
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

(Mark One)

- ☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended June 30, 2019
- Or**
- ☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from
to

Commission file number 1-34370



WASTE CONNECTIONS, INC.

(Exact name of registrant as specified in its charter)

Ontario , Canada

(State or other jurisdiction of incorporation or organization)

98-1202763

(I.R.S. Employer Identification No.)

610 Applewood Crescent, 2nd Floor

Vaughan

Ontario L4K 0E3

Canada

(Address of principal executive offices)

(905) 532-7510

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, no par value	WCN	New York Stock Exchange ("NYSE") Toronto Stock Exchange ("TSX")

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports); and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

☒ Large Accelerated
Filer

☐ Accelerated
Filer

☐ Non-accelerated
Filer

☐ Smaller Reporting
Company

☐ Emerging Growth
Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

Indicate the number of shares outstanding of each of the issuer's classes of common shares:

As of July 19, 2019: 263,666,142 common shares

WASTE CONNECTIONS, INC.
FORM 10-Q

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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

WASTE CONNECTIONS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)
(In thousands of U.S. dollars, except share and per share amounts)

	June 30, 2019	December 31, 2018
ASSETS		
Current assets:		
Cash and equivalents	\$ 209,209	\$ 319,305
Accounts receivable, net of allowance for doubtful accounts of \$14,029 and \$16,760 at June 30, 2019 and December 31, 2018, respectively	663,931	609,545
Prepaid expenses and other current assets	117,454	164,053
Total current assets	990,594	1,092,903
Restricted cash	84,527	84,661
Restricted investments	54,515	47,486
Property and equipment, net	5,318,196	5,168,996
Operating lease right-of-use assets	194,361	—
Goodwill	5,316,670	5,031,685
Intangible assets, net	1,124,107	1,128,628
Other assets, net	62,802	72,970
Total assets	\$ 13,145,772	\$ 12,627,329
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	\$ 408,229	\$ 359,967
Book overdraft	17,984	18,518
Accrued liabilities	274,478	289,544
Current portion of operating lease liabilities	30,255	—
Current portion of contingent consideration	11,773	11,612
Deferred revenue	199,401	179,282
Current portion of long-term debt and notes payable	798	1,786
Total current liabilities	942,918	860,709
Long-term debt and notes payable	4,082,876	4,153,465
Long-term portion of operating lease liabilities	170,829	—
Long-term portion of contingent consideration	45,227	43,003
Deferred income taxes	783,609	760,033
Other long-term liabilities	412,508	349,931
Total liabilities	6,437,967	6,167,141
Commitments and contingencies (Note 18)		
Equity:		
Common shares: 263,686,518 shares issued and 263,601,239 shares outstanding at June 30, 2019; 263,271,302 shares issued and 263,141,413 shares outstanding at December 31, 2018	4,135,002	4,131,307
Additional paid-in capital	138,194	133,577
Accumulated other comprehensive loss	(23,487)	(74,786)
Treasury shares: 85,279 and 129,889 shares at June 30, 2019 and December 31, 2018, respectively	—	—
Retained earnings	2,452,687	2,264,510
Total Waste Connections' equity	6,702,396	6,454,608
Noncontrolling interest in subsidiaries	5,409	5,580
Total equity	6,707,805	6,460,188
	\$ 13,145,772	\$ 12,627,329

The accompanying notes are an integral part of these condensed consolidated financial statements.

WASTE CONNECTIONS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF NET INCOME
(Unaudited)
(In thousands of U.S. dollars, except share and per share amounts)

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Revenues	\$ 1,369,639	\$ 1,239,968	\$ 2,614,275	\$ 2,380,099
Operating expenses:				
Cost of operations	815,819	725,022	1,549,508	1,384,825
Selling, general and administrative	139,664	128,261	272,249	259,568
Depreciation	156,776	142,450	303,623	275,634
Amortization of intangibles	31,344	26,474	61,886	52,573
Impairments and other operating items	3,902	7,073	20,014	8,104
Operating income	222,134	210,688	406,995	399,395
Interest expense	(37,245)	(32,426)	(74,533)	(64,796)
Interest income	1,818	1,056	5,129	2,210
Other income, net	805	2,031	3,363	1,644
Foreign currency transaction gain (loss)	1,115	30	1,218	(190)
Income before income tax provision	188,627	181,379	342,172	338,263
Income tax provision	(39,788)	(42,565)	(67,756)	(74,417)
Net income	148,839	138,814	274,416	263,846
Plus (less): Net loss (income) attributable to noncontrolling interests	9	(132)	54	(295)
Net income attributable to Waste Connections	\$ 148,848	\$ 138,682	\$ 274,470	\$ 263,551
Earnings per common share attributable to Waste Connections' common shareholders:				
Basic	\$ 0.56	\$ 0.53	\$ 1.04	\$ 1.00
Diluted	\$ 0.56	\$ 0.52	\$ 1.04	\$ 1.00
Shares used in the per share calculations:				
Basic	263,846,970	263,691,172	263,725,867	263,757,179
Diluted	264,494,943	264,332,029	264,416,610	264,452,785
Cash dividends per common share	\$ 0.16	\$ 0.14	\$ 0.32	\$ 0.28

The accompanying notes are an integral part of these condensed consolidated financial statements.

WASTE CONNECTIONS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)
(In thousands of U.S. dