy of the:

- Tonnage data reported by Recology; and
- The allocation of tonnages among each of the Member Agencies.

### Background

Recology's Monthly Reports include a Monthly Tonnage Report (M1. Tonnage Summary of the supporting Excel workbook) that allocates franchised tonnages among each of the member agencies for the following categories:

- Residential;
- Multi-Family Dwelling (MFD);
- Commercial; and
- Roll-Off.

The Monthly Tonnage Report figures are electronically linked to the data reported in the following supporting workbook spreadsheets, all of which contain hard coded inputs (i.e., are not electronically linked to the supporting data source):

- M1a. Solid Waste;
- M1b. Targeted Recycled Tonnage; and
- M1c. Organic Materials Tonnage.

Each of the above spreadsheets reports tonnages for the following categories:

- Single-Family (categorized as Residential);
- Multi-Family (categorized as MFD);
- Commercial (categorized as Commercial);
- Agency Facilities (categorized as Commercial);
- Drop Box (categorized as Commercial);
- Venues and Events (categorized as Commercial);
- On-Call Single-Family (categorized as Residential);
- On-Call Multi-Family (categorized as MFD);
- On-Call Agency Facilities (categorized as Commercial); and
- On-Call Agency Facilities (categorized as Commercial)

The methods used by Recology to allocate tons to the above categories for each Member Agency are as follows:

**Single-Family, Multi-Family and Commercial** – Recology allocates the tonnage collected from Single-Family, Multi-Family and Commercial regularly scheduled cart and bin customers based on subscribed service volume. For each route, the customers serviced are identified by Member Agency and assigned a unique rate code. Services for Member Agency facilities are also assigned a unique rate code. Using this data, the percentage of the total service volume (cubic yards) of each load collected within each Member Agency, which is assumed to represent the percentage of the total tons of each daily route assigned to each Member Agency, is calculated quarterly and reported in Recology’s Split Table Listing.<sup>2</sup> This data is then applied to the load weights of the applicable routes to allocate that tonnage among the Member Agencies.

**Agency Facilities** – Recology uses the same methodology to allocate scheduled collections from Member Agency facilities as it does to allocate Single-Family, Multi-Family and Commercial tonnages as described above. Each Member Agency account is assigned a unique code that is included in the quarterly Split Table Listing and used to allocate those tons to the appropriate Member Agency.

**Drop-Box** – Drop box and compactor loads are specific to a single location and therefore 100% of the tons for each drop box and compactor load is directly assigned to the associated Member Agency.

**Bulky Item On-Call Collections & Abandoned Waste/Illegal Dumping** – Recology runs two separate on-call bulky item routes, one for solid waste and one for recyclables. The bulky-item solid waste route also collects abandoned waste/illegal dumping tonnages. Recology maintains a log of reported abandoned waste, by Member Agency, that includes estimated weight. This estimated abandoned waste tonnage is subtracted from the total weight of tonnage of the on-call collections. Recology tracks the requests for bulky item/on-call collections by Member Agency and allocates the total on-call collection tonnage to each Member Agency in proportion to the percentage of total collections for each load by Member Agency.

**Venues and Events** – With the exception of roll-off bins from venues and events, which are weighed, tracked and recorded in SBR’s PC Scales system, material from individual venues and events are collected by dedicated vehicles (e.g., supervisor vehicles) and delivered to Recology’s maintenance facility where they are weighed consolidated in bins. Those bins are then weighed and recorded in SBR’s PC Scales system as Recology Maintenance Box Tons. The tonnages for each venue and event are specifically tracked and those figures manually assigned to the associated Member Agency on the “Events” workbook of each monthly query excel file.<sup>3</sup>

## Review of Member Agency Tonnage Allocations

Based on the above stated methods Recology uses to allocate tons among the Member Agencies, R3 gathered applicable supporting documentation to test the calculation of and application of Recology’s tonnage allocation methodology. That review included at one month of data for each Member Agency covering all twelve months during the year.

<sup>2</sup> The Split Table Listing provides an accounting of the percentage of subscribed service levels by member agency for each route.

<sup>3</sup> Recology’s “monthly query files” provide a download of its internal tonnage data base that allocates tonnages to each Member Agency based on the Split Table Listings and other supporting documentation.

## Section 3

Review of  
Recology  
Tonnage Data

**Single-Family, Multi-Family and Commercial / Agency Facilities** – To test the allocation of regularly scheduled cart and bin customers, R3 selected a sample of routes and calculated the Member Agency allocation percentages associated with Recology’s allocated Member Agency tonnages that were generated from Recology’s monthly tonnage queries. Those allocated tonnage percentages were then compared to the quarterly split table percentages for each applicable Member Agency to determine the accuracy of Recology’s tonnage allocations.

**Drop Box** – R3 tied the reported Drop-Box tons on Recology’s Monthly Tonnage Reports for samples covering each Member Agency to the supporting data generated by Recology’s monthly queries.

**Bulky Item On-Call Collections** – R3 tied Recology’s on-call bulky item solid waste and recyclables collection tonnages reported on its Monthly Tonnage Report to the supporting documentation for a sample covering all Member Agencies.

**Abandoned Waste/Illegal Dumping** – R3 tied Recology’s abandoned waste/illegal dumping tonnages reported on its Monthly Tonnage Report to the supporting documentation for a sample covering all Member Agencies.

**Venues and Events** – R3 tied Recology’s venues and events tonnages reported on its Monthly Tonnage Report to the supporting documentation for a sample covering various Member Agencies.

Findings:

- ✓ R3 found Recology’s tonnage allocation methodology to be logical and reasonable, and consistently applied.
- ✓ R3 confirmed that the quarterly allocations of Single-Family, Multi-Family and Commercial and Agency Facilities were consistent with the sampled quarterly split table percentages.
- ✓ R3 traced the data reported on Recology’s Tonnage Report (M1) to the supporting spreadsheets (M1a, M1b and M1c) without exception.
- ✓ R3 traced the data reported on Recology’s supporting spreadsheets (M1a, M1b and M1c) to the supporting monthly queries and other supporting documentation. That testing documented the supporting basis for all allocations with the exception of various minor tonnage differences.

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## Section 4. Review of Recology Reported Customer Service Data

The objectives of this task were to:

- Test two separate months (April and September) of the reported customer service data for each Member Agency and verify it ties to the supporting documents;
- Test the accuracy of customer service representative (CSR) reported statistics; and
- Test the accuracy of CSR's coding calls.

### Review of Reported Customer Service Data

In Section D of the Quarterly and Annual Reports, Recology reports customer service data (i.e., "Inquiry, Service Request and Complaint Data") in the following categories:

- Single-Family Missed Pick-Up Initial Complaints
- Single-Family Missed Pick-Up Collection Events\*
- Excessive Noise\*
- Discourteous Behavior\*
- Property Damage\*
- Spills\*
- On-Call Bulky Item Collection
- Extra/Overage Requests
- Recycling Tote-Bag Requests
- Information Requests
- Billing Concerns

\* The accuracy of these reporting items has been reviewed as part of R3's Review of Recology Liquidated Damages/Performance Incentive and Disincentive payments.

For all customer service items above with associated Liquidated Damages and/or Performance Incentives and Disincentives, **R3 tested Recology's reported number of "occurrences" for April and September of 2016**. The results of that review are provided in the Section 5 of this report titled "Review of Recology Liquidated Damages / Performance Incentive and Disincentive Payments." For the remaining items above with no associated Liquidated Damages or Performance Incentives and Disincentives, **R3 also tested two months of data for each Member Agency (April and September)** to verify that the reported number of "occurrences" ties to the supporting documents.

#### Findings:

Our review identified a number of instances where the reported occurrences varied from the source documentation. Specifically:

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## Section 4

Review of  
Recology  
Reported  
Customer  
Service Data

- ✓ 99 of 156 tested data points (63%) were equal to the source documentation;<sup>4</sup>
- ✓ 45 of 156 tested data points (29%) varied from the source documentation by less than 10%; and
- ✓ 12 of 156 tested data points (8%) varied from the source documentation by greater than 10%.<sup>5</sup>

In last year's review, we recommended requesting that Recology omit commercial account information next year (i.e., for the 2016 Annual Report) in an effort to definitely explain the cause of R3's observed differences in customer service data accuracy between the first and second half of calendar year 2016 (i.e., assist in explaining R3's finding of increased accuracy in the second half of 2016 as compared to the first half). Recology reported that it made changes to accommodate this request that took effect starting with the June 2016 monthly report (completed in July).

In either case, this year, we noted that there was no notable difference in accuracy between the two tested months of 2016. Specifically:

- **April 2016** – 50 of 78 tested data points (64%) were equal to the source documentation; and
- **September 2016** – 49 of 78 tested data points (63%) were equal to the source documentation.

## Review of Reported CSR Statistics

On a quarterly and annual basis, Recology reports customer service representatives (CSR) statistics which are based on data generated by Recology's Shoretel phone system. Statistics generated by the phone system include:

- Number of calls received;
- Number of calls answered;
- Number of calls answered within 15, 30, 45, 60, and 90 seconds; and
- Cumulative wait time before answered. (The average wait/hold time (i.e., average speed of answer) is calculated based on the cumulative wait time and the total number of calls answered.)

<sup>4</sup> As an example, the annual report indicated that there were 34 Single-Family Missed Pickup Complaints in Atherton in April 2017. Our review of the source documentation (TQR4 Reports) also found that there were 34 Single-Family Missed Pickup Complaints in Atherton in April 2017. Therefore, this is an example of a reported data point that was equal to the source documentation (TQR4 Reports).

<sup>5</sup> As an example, the annual report indicated that there were 22 Extra/Overage Requests in Redwood City in April 2017. Our review of the source documentation (TQR4 Reports) indicated that there were actually 76 Extra/Overage Requests in Redwood City in April 2017. Therefore, this is an example of a reported data point that varied from the source documentation (TQR4 Reports) by more than 10% (i.e., for this data point, within 10% would mean within 7.6 plus or minus of the source documentation's value of 76).

The phone statistics for each month are input into Section E (“Call Center Data and Quality Assurance Calls Made”) of the Quarterly and Annual Reports, and are also used for the Incentive/Disincentive forms for “Ninety Second Hold Time” and “Average Speed of Answer”. Recology also reports the total number of quality assurance calls made during each month in Section E.

**Findings:**

- ✓ Without exception, R3 verified that the phone statistics provided in Recology’s 2016 Quarterly and Annual Reports matched the phone statistics generated by the Shoretel phone system for April and September of 2016.

### Review of CSR’s Coding Calls

To test the accuracy of CSR’s coding calls, R3 randomly sampled 400 CSR tickets created in both April and September of 2016.

**Findings:**

Of the 800 tickets sampled, we found that 1 was coded incorrectly, pertaining to a single-family missed pick-up initial complaint. Table 3 provides a listing of the above incorrectly coded ticket.

**Table 3  
CSR Coding Call Errors**

Actual Ticket Type	Incorrect Samples Identified			Total Annual Allowance	Liquidated Damages per Occurrence	Additional Liquidated Damages Due to SBWMA <sup>1</sup>
	April 2016	September 2016	Total			
Missed Pickup Complaints	1	0	1	<i>No applicable Liquidated Damages</i>		
<b>Total</b>	<b>1</b>	<b>0</b>	<b>1</b>			<b>\$0</b>

The Single-Family Missed Pick-Up Initial Complaint ticket identified in Table 3 above would not result in additional payments due to the fact that there are no longer any Performance Incentives/Disincentives associated with Missed Pick-Up Initial Complaint tickets.<sup>6</sup> All three (3) of the identified incorrectly coded tickets were coded as “Attention Operations” or “Reminder to Service.”

**Recommended Adjustment – None**

<sup>6</sup> As amended per the administrative changes and amendments.

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Section 4

Review of  
Recology  
Reported  
Customer  
Service Data

**Recommendation #1** – Recology’s Dispatch Supervisors should continue to review all Supervisor tickets weekly to ensure that procedures are being followed and tickets are being closed with detailed resolutions. “Attention Operations” and “Reminder to Service” and any other similarly coded tickets should be reviewed weekly by the Route Supervisors to ensure they were coded correctly as missed pick-up complaints or as items subject to liquidated damages. *[A similar recommendation was also presented as part of our 2013, 2014, and 2015 Reviews.]*

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## Section 5. Review of Recology Liquidated Damages and Performance Incentive/Disincentive Payments

The objectives of this task were to:

- Verify the liquidated damages, incentive, and disincentive payments reported by Recology have been properly calculated and tie to the events reported; and
- Verify and explain Recology's procedures to identify and report events which would trigger liquidated damages and performance incentives/disincentives.

### Background

Provisions for Liquidated Damages and Performance Incentives/Disincentives are provided in Attachment J and Attachment I<sup>7</sup> of Recology's franchise agreements, respectively. Calculations of each Liquidated Damage and Performance Incentive/Disincentive item are provided as part of Recology's Quarterly and Annual Reports, with the exception of the Incentive/Disincentive for diversion, which is only calculated as part of the Annual Report.

R3 requested and reviewed Recology's source documentation for Liquidated Damages and Incentives/Disincentives occurrences for 2016. Table 4 and Table 5 below provide listings of Liquidated Damage and Incentive/Disincentive items, respectively, as well as the source documentation for each item as identified during our review. As shown, many of these items represent customer complaints, which are tracked through Recology's internal ticketing software ("TQR4 Reports").

The adjustments noted in Table 4 and Table 5 below reflect R3's review of the accuracy of the reported quantities of occurrences (i.e., number of complaints in each category) as compared to Recology's source documentation (i.e., TQR4 Reports).

The adjustments shown in Tables 4 and 5 do not account for whether the reported complaints have been properly coded by the customer service representative (CSR). A separate review of CSR call coding accuracy, as well as separate recommended adjustments based on that review, may be found in Section 4 of this report under the subsection titled "Review of CSR's Coding Calls".

### Review of Liquidated Damages Payments

Attachment J (Liquidated Damages) of Recology's franchise agreement lists the events that constitute breaches of the Agreement's standard of performance warranting the imposition of liquidated damages; the acceptable performance level; the definition of the complaint, incident or event; the method by which occurrences will be principally tracked and the amount

<sup>7</sup> As amended per the administrative changes and amendments.

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Section 5

Review of  
Recology  
Liquidated  
Damages and  
Performance  
Incentive /  
Disincentive  
Payments

of liquidated damages for failure to meet the contractually-required standard of performance. Recology is required to maintain records of customer complaints which show for each complaint: date and time received; name, address and telephone number of the caller; nature of complaint (e.g., missed pick-up, excessive noise, property damage, etc.); name of employee receiving complaint; action taken by Recology to respond to complaint; and date complaint was resolved.

Recology is to submit to the Member Agencies a liquidated damages report with its Quarterly Report that summarizes the number of complaints in each category and computes the amount (if any) of liquidated damages accrued by month during the preceding quarter.

Liquidated Damages specified in Attachment J of the Agreement are as follows:

**Collection Quality**

- Unauthorized Collection Hours
- Damage to Private Property
- Failure to Resolve Property Damage Claim
- Failure to Provide New Service or Initiate Change in Service
- Improper Container Placement
- Failure to Effectively Distribute Non-Collection Notices
- Excessive Noise Complaints
- Unacceptable Employee Behavior
- Complaints of Spills of Discarded Materials
- Complaints of Failure to Clean Up Spills of Discarded Materials
- Spills of Vehicle Fluids

**Customer Service Quality**

- Untimely Resolution of Complaints and Inquires

**Reporting**

- Late Submittal or Reports
- Submittal of Inaccurate Reports, etc.
- Failure to Perform and Report on Billing Review

**Other**

- Disposal of Diversion Program Materials
- Use of Unauthorized Facilities

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Findings:

Overall

Table 4 below provides a full list of 2016 Liquidated Damages payments as reported by Recology and as calculated by R3. As shown, R3 is recommending no overall adjustment to the amounts reported by Recology (with the exception of the recommended adjustment stated in Section 4 of this report). R3's findings specific to each Liquidated Damage category are discussed in additional detail below.

**Table 4  
2016 Liquidated Damages Payments**

Item Description	Company Source Documentation	Total 2016 Liquidated Damages Payments			
		Company Reported	R3 Calculated	Recommended Adjustment	
<b>Collection Quality</b>					
1	Complaints regarding unauthorized collection hours, inadequate care of or damage to private property, and failure to resolve property damage claims within 30 days	TQR4 Reports (Reason Codes: 31086, 31093, 03CPD, 03CUH)	\$ -	\$ -	\$ -
2	Complaints regarding failure to provide new service or change existing service level within five (5) business days	TQR4 Reports (Reason Codes: 31120, 03CFC)	\$ -	\$ -	\$ -
3	Complaints regarding improper container placement	TQR4 Reports (Reason Codes: 31071, 03CCP)	\$ -	\$ -	\$ -
4	Distribution of less than 50% of required non-collection notices	TQR4 Reports (Reason Codes: 31010, 03CNN)	\$ -	\$ -	\$ -
5	Excessive noise complaints	TQR4 Reports (Reason Codes: 31084, 03CEN)	\$ -	\$ -	\$ -
6	Complaints regarding unacceptable employee behavior	TQR4 Reports (Reason Codes: 31053, 03CDB)	\$ 1,750	\$ 1,750	\$ -
7	Complaints regarding spills of discarded materials and failure to clean up those spills	TQR4 Reports (Reason Codes: 31098, 03CSG, 03CSR, 03CSO)	\$ -	\$ -	\$ -
8	Complaints regarding unreasonable leaks or spills of vehicle fluids	TQR4 Reports (Reason Codes: 31116, 03CVF)	\$ 11,000	\$ 11,000	\$ -
<b>Customer Service Quality</b>					
1	Resolution or remedy of complaints or inquiries beyond 10 business days of receipt of the complaint or inquiry	TQR4 Reports (Reason Codes: 31123, 03CNR)	\$ -	\$ -	\$ -
<b>Reporting</b>					
1	Late submittal of reports, applications, proposals or other submittals	Submittal dates shown on report covers and cover letters, and also tracked via email	\$ -	\$ -	\$ -
2	Accuracy of submittals: corrections or restatements submitted more than two (2) business after notification		\$ -	\$ -	\$ -
3	Late submittal of billing review report		\$ -	\$ -	\$ -
<b>Other</b>					
1	Disposal of recyclable materials without written approval	The Company stated that all materials are delivered to the Shoreway SBR facility.	\$ -	\$ -	\$ -
	Disposal of organic materials without written approval		\$ -	\$ -	\$ -
2	Recyclable materials not delivered to the designated transfer and processing facility		\$ -	\$ -	\$ -
	Solid waste or organic materials not delivered to the designated transfer and processing facility		\$ -	\$ -	\$ -
<b>Total Liquidated Damages Due to / (from) SBWMA</b>			<b>\$ 12,750</b>	<b>\$ 12,750</b>	<b>\$ -</b>

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**Collection Quality**

As shown in Table 4, Recology reports on several Liquidated Damages items related to Collection Quality. R3 checked the number of occurrences for each Liquidated Damage item for April and September of 2016 against the source documentation (TQR4 Reports) provided by Recology and made adjustments as appropriate. R3 identified several instances of variances between the reported occurrences and the source documentation, although none of these variances had a material impact on the amount of Liquidated Damages due to the Member Agencies due to those variances not exceeding allowable monthly occurrences for each Liquidated Damage item.

**Recommended Adjustment** – None

**Customer Service Quality**

The one Liquidated Damage item related to Customer Service Quality is “Resolution or remedy of complaints or inquiries beyond 10 business days of receipt of the complaint or inquiry.” R3 identified no instances of the Reason Code corresponding to this Liquidated Damage item in Recology’s TQR4 Reports in April and September of 2016.

**Recommended Adjustment** – None

**Reporting**

For the Reporting category of Liquidated Damages, report submittal dates are recorded by the email transmittal, but no Liquidated Damages for lateness are assessed unless they are notified of the late submittal by RethinkWaste and the Member Agencies. During our review, we noted that:

- All 2016 Monthly Reports displayed their submittal date on the cover and cover letter of the report, and with the exception of the Monthly Report for May 2016, all were submitted within 15 days of the end of the month as required by Section 9.04.C. The May 2016 Monthly Report was submitted 15 days later than the due date (i.e., June 30<sup>th</sup> submittal vs. June 15<sup>th</sup> due date) delineated in the Franchise Agreements. However, it is important to note that an improvement in submittal of the reports due in June was agreed to by RethinkWaste. The May Monthly Report due date was changed from June 15<sup>th</sup> to June 30<sup>th</sup> to accommodate an earlier submittal date of the company’s annual Compensation Application on June 15<sup>th</sup> (which had previously been due on June 30<sup>th</sup>);
- All 2016 Quarterly Reports displayed their submittal date on the cover and cover letter of the report, and all were submitted within 30 days of the end of the end of the quarter as required by Section 9.04.C;
- The 2016 Annual Report displayed the submittal date on the cover and cover letter of the report, and was submitted within 45 days of the end of the year as required by Section 9.04.C;

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- RethinkWaste did not notify Recology of any required corrections or restatements for any of the 2016 reports; and
- The billing review report was included in the 2016 Annual Report, and was therefore submitted within 45 days of the end of the year as required by Section 7.01.E.

**Recommended Adjustment** – None

**Other**

In regards to the “Other” subcategory of Liquidated Damages listed in Table 4 above, Recology has stated that all collected materials are delivered to the SBR facility on Shoreway Road, as required by the franchise agreements (i.e., “the designated transfer and processing facility”).

**Recommended Adjustment** – None

## Review of Incentives/Disincentives Payments

Attachment I (Performance Incentives and Disincentives) of Recology’s franchise agreement specifies that the Member Agencies shall provide incentive payment to Recology for exceeding the following three (3) performance standards:

- Overall Diversion Level;
- Single-Family Missed Pick-Up Initial Complaints;\* and
- Average Speed of Answer.\*

Disincentive payments are to be assessed from not meeting the following eleven (11) performance standards:

- Minimum Single-Family Diversion Level;
- Minimum Commercial Diversion Level;
- Maximum Contamination Level – Single-Family Targeted Recyclable Materials;
- Maximum Contamination Level – Single-Family Organic Materials;
- Maximum Contamination Level – Commercial Source Separated and Targeted Recyclable Materials;
- Maximum Contamination Level – Commercial Organic Materials;
- Maximum Contamination Level – MFD and Commercial Plant Materials;
- Single-Family Missed Pick-Up Initial Complaints;\* and
- Single-Family Missed Pick-Up Collection Events;

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- Average Speed of Answer;\* and
  - Ninety (90) Second Maximum Hold Time.
- \* Items for which there is both an Incentive and Disincentive Payment

**Findings:**

Table 5 below provides a full list of 2016 Performance Incentive/Disincentive payments as reported by Recology and as calculated by R3. As shown, R3 is recommending an increase of \$5,197 to the Disincentive payment associated with exceeding Maximum Contamination Levels. Findings specific to each Incentive/Disincentive category are discussed below.

**Table 5  
2016 Performance Incentive/Disincentive Payments**

Item Description	Company Source Documentation	Total 2016 Incentive/Disincentive Payments		
		Company Reported	R3 Calculated	Recommended Adjustment
Single-Family Missed Pick-Up Initial Complaints	TQR4 Reports (Reason Codes: 32014, 03CMG, 03CMR, 03CMO)	<i>Incentive/Disincentive has been eliminated.</i>		
Single-Family Missed Pick-Up Collection Events	TQR4 Reports (Reason Codes: 32014, 03CMG, 03CMR, 03CMO)	\$ 4,150	\$ 4,150	\$ -
Average Speed of Answer at Customer Service Center	Shoretel Phone System Statistics Report	\$ 14,540	\$ 14,540	\$ -
Ninety (90) Second Maximum Hold Time	Shoretel Phone System Statistics Report	\$ 43,300	\$ 43,300	\$ -
Maximum Contamination Levels	Quarterly Sloan-Vasquez Contamination Sampling Results	\$ 5,546	\$ 10,743	\$ 5,197
Minimum Diversion Levels	'M1d. Diversion Level' sheet of the Quarterly Report	\$ (175,789)	\$ (175,789)	\$ -
<b>Total Incentive/Disincentive Payments Due to / (from) SBWMA</b>		<b>\$ (108,253)</b>	<b>\$ (103,056)</b>	<b>\$ 5,197</b>

**Single-Family Missed Pick-Up Initial Complaints**

Recology stated in its reports that the Incentive/Disincentive for “Single-Family Missed Pick-Up Initial Complaints” was eliminated.<sup>8</sup> This has been confirmed with RethinkWaste, and we recommend no further action with regards to this item.

**Single-Family Missed Pick-Up Collection Events**

R3 checked the number of Single-Family Missed Pick-Up Collection Events for April and September of 2016 against the source documentation (TQR4 Reports) provided by Recology. This involved reviewing Recology’s notes regarding the quantity of Single-Family Missed Pick-Up Complaints which were not resolved by the end of the next business day (per Section 8.02.B.2 of the Agreement). Our review identified no errors in Recology’s reported Single-

<sup>8</sup> As amended per the administrative changes and amendments.



Family Missed Pick-Up Collection Events for April and September of 2016; therefore, we recommend no adjustment to the calculated Disincentive amount.

**Recommended Adjustment – None**

### Average Speed of Answer at Customer Service Center

R3 verified that the phone statistics provided in Recology’s 2016 Quarterly and Annual Reports matched the phone statistics generated by the Shoretel phone system for April and September of 2016. Recology receives an Incentive payment for a calculated average speed of answer below 15 seconds, and a Disincentive payment for a calculated average speed of answer greater than 30 seconds. Recology calculated an overall Disincentive Payment of \$14,540, which was driven primarily by average answer speeds of over 30 seconds for April and December of 2016.

**Recommended Adjustment – None**

### Ninety (90) Second Maximum Hold Time

R3 verified that the phone statistics provided in Recology’s 2016 Quarterly and Annual Reports matched the phone statistics generated by the Shoretel phone system for April and September of 2016. Specifically, Recology receives a Disincentive payment of \$5.00 per call when the number of calls exceeding the 90-second threshold exceeds 5% of all incoming calls in the quarter. The number of calls exceeding the 90-second threshold did exceed 5% for the second, third, and fourth quarter of 2016. This resulted in a total calculated Disincentive payment of \$43,300 for 2016.

**Recommended Adjustment – None**

### Maximum Contamination Levels

Attachment I<sup>9</sup> of the franchise agreement establishes the following Maximum Contamination Levels:

- Commercial Source Separated or Targeted Recyclable Materials – 10%
- MFD and Commercial Plant Materials – 5%
- Single-Family Organic Materials – 5%
- Commercial Organic Materials – 10%
- Single-Family Targeted Recyclable Materials – 8.5%

R3 found that the reported contamination amounts used for the Incentive/Disincentive calculations were consistent with the contamination figures presented in the Quarterly and

<sup>9</sup> As amended per the administrative changes and amendments.

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Annual Reports, and were also consistent with the “Contamination Sampling Results” for 2016 provided by Sloan-Vazquez for the first and fourth quarters. We noted that for purposes of the Incentive/Disincentive calculations, Recology did not calculate Disincentive amounts for the second and third quarter of 2016.<sup>10</sup> Recology reported that, as agreed to with the SBWMA, the quarterly Disincentive payment will only apply to the quarter in which the sample is taken, therefore, no Disincentive payment would apply for the second or third quarter.

Recology maintained contamination levels below the maximums listed above for each quarter of 2016, with the exception of exceeding the Maximum Contamination Level for Commercial Targeted Recyclable Materials for the first and second quarter of 2016, and exceeding the Maximum Contamination Level for Single-Family Targeted Recyclable Materials for the third and fourth quarter of 2016.

**Recommended Adjustment – None.**

**Minimum Diversion Levels**

R3 found that the diversion amounts used for the “Minimum Diversion Levels” Incentive/Disincentive calculations were consistent with the figures presented in the Quarterly and Annual Reports. Specifically, Recology calculated an overall 2016 diversion rate of 47.57%, as compared to the target diversion rate of 46.87% (i.e., the overall 2014 diversion rate). Because the overall diversion target was exceeded, this means that an Incentive payment is due to Recology from the Member Agencies, and that the new overall target diversion rate will be 47.57% going forward. In addition, R3 confirmed that Recology correctly calculated Disincentive amounts due to the Member Agencies for single-family and commercial sector minimum diversion levels. Specifically:

- Recology achieved a single-family sector diversion rate of 63.51%, as compared to the target diversion level of 62.64%, resulting in no Disincentive payment; and
- Recology achieved a commercial sector diversion rate of 32.14%, as compared to the target diversion level of 24.75%, resulting in no Disincentive payment.

**Recommended Adjustment – None**

<sup>10</sup> Contamination results are measured on a bi-annual basis (twice per year), with the year’s first-half sampling results applied to the first and second quarter’s diversion calculations, and the year’s second-half sampling results applied to the third and fourth quarter’s diversion calculations. This is illustrated by Recology’s application of the contamination sampling results on the “M1d. Diversion Level Calculation” section of their 2016 Annual Report. As such, the contamination sampling results should also be applied to the Disincentive calculations in the same manner (i.e., the year’s first-half sampling results apply to the first and second quarter’s Disincentive calculation, and the year’s second-half sampling results apply to the third and fourth quarter’s tonnage data).



## Liquidated Damages and Performance Incentives/Disincentives Tracking and Reporting Procedures

### Liquidated Damages Procedures

In general, Recology tracks and reports “occurrences” related to the franchise agreement’s specified Liquidated Damage items, and Liquidated Damage payments are assessed on any occurrences in excess of the occurrence limits specified by the franchise agreement. Many of the Liquidated Damage items are related to customer complaints, with additional Liquidated Damages related to late submittal of reports, and proper processing and delivery of collected material types.

### Collection Quality

Complaints are received by phone through Recology’s call center, and may also be submitted by customers online via Recology’s website. When a complaint is received through the call center, the responding customer service representative (CSR) creates a complaint ticket with a “Reason Code” that describes the nature of the complaint. Each ticket is maintained in Recology’s internal software and is shown as a line-item entry on Recology’s internal monthly TQR4 Report.

It is important that each incoming complaint be assigned the correct Reason Code, because Recology determines monthly Liquidated Damage occurrence amounts, as well as other information, using the quantity of Reason Codes shown on the TQR4 Report for each complaint type. In other words, if a complaint is entered into the system with an incorrect Reason Code, the associated Liquidated Damage quantity for that month will not account for the complaint.

All complaints submitted via Recology website produce a ticket with a generic “Complaint” Reason Code that is not specific to the type of complaint received. Recology reported that each generic complaint submitted through the website, if handled properly, should be accompanied by a follow-up complaint ticket with a more specific Reason Code corresponding to the associated Liquidated Damage item. During our review of CS call coding, R3 observed several website “Complaint” tickets and confirmed that follow-up complaint tickets with more specific Reason Codes were created for complaints submitted via the website.

### Customer Service Quality

Recology tracks occurrences of the one Liquidated Damage item related to Customer Service Quality (“Resolution or remedy of complaints or inquiries beyond 10 business days of receipt of the complaint or inquiry”) using a specific Reason Code in the same manner as those items in the “Collection Quality” category above. Recology determines monthly Liquidated Damage occurrence amounts for this item using the quantity of Reason Codes shown on the TQR4 Report for this item.

### Reporting

For the “Reporting” category of Liquidated Damages, report submittal dates are recorded by the email transmittal, but no Liquidated Damages for lateness are assessed unless they are notified of the late submittal by RethinkWaste.

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**Other**

For the “Other” subcategory of Liquidated Damages, Recology stated that all collected materials are delivered to the SBR facility on Shoreway Road (i.e., “the designated transfer and processing facility”).

**Performance Incentives/Disincentives Procedures**Single-Family Missed Pick-Up Initial Complaints

The Incentive/Disincentive for “Single-Family Missed Pick-Up Initial Complaints” was eliminated and is no longer included in Recology’s reports.<sup>11</sup>

Single-Family Missed Pick-Up Collection Events

Recology calculates the total number of “Single-Family Missed Pick-Up Collection Events” for each month by determining which instances of “Single-Family Missed Pick-Up Complaints” (i.e., TQR4 Report Reason Code 32014) are not resolved by the end of the next business day. Single-Family Missed Pick-Up Complaints are received at the call center in the same manner as described in the “Collection Quality” subsection above.

Average Speed of Answer at Customer Service Center & Ninety (90) Second Maximum Hold Time

The calculated Incentive/Disincentive amounts for “Average Speed of Answer at Customer Service Center” and “Ninety (90) Second Maximum Hold Time” are based on phone statistics generated by Recology’s Shoretel phone system. As discussed previously, statistics generated by the system include:

- Number of calls received;
- Number of calls answered;
- Number of calls answered within 15, 30, 45, 60, and 90 seconds; and
- Cumulative wait time before answered. (The average wait/hold time (i.e., average speed of answer) is calculated based on the cumulative wait time and the total number of calls answered.)

The Shoretel phone statistics from each month are input into the applicable Incentive/Disincentive forms that are provided in reports to RethinkWaste.

Maximum Contamination Levels

Recology’s contamination levels are based on third party “Contamination Sampling Results” provided by Sloan-Vazquez, under contract to RethinkWaste. These contamination levels are determined twice per year, and the resulting contamination percentages are input into the applicable quarterly Incentive/Disincentive forms in the Quarterly Reports that are provided to RethinkWaste.

Minimum Diversion Levels

For purposes of calculating the Performance Incentive/ Disincentive, annual diversion levels are set equal to the overall annual diversion levels after accounting for contamination, as

<sup>11</sup> As amended per the administrative changes and amendments.

provided on sheet M1d of Recology's Annual Report source documentation provided to RethinkWaste and available to the Member Agencies upon request.

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## Section 6

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## Section 6. Review of SBR Reported In-Bound Tonnage Data

The objectives of this task were to:

- Verify Accuracy of SBR's reported In-Bound Tonnage Data;
- Verify SBR's reported data (from franchised services) is consistent with Recology's reports; and
- Verify all other SBR tonnage is also accurate.

### Background

All incoming franchised vehicles (Recology) and Member Agency Vehicles, as well as self-haul C&D/Inert loads are weighed on SBR's scales when those loads enter the facility. All other self-haul loads are not weighed and are charged based on estimated volume and material type.

### Comparison of Recology Tons to SBR Tons

Recology drivers enter information about each load into SBR's PC Scales system through the driver automated attendant (DAT) terminal located at the scales. Each driver receives a hard copy of each ticket. SBR reviews Recology's weight tickets on a daily basis for discrepancies such as duplicate loads and zero-weight loads and any inaccuracies to identify any potential errors and electronically uploads all data to Recology on a daily basis. At the end of each month SBR submits a monthly aggregate data upload to Recology.

To determine if SBR's reported data for Recology's franchised service is consistent with that data reported by Recology, R3 compared SBR's monthly data from franchise services, as reported in their 2016 December Report (Attachment 3 – Franchised Inbound Tons (Recology)) to the monthly data reported by Recology in its monthly tonnage reports as reported in its Tonnage Summary and Cumulative Comparison worksheets of its Quarterly Reports.

#### Findings:

Table 6 below provides a comparison of the total tons diverted and disposed as reported by Recology to those reported by SBR. As shown there are some minor discrepancies in both the reported diversion and disposal data. Relative discrepancies from our 2013, 2014, and 2015 Annual Report Reviews are also shown.

**Table 6  
Comparison of Recology and SBR Monthly Tonnages**

Month	Tons Disposed				Tons Diverted			
	Recology Report (1)	SBR Report (2)	Variance (Recology vs. SBR)		Recology Report (1)	SBR Report (2)	Variance (Recology vs. SBR)	
			Tons	%			Tons	%
January	14,655.11	14,662.62	(7.51)	-0.05%	14,775.55	14,770.60	4.95	0.03%
February	14,554.51	14,554.51	0.00	0.00%	14,092.44	14,094.97	(2.53)	-0.02%
March	16,208.17	16,208.06	0.11	0.00%	16,785.00	16,788.77	(3.77)	-0.02%
April	14,406.64	14,406.51	0.13	0.00%	14,892.29	14,895.98	(3.69)	-0.02%
May	15,003.34	15,003.11	0.23	0.00%	15,279.63	15,281.53	(1.90)	-0.01%
June	15,278.96	15,278.93	0.03	0.00%	14,856.66	14,859.57	(2.91)	-0.02%
July	14,593.08	14,591.34	1.74	0.01%	13,643.87	13,646.23	(2.36)	-0.02%
August	15,924.76	15,924.72	0.04	0.00%	15,207.02	15,210.75	(3.73)	-0.02%
September	14,866.70	14,865.37	1.33	0.01%	14,458.06	14,461.10	(3.04)	-0.02%
October	14,748.09	14,747.75	0.34	0.00%	14,958.03	14,959.06	(1.03)	-0.01%
November	15,134.82	15,134.82	0.00	0.00%	15,994.78	15,998.90	(4.12)	-0.03%
December	15,480.16	15,480.09	0.07	0.00%	16,056.07	16,059.44	(3.37)	-0.02%
<b>2016 Total</b>	<b>180,854.34</b>	<b>180,857.83</b>	<b>(3.49)</b>	<b>0.00%</b>	<b>180,999.40</b>	<b>181,026.90</b>	<b>(27.50)</b>	<b>-0.02%</b>

**Prior Years Data**

<b>2015 Total</b>	<b>177,591.01</b>	<b>177,585.62</b>	<b>5.39</b>	<b>0.00%</b>	<b>171,735.83</b>	<b>171,761.96</b>	<b>(26.13)</b>	<b>-0.02%</b>
<b>2014 Total</b>	<b>177,106.09</b>	<b>177,098.36</b>	<b>7.73</b>	<b>0.00%</b>	<b>169,503.18</b>	<b>169,527.89</b>	<b>(24.71)</b>	<b>-0.01%</b>
<b>2013 Total</b>	<b>177,001.51</b>	<b>176,979.89</b>	<b>21.62</b>	<b>0.01%</b>	<b>168,930.40</b>	<b>168,929.28</b>	<b>1.12</b>	<b>0.00%</b>

(1) Source: Annual Report Tonnage Report supporting detail: (4) RSMC Annual Reports 2016 part 1 / M1. Rolling 13 Month

(2) Source: SBR's 2016 December Report; Attachment A; Shoreway Center Inbound Detail Report

## Tracking Inbound Tonnage Data

SBR tracks the following seven (7) major categories of Inbound Tons as reported in the Inbound Summary Report (Attachment 2) of their monthly, Quarterly and Annual Reports:

- Franchised Inbound Tons (Recology);
- Member Agency Vehicles Inbound Tons;
- Recology Maintenance Box Trucks;
- Self-Haul Tons;
- Buyback & Drop-Off Tons;

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- South Bay Internal Tons; and
- Non-Franchised Tons.

**Non-Self-Haul Tons**

With the exception of self-haul tons (other than self-haul C&D and inerts) which are not weighed, all of SBR’s reported line item tonnages for each of the above major categories of Inbound Tons are weighed and recorded in the monthly PC Scales data input sheet (Attachment AA – Data Entry Form 1 from PCS) that supports SBR’s Monthly Inbound Tons Report. The line item tonnages listed in the Monthly Inbound Reports are electronically linked to Attachment AA. The data in Attachment AA is manually inputted largely from reports generated from the PC Scales data base.

Findings:

To verify the accuracy of the reported input tonnages R3:

- ✓ Tied the data reported on Attachment AA for that same sample month to the supporting PC Scales generated reports and other supporting documents, without exception.

**Self-Haul Tons**

Inbound self-haul tons are calculated by subtracting the Total MSW Inbound Tons from the Total MSW Outbound Tons (Attachment AB) (e.g., in December 2016 there was total of 17,873.56 outbound tons MSW and 15,786.07 tons of inbound MSW recorded in the PC Scales system, the difference of which (2,087.49 tons) is assumed to be the tonnage associated with self-haul material entering the facility, which was recorded on a volume (cubic yard basis).

Self-haul PC Scale recorded volumes (cubic yards) for self-haul material are then converted into tons by:

- Calculating the percentage of the total volume of self-haul solid waste associated with each Member Agency (e.g., Atherton had 45 cubic yards of self-haul solid waste recorded in December 2016 out of a total of 4,461.00 total self-haul solid waste yardage or 1.01% of the total self-haul volume of solid waste); and
- Multiplying that percentage by the calculated self-haul tonnage of 2,087.49 tons, (which, for example, in the case of Atherton results in a total of 21.06 tons of self-haul material allocated Atherton for December 2016).

Findings:

- ✓ R3 confirmed the accuracy of the calculated Self-Haul tonnage.

**Review of Inbound Member Agency Tonnage Data**

**Member Agency Vehicles**

Tonnages for inbound Member Agency vehicles are reported on SBR’s Inbound Tons Report for the following five (5) categories:

- Municipal Solid Waste;

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- Recyclables;
- Green/Organics;
- Inert/C&D; and
- Tires

Findings:

- ✓ For a sample month, R3 tied the overall Member Agency reported tonnages for each of the above categories to the PC Scales Data Entry Form (Attachment A of the Monthly Report supporting Excel file). We also tied the tonnage on the PC Scales Data Entry Form to the Member Agency Tonnage Report by Material data download from the PC Scales data base, without exception.

**Transfer Station & Third Party Tonnages**

SBR also reports Transfer Station & Third Party Tonnages for tonnages by Member Agency for the following sources (Attachment 9 Member Agency Tonnage Support):

- Self-Haul Solid Waste;
- MRF Residue;
- Transfer Station & Other Recycling;
- Self-Haul Green Waste; and
- Self-Haul Inert/C&D.

**Self-Haul Solid Waste**

As discussed above, inbound self-haul tons are calculated by subtracting the Total MSW Inbound Tons from the Total MSW Outbound Tons (Attachment AB “Yardage Data by Origin for MSW” of the Monthly Report supporting Excel file).

Findings:

- ✓ R3 tied the reported MSW yards by Member Agency on Attachment AB for a sample month to the supporting PC Scales data base and confirmed the accuracy of the associated conversion of yardage to tons without exception.

**MRF Residue<sup>12</sup>**

MRF residue ties to Attachment AD (“Data Entry Residual Allocation by Origin” of the Monthly Report supporting Excel file), which is generated using Member Agency allocation data provided by Recology in its monthly MIS Report.

Findings:

- ✓ We tied the reported MRF Residue tonnage for a test sample to the supporting PC Scales data base.

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<sup>12</sup> MRF residue from the sort line that goes over the Thayer Belt Scale that is calibrated every shift.

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**Transfer Station & Other Recycling**

This category is comprised of Appliances, Mattresses, Refrigerators and Tires. Transfer Station & Other Recycling is calculated in a manner similar to MSW above, on Attachment AC (“Recycling Origin Information” of the Monthly Report supporting Excel file), which ties directly to PC Scales volume inputs.

Findings:

We tied the reported Transfer Station & Other Recycling tonnage for a test sample to the supporting PC Scales data base.

**Self-Haul Green Waste**

Self-Haul Green Waste is calculated in a manner similar to MSW above on Attachment AC (Self Haul and Yardage Allocation by Origin).

Findings:

- ✓ We tied the reported Self-Haul Green Waste tonnage for a test sample to the supporting PC Scales data base without exception.

**Self-Haul Inert/C&D**

Self-Haul Inert/C&D is calculated in a manner similar to MSW above on Attachment AC (Self Haul and Yardage Allocation by Origin), which ties directly to PC Scales volume inputs.

Findings:

- ✓ We tied the reported Self-Haul Inert/C&D tonnage for a test sample to the supporting PC Scales data base without exception.

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## Section 7. Review of SBR Liquidated Damages

The objectives of this task were to:

- Verify Liquidated Damages payments have been properly calculated in accordance with the Operating Agreement and tie to the reported events; and
- Verify and explain SBR's procedures to identify and report events which would trigger Liquidated Damages.

### Review of Liquidated Damages Payments

#### Background

Attachment 10 of SBR's operating agreement specifies the following Liquidated Damage events:

- Failure to meet Vehicle Turnaround Guarantee;
- Failure to receive vehicles during Operating Hours;
- Failure to remedy a litter complaint within 5 hours of notification;
- Failure to provide excellent customer service;
- Timeliness of submission of reports to RethinkWaste;
- Failure to make records available upon request; and
- Failure to notify RethinkWaste of intent to use subcontractors.

