

November 18, 2016

Authority Staff
 South Lake Tahoe Basin Waste Management Authority
 1901 Airport Road
 South Lake Tahoe, CA 96150

Subject: 2017 Interim Year Rate Review of South Tahoe Refuse Company

Crowe Horwath (Crowe) has completed its review of South Tahoe Refuse Company Inc.'s (STR) 2017 Interim Year Rate Application (Application). The South Lake Tahoe Basin Waste Management Authority (JPA) contracted with Crowe to conduct a review of the Application and to provide recommendations for changes in refuse collection rates effective January 1, 2017. This letter report documents results of our review, and is organized as follows:

- A. Summary
- B. Background of Review
- C. Scope of Review
- D. Analysis and Recommendation

There are three (3) attachments to this report.

A. Summary

Crowe recommends a rate increase of 1.62 percent for the City of South Lake Tahoe and El Dorado County and 1.59 percent for Douglas County, effective January 1, 2017. Current and recommended residential rates, for selected service levels, are shown in **Table 1** below. The complete recommended residential rate structure is provided in **Attachment A** of this report.

Table 1
South Tahoe Refuse
Residential Rates with a 1.62 Percent Rate Increase for the City of South Lake Tahoe and El Dorado County
and a 1.59 Percent Rate Increase for Douglas County
(Interim Year 2017)

Service Level	Current Rate (Per Customer, Per Month)	Crowe Recommended Rate (Per Customer, Per Month, with the Recommended Increase)	Crowe Recommended Rate Increase (Per Customer, Per Month)
City of South Lake Tahoe			
Unlimited Service	\$26.13	\$26.55	\$0.42
Douglas county			
1, 32-gallon can	\$17.44	\$17.72	\$0.28
El Dorado County			
Unlimited Service	\$29.98	\$30.46	\$0.49

B. Background of Review

The JPA is a joint powers authority comprised of the City of South Lake Tahoe, California; Douglas County, Nevada; and El Dorado County, California (Member Agencies). The JPA is responsible for overseeing regional cooperation regarding solid waste, and coordinating solid waste program planning and reporting for these Member Agencies.

STR is the franchise hauler for the three (3) jurisdictions. STR provides exclusive refuse collection, recycling, and transfer station operations to Member Agencies in accordance with separate franchise agreements.

JPA rate setting is guided by the JPA's 2012 *Solid Waste Rate Setting Policies and Procedures Manual* (Manual). The Manual allows STR to submit an interim year rate application for the rate year 2017. Our review was conducted consistent with Step 2 in Section 3 of the Manual.¹

Rate setting has generally followed an approximately three year cycle with the prior base year rate review completed for rate year 2015. The JPA and STR followed the interim year rate setting process in Section 3 of the Manual for interim years 2013, 2014 and 2016. Recently approved rate changes include:

- 2014 – 2.78 percent rate increase (City of South Lake Tahoe and El Dorado County) and 2.73 percent rate increase (Douglas County) – interim year.
- 2015 – 2.88 percent rate increase (City of South Lake Tahoe and El Dorado County) and 2.66 percent rate increase (Douglas County) – base year.
- 2016 – No rate increase (City of South Lake Tahoe, El Dorado County and Douglas County) – interim year.

Table 2
South Tahoe Refuse
Selected Residential Rates
(2014 to 2016)

Service Level	2014	2015	2016
City of South Lake Tahoe			
Unlimited Service	\$25.40	\$26.13	\$26.13
Douglas county			
1, 32-gallon can	\$16.95	\$17.44	\$17.44
El Dorado County			
Unlimited Service	\$29.20	\$29.98	\$29.98

On August 26, 2016, STR submitted its Application to the JPA for rate year 2017. **Attachment B** includes a copy of the Application. The interim year application process requires STR to project one component of the rate, the projected change in landfill disposal costs. In accordance with the Manual, the JPA then determines the remaining portion of the rate change which is based on the applicable Consumer Price Index (CPI). As shown in Attachment B, STR projected that landfill disposal costs will increase by 8.70 percent in 2017.

The 8.70 percent requested disposal cost increase was driven by a projected increase in landfill tipping fee rates as well as a planned shift toward less use of the Lockwood Landfill (Lockwood) and greater use of the Carson City Landfill (Carson City) for JPA disposal. We relied on STR internally prepared financial information and operational data for rate years 2016 (estimated) and 2017 (projected), and additional information and data Crowe requested during the rate review process. This review does not constitute an audit of STR financial information.

¹ The JPA allows for the franchise hauler to submit an interim year rate application in each of the "interim" two (2) years between "base" years, should the franchised hauler want to request an increase rates.

C. Scope of Review

Our scope of services included the following tasks:

- Identify applicable Consumer Price Index (U.S. Garbage and Trash, (CUUR0000SEHG02)
- Request additional data and clarification from STR
- Complete interim year rate change worksheet and determine new rates
- Prepare draft report
- Receive comments from the JPA and STR
- Prepare final report.

For this rate review and evaluation, we performed the following tasks:

- Assessed if the Application was mathematically accurate and logically consistent
- Verified that the Application complied with the terms and conditions of the Manual
- Assessed supporting data, worksheets, and documentation
- Obtained and reviewed support for the assumptions used to project 2016 and 2017 tonnage and tipping fees
- Prepared draft and final reports
- Participated in JPA and Member Agency preparation and meeting(s), if required.

Crowe submitted a data request to STR on November 2, 2016. STR was cooperative and provided timely responses to our data request. STR furnished the information requested.

D. Analysis and Recommendation

In its Application, STR projected increases in disposal costs of 8.70 percent driven by a contractually obligated 3.00 percent increase in tipping fee rates at Lockwood (see letter from Lockwood included with Application) and a shift in tonnage from Lockwood to Carson City following STR signing a new contract with Carson City. According to STR, the new contract with Carson City results in several operational efficiencies listed below:

- Carson City is geographically closer than Lockwood and allows for additional material to be hauled in the same timeframe alleviating excess build up during high demand seasons or if equipment is down. In addition, the location of Carson City is beneficial during times of inclement weather.
- Carson City is open on Saturday, while Lockwood is not, providing an additional day to divert excess loads during busy seasons.
- Carson City does not charge for disposal of Alternative Daily Cover (ADC) material. In contrast, Lockwood has increased the per ton fee to dispose of ADC by 76 percent between 2012 (\$6.40) and 2016 (\$11.29).

STR also projected a moderate overall increase in JPA disposal tonnage (359 tons) based on recent improvements in the economy. MSW tonnage is projected to increase by 225 tons or 0.5 percent, C&D tonnage to increase by 64 tons or 3.8 percent, and ADC tonnage to increase 70 tons or 0.5 percent. STR provided sufficient evidence to support this projected 359 ton increase in landfill disposal.

Due to the complexity of determining impacts of the shift of greater use of Carson City versus Lockwood which began in April 2016, Crowe did not allow for requested increases in disposal costs solely attributable to this discretionary shift in use of disposal facilities. Assessing this operational change is complex and goes beyond the intent of the interim year process. For example, the interim year process does not consider whether, or to what degree, STR benefits from long haul transportation efficiency gains, and reduced overall operational costs, as a result of shorter travel distances to Carson City.

Consequently, Crowe requested STR to furnish 2017 landfill disposal cost changes based on the conditions in place prior to STR's shift toward greater use of Carson City. STR provided a calculation that supports a 3.49 percent increase in disposal costs as opposed to the 8.70 percent increase originally

requested in the Application (see the calculation below). Crowe recommends that the JPA use this 3.49 percent disposal cost escalation figure in the interim year worksheet (see line 16 of the worksheet in **Attachment C**) and that the JPA and STR conduct a more thorough analyses of the total impacts of this disposal facility change during the next base year schedule for 2018. Note that for purposes of the interim year calculation, landfill disposal costs represent just over 7 percent of all STR costs (see line 6 of the worksheet in Attachment C).

Change in Landfill Disposal Costs			Lockwood	Carson City	Total
1.		Prior Year Landfill Tipping Fees Per Ton (rounded)	\$ 16.65	\$ 3.54	\$ 14.18
2.	<i>Multiplied by:</i>	Prior Year Landfill Tons	49,189.61	11,428.28	60,617.89
		Add Adjustment for Rounding	\$ -	\$ -	\$ (98.56)
3.	<i>Equals:</i>	Total Prior Year Landfill Disposal Costs	\$ 819,007.01	\$ 40,456.11	\$ 859,463.12
4.		Projected Interim Year Landfill Tipping Fees Per Ton	\$ 17.15	\$ 3.63	\$ 14.59
5.	<i>Multiplied by:</i>	Projected Interim Year Landfill Tons	49,414.52	11,561.64	60,976.16
		Add Adjustment for Rounding	-	-	\$ (214.40)
6.	<i>Equals:</i>	Total Projected Interim Year Landfill Disposal Costs	\$ 847,459.02	\$ 41,968.75	\$ 889,427.77
7.		Projected Change In Landfill Disposal Costs	3.47%	3.74%	3.49%

The applicable change in June 2015 to June 2016 U.S. Garbage and Trash CPI (index reference: CUUR0000SEHG02) for this interim year was 1.64 percent. The index changed from 430.813 to 437.858. The Manual calls for use of 85% of the index for non-landfill disposal costs (see line 9 of the worksheet in Attachment C). Note that this change in CPI is applied to the remaining 93 percent of STR costs (see reference on line 5 of the worksheet in Attachment C).

As a result of Crowe's review of the Application, and based on the calculations provided in the interim year worksheet in Attachment C, Crowe recommends a 2017 interim year rate increase of 1.62 percent for the City of South Lake Tahoe and El Dorado County, and a 1.59 percent interim year rate increase for Douglas County.

* * * * *

If you have any questions regarding this rate review, or any of the contents of this letter report, please do not hesitate to contact Erik Nylund at (415) 230-4963.

Attachment A
Recommended Residential Rate Structure

Rate Schedule		Current Base Rate	Surcharges	Total Current Rate	Rate Adjustment	New Base Rate	New Rate (including surcharge)
(per customer, per month)							
City of South Lake Tahoe							
2.1.	Unlimited service	\$ 26.13	\$ 0.90	\$ 27.03	\$ 1.32	\$ 26.55	\$ 27.45
2.2.	Mandated pickup per 32-gallon can/bag	\$ 5.58	\$ -	\$ 5.58	\$ 0.09	\$ 5.67	\$ 5.67
2.3.	Mandated pickup per cubic yard	\$ 37.35	\$ -	\$ 37.35	\$ 0.61	\$ 37.96	\$ 37.96
2.4.	Qualified senior rate	\$ 22.20	\$ 0.90	\$ 23.10	\$ 1.26	\$ 22.56	\$ 23.46
2.5.	House service - 1 can	\$ 29.93	\$ 0.90	\$ 30.83	\$ 1.38	\$ 30.41	\$ 31.31
2.6.	House service - 2 cans	\$ 33.73	\$ 0.90	\$ 34.63	\$ 1.45	\$ 34.28	\$ 35.18
2.7.	House service - 3 cans	\$ 37.53	\$ 0.90	\$ 38.43	\$ 1.51	\$ 38.14	\$ 39.04
2.8.	Residential - All other services	\$ -			\$ -		\$ -
Douglas County							
3.1.	1, 32-gallon can	\$ 17.44			\$ 0.28		\$ 17.72
3.2.	2, 32-gallon cans	\$ 33.58			\$ 0.53		\$ 34.11
3.3.	3, 32-gallon cans	\$ 51.21			\$ 0.81		\$ 52.03
3.4.	4, 32-gallon cans	\$ 67.35			\$ 1.07		\$ 68.42
3.5.	One extra 32-gallon can (also the seasonal service rate)	\$ 4.38			\$ 0.07		\$ 4.45
3.6.	On-call 32-gallon can billed monthly/arrears	\$ -			\$ -		\$ -
3.7.	Per cubic yard	\$ 28.18			\$ 0.45		\$ 28.63
3.8.	1, 45-gallon can	\$ 21.15			\$ 0.34		\$ 21.49
3.9.	2, 45-gallon cans	\$ 40.66			\$ 0.65		\$ 41.30
3.10.	3, 45-gallon cans	\$ 61.96			\$ 0.99		\$ 62.95
3.11.	One extra 45-gallon can (also the seasonal service rate)	\$ 5.33			\$ 0.08		\$ 5.41
3.12.	On-call 45-gallon can billed monthly/arrears	\$ -			\$ -		\$ -
3.13.	Residential - All other services	\$ 80.46			\$ 1.28		\$ 81.74
El Dorado County							
4.1.	Unlimited service	\$ 29.98			\$ 0.49		\$ 30.46
4.2.	Mandated pickup per 32-gallon can/bag	\$ 6.28			\$ 0.10		\$ 6.38
4.3.	Mandated pickup per cubic yard	\$ 35.95			\$ 0.58		\$ 36.53
4.4.	Qualified senior rate	\$ 26.58			\$ 0.43		\$ 27.01
4.5.	House service per can	\$ 3.80			\$ 0.06		\$ 3.86
4.6.	Residential - All other services	\$ -			\$ -		\$ -

Attachment B
2017 Interim Year Rate Application

Interim Year Rate Application

		Lockwood	Carson City	Total
Change in Landfill Disposal Costs				
1.				
	Prior Year Landfill Tipping Fees Per Ton (rounded)	\$ 16.79	\$ 6.03	\$ 14.20
2.	<i>Multiplied by:</i> Prior Year Landfill Tons	46,040.38	14,577.51	60,617.89
	Add Adjustment for Rounding	\$ -	\$ -	\$ 146.33
3.	<i>Equals:</i> Total Prior Year Landfill Disposal Costs	\$ 773,017.98	\$ 87,902.39	\$ 860,920.37
4.				
	Projected Interim Year Landfill Tipping Fees Per Ton	\$ 17.76	\$ 12.91	\$ 15.35
5.	<i>Multiplied by:</i> Projected Interim Year Landfill Tons	30,638.04	30,338.12	60,976.16
	Add Adjustment for Rounding	-	-	\$ (187.34)
6.	<i>Equals:</i> Total Projected Interim Year Landfill Disposal Costs	\$ 644,131.58	\$ 391,665.13	\$ 935,796.72
7.				
	Projected Change in Landfill Disposal Costs	-20.6%	345.6%	8.7%

Provide an explanation of any changes in landfill disposal costs (i.e., landfill tipping fees paid by the franchise hauler, landfill tonnage). Attach supporting documentation to this application as appropriate.

- Effective March 3, 2016, STR entered into a 10-year agreement with Carson City which qualifies STR for reduced, in-county pricing at the Carson City Landfill. Access to the Carson City Landfill provides STR operational savings and efficiencies. The projected interim year landfill tons reflect a partial shift in tonnage from the Lockwood Landfill to the Carson City Landfill.
- Prior year Lockwood and Carson tipping fee per ton have been calculated using a weighted-average rate for MSW, C&D and ADC. See attached tipping fee increase letter effective April 1, 2016. Also see attached tonnage detail schedule for more information.
- Projected interim year tipping fee per ton for Lockwood was calculated based on a minimum 3.00% increase consistent with section IV(b) of the Lockwood agreement. The projected interim year tipping fee per ton for Carson is calculated based on current contract rates in effect which are fixed and will not increase for the first five years of the contract.
- Tonnage increase of 358 tons is projected based on recent economic improvements. Disposal cost increase is due to higher cost per ton disposal fee at the Lockwood Landfill and more MSW tons disposed of at the Carson City Landfill.

Enclosures:
- FYE 2017 Tonnage Detail
- Lockwood Tipping Fee Increase Letter

Section III--Certification

To the best of my knowledge, the data and information in this application is complete, accurate, and consistent with the instructions provided by the South Lake Tahoe Basin Waste Management Authority

Name: Jeffery R. Tillman

Title: President

Signature:



Date:

8/26/16

SLT Authority Staff
November 18, 2016

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Attachment B
2017 Interim Year Rate Application (continued)



WASTE MANAGEMENT
Nevada

Lockwood Regional Landfill
2700 East Mustang Road
Storey County, NV 89434
(775) 343-7372
(775) 342-2328 - Fax

February 26, 2016

Mr. Jeff Tillman
General Manager
South Tahoe Refuse, Inc.
2140 Ruth Avenue
South Lake Tahoe, CA 96150

Subject: Increase to MSW Disposal Rate at Lockwood Regional Landfill

Dear Jeff:

We have contacted the Bureau of Labor Statistics and obtained the percentage change in the Consumer Price Index-U.S. City Average-Garbage and Trash Collection for the annual period of January 1, 2015 to January 1, 2016. Per the Bureau of Labor Statistics, the annual percentage change in the Consumer Price Index increased 2.21% during this period.

Accordingly, pursuant to Section IV (b) of the agreement, the increase to disposal rates, which the company will put into effect as of April 1, 2016, will be the 3.00% minimum. Your rate will go up to \$17.55 per ton from the current rate of \$17.04 per ton.

Please call me at 775-343-7372 if you have any questions.

Sincerely,



Chris Anderson
Waste Management

cc: Dan Peterson
Greg Martinelli
Maria Davis

THINK GREEN!

Consumer Price Index - All Urban Consumers

Series Id: CUUR0000SEHG02
 Not Seasonally Adjusted
 Area: U.S. city average
 Item: Garbage and trash collection
 Base Period: DECEMBER 1983=100

Jan-15	427.734
Jan-16	437.205
Change	9.471
Pct. Change	2.21%

Download:

xlsx

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	HALF1	HALF2
2006	323	324.6	325.3	326.8	327.3	328.8	329.6	331.9	334.3	335.9	336.9	337.2		
2007	340.087	340.898	342.033	343.286	343.198	343.836	345.081	347.168	347.949	348.684	351.136	353.439		
2008	356.901	358.059	358.55	359.586	361.533	363.159	366.043	368.96	369.651	371.155	371.648	371.093		
2009	371.828	372.503	373.241	375.392	375.599	376.582	377.494	377.879	378.285	379.56	379.208	379.248		
2010	380.036	382.49	383.362	383.615	383.405	383.749	383.832	385.01	385.92	385.909	387.216	387.884		
2011	389.727	391.854	391.855	392.754	395.477	395.329	395.723	396.605	397.028	397.106	398.91	398.72		
2012	398.88	400.381	401.692	400.913	401.067	402.793	406.243	406.823	407.594	409.495	410.155	410.416		
2013	411.126	411.805	412.305	413.675	414.511	414.802	416.505	417.76	418.357	419.687	421.427	422.237		
2014	422.44	422.483	423.413	425.393	425.242	425.93	426.562	426.771	427.327	427.995	427.808	428.187		
2015	427.734	429.248	429.235	429.807	431.234	430.813	431.229	432.967	433.843	434.829	436.428	436.996		
2016	437.205													

Attachment B
2017 Interim Year Rate Application (continued)

STR
Landfill Tipping Fees and Tonnage

	ACTUAL				ACTUAL				ACTUAL			
	Lockwood Landfill (7/1/15 - 6/30/16)				Carson City Landfill (7/1/15 - 6/30/16)				TOTAL (7/1/15 - 6/30/16)			
	Tons	Tip Fee \$	Rate per Ton		Tons	Tip Fee \$	Rate per Ton		Tons	Tip Fee \$	Rate per Ton	
MSW	42,733.90	\$ 732,959.54	\$ 17.15		2,248.25	\$ 53,958.00	\$ 24.00		44,982.15	\$ 786,917.54	\$ 17.49	
C&D	-	\$ -	\$ -		1,417.29	\$ 34,014.96	\$ 24.00		1,417.29	\$ 34,014.96	\$ 24.00	
C&D as ADC	269.10	\$ 6,068.22	\$ 22.55		-	\$ -	\$ -		269.10	\$ 6,068.22	\$ 22.55	
ADC	3,037.38	\$ 34,155.13	\$ 11.24		10,911.97	\$ -	\$ -		13,949.35	\$ 34,155.13	\$ 2.45	
Total	46,040.38	773,182.89	\$ 16.79		14,577.51	\$ 87,972.96	\$ 6.03		60,617.89	\$ 861,155.85	\$ 14.21	

	PROJECTED				PROJECTED				PROJECTED			
	Lockwood Landfill (7/1/16 - 6/30/17)				Carson City Landfill (7/1/16 - 6/30/17)				TOTAL (7/1/16 - 6/30/17)			
	Tons	Tip Fee \$	Rate per Ton		Tons	Tip Fee \$	Rate per Ton		Tons	Tip Fee \$	Rate per Ton	
MSW	30,138.04	\$ 532,889.53	\$ 17.68		15,069.02	\$ 361,656.49	\$ 24.00		45,207.06	\$ 894,546.02	\$ 19.79	
C&D	-	\$ -	\$ -		1,250.00	\$ 30,000.00	\$ 24.00		1,250.00	\$ 30,000.00	\$ 24.00	
C&D as ADC	500.00	\$ 11,275.00	\$ 22.55		-	\$ -	\$ -		500.00	\$ 11,275.00	\$ 22.55	
ADC	-	\$ -	\$ -		14,019.10	\$ -	\$ -		14,019.10	\$ -	\$ -	
Total	30,638.04	\$ 544,164.53	\$ 17.76		30,338.12	\$ 391,656.49	\$ 12.91		60,976.16	\$ 935,821.02	\$ 15.35	

	Increase (decrease)	358.27	\$ 74,665.17	8.7%
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Attachment C
Interim Year Worksheet

Interim Year Rate Change Worksheet

Financial Information

Section I--Base Year Costs			
Base Year Operating Costs (Other Than Landfill Disposal)			
1.	Total Allowable Operating Costs	\$ 12,864,308	
2.	Plus: Allowable Operating Profit	1,851,259	
3.	Plus: Total Pass Through Costs	702,038	
4.	Minus: Landfill Disposal Costs	1,083,005	
5.	Equals: Total Operating Costs (Other Than Landfill Disposal)	\$ 14,334,600	92.98%
Base Year Landfill Disposal Costs			
6.	Total Landfill Disposal Costs	\$ 1,083,005	7.02%
7.	Base Year Revenue Requirement	\$ 15,417,605	100.00%
Section II--Changes in Costs			
Change in Operating Costs (Other Than Landfill Disposal)			
8.	Projected Change in Consumer Price Index		1.64%
9.	Projected 85 Percent Change in Consumer Price Index		1.39%
Change in Landfill Disposal Costs			
10.	Prior Year Total Landfill Tipping Fees Per Ton	\$ 14.18	
11.	Multiplied by: Prior Year Total Landfill Tons	\$ 60,617.89	
12.	Equals: Total Prior Year Total Landfill Disposal Costs	\$ 859,463.12	
13.	Projected Interim Year Total Landfill Tipping Fees Per Ton	\$ 14.59	
14.	Multiplied by: Projected Interim Year Total Landfill Tons	\$ 60,976.16	
15.	Equals: Total Projected Interim Year Total Landfill Disposal Costs	\$ 889,427.77	
16.	Projected Change In Total Landfill Disposal Costs		3.49%
Section III--Calculation of Percent Change in Rates			
Weighted Change in Operating Costs (Other Than Landfill Disposal)			
17.	Operating Costs as % of Base Yr. Revenue Requirement		92.98%
18.	Multiplied by: Projected 85 Percent Change in Consumer Price Index		1.39%
19.	Equals: Weighted Change in Operating Costs		1.29%
Weighted Change in Total Landfill Disposal Costs			
20.	Total Landfill Disposal Costs as % of Base Yr. Revenue Requirement		7.02%
21.	Multiplied by: Projected Change in Total Landfill Disposal Costs		3.49%
22.	Equals: Weighted Change in Total Landfill Disposal Costs		0.25%
Total Change			
23.	Total Percent Change in Costs		1.54%
24.	Divided by: Adjustment for Franchise Fee (100% - 5%)		95.00%
25.	Equals: Percent Change in Existing Rates (City of South Lake Tahoe and El Dorado County)		1.62%
26.	Total Percent Change in Costs		1.54%
27.	Divided by: Adjustment for Franchise Fee (100% - 3%)		97.00%
28.	Equals: Percent Change in Existing Rates (Douglas County)		1.59%

Year:

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