Attachment 10 of SBR's 2016 Quarterly and Annual Reports included no reported instance of service issues that would trigger the payment of Liquidated Damages.

#### Findings:

- ✓ We verified that the Liquidated Damage amounts reported in Attachment 10 of its December Monthly Reported tied to those listed in Attachment 10 of its Operating Agreement.
- ✓ In addition, while SBR reported no Liquidated Damages associated with "Failure to Meet Vehicle Turnaround Guarantees," we noted that it has not actively tracked the data that would support that finding (see Review of Liquidated Damage Reporting Procedures on the following page).

**Recommended Adjustment** – None.

R3

Section 7

Review of  
SBR  
Liquidated  
Damages

## Review of Liquidated Damage Reporting Procedures

As part of our review of SBR's Liquidated Damages, R3 met with SBR management staff and RethinkWaste's Facility Operations Contract Manager. SBR reported among other things that, while it has the capabilities to track various data related to Liquidated Damages (e.g., Vehicle Turnaround Guarantee), that data is not actively tracked. RethinkWaste's Facilities Operations Contract Manager reported that RethinkWaste was aware of the fact that the data was not actively being tracked but also reported that RethinkWaste is not aware of any issues related to those items for which Liquidated Damages apply. The Facility Operations Contract Manager also reported that should RethinkWaste become aware of any potential issues in the future it would require SBR to actively track any associated data for purposes of assessing compliance.

R3

## Section 8. Status of Prior Year's Recommendations

This section includes a consolidated list of the recommendations included throughout this report:

### Sections 1 – 3

*No recommendations*

### Section 4: Review of Recology Reported Customer Service Data

Status of  
Prior Year's  
Recommendations

**Recommendation #1** – Request that Recology explain the cause of the R3's observed differences in customer service data accuracy between the first and second half of calendar year 2015 (i.e., explain the increased accuracy in the second half of 2015 as compared to the first half). Understanding the cause of this change may help to identify successful methods for improving the quality of reported data going forward.

Recommendations were provided to Recology in the Annual Report Audit published July of 2016. Recology made changes to accommodate this request that took effect starting with the June 2016 monthly report (completed in July). The data used to create M2 Ticket Summary in the first half of 2016 came from a summary TQR4 report of ticket data. For the June 2016 Monthly Report and thereafter, Recology did prepare monthly report data as recommended by R3.

**Recommendation #2** – Recology's Dispatch Supervisors should continue to review all Supervisor tickets weekly to ensure that procedures are being followed and tickets are being closed with detailed resolutions. "Attention Operations" and "Reminder to Service" and any other similarly coded tickets should be reviewed weekly by the Route Supervisors to ensure they were coded correctly as missed pick-up complaints or as items subject to liquidated damages. **[A similar recommendation was also presented as part of our 2013 and 2014 Reviews.]**

Recology continues to follow procedures to help ensure that the correct tickets are entered and reported.

R3

## Section 8

## Sections 5 – 7

*No recommendations*

Status of  
Prior Year's  
Recommendations

## General Recommendations

**Recommendation #3** – Going forward, as part of their Annual Reports, Recology and SBR should provide RethinkWaste with an electronic data package that includes all necessary information to complete an audit such as the one represented by this report. Specifically, that data should include:

- **Recology:** TQR4 Reports, Missed Pickup Reports, and Web Ticket data for all 12 months; Phone Stat files for all 12 months; Supporting spreadsheets for annual report tables (M1a, M1b, M1c, M1d, etc.), including all Liquidated Damage and Incentive/Disincentive calculations; Split Tables; Monthly Query Data Files for all 12 months; and biannual contamination sampling results.
- **SBR:** Electronic copies (i.e., Excel spreadsheets) of all monthly, quarterly, and annual reports; Attachments AA, AB, AC and AD; supporting PC Scales Reports; A – Inbound Tonnage Reports; B – Outbound Tonnage Reports; C – Mass Balance; D – Self-Haul Reconciliation; and SBR – Monthly Reporting Summary.

Per Recology, the data used to produce M2 was not provided to the SBWMA and was not requested until the announcement of the audit. All files were ready and provided promptly when notified of the audit. Spreadsheets with the report table information (M1a, M1b, M1c, M1d, etc.) and liquidated damages and incentive/disincentive calculations are provided to the SBWMA on a monthly/quarterly basis. Biannual contamination sampling results are provided to the SBWMA by the firm conducting the sampling.

R3

## Section 9. Current Year Recommendations

This section includes a consolidated list of the recommendations included throughout this report:

### Sections 1 – 3

*No recommendations*

### Section 4: Review of Recology Reported Customer Service Data

**Recommendation #1** – Recology’s Dispatch Supervisors should continue to review all Supervisor tickets weekly to ensure that procedures are being followed and tickets are being closed with detailed resolutions. “Attention Operations” and “Reminder to Service” and any other similarly coded tickets should be reviewed weekly by the Route Supervisors to ensure they were coded correctly as missed pick-up complaints or as items subject to liquidated damages. ***[A similar recommendation was also presented as part of our 2013, 2014, and 2015 Reviews.]***

### Sections 5 – 7

*No recommendations*

*(General Recommendations continued on next page)*

R3

Section 9

## General Recommendations

Current Year  
Recommendations

**Recommendation #2** – Recology and SBR should provide RethinkWaste with an electronic data package that includes the following information which is necessary to complete the audit. This data package should be provided by March 1<sup>st</sup> of each year:

- **Recology:** TQR4 Reports, Missed Pickup Reports, and Web Ticket data for all 12 months; Phone Stat files for all 12 months; Supporting spreadsheets for annual report tables (M1a, M1b, M1c, M1d, etc.), including all Liquidated Damage and Incentive/Disincentive calculations; Split Tables; Monthly Query Data Files for all 12 months; and biannual contamination sampling results.
- **SBR:** Electronic copies (i.e., Excel spreadsheets) of all monthly, quarterly, and annual reports; Attachments AA, AB, AC and AD; supporting PC Scales Reports; A – Inbound Tonnage Reports; B – Outbound Tonnage Reports; C – Mass Balance; D – Self-Haul Reconciliation; and SBR – Monthly Reporting Summary.

*[A similar recommendation was also presented as part of our 2015 Review.]*

R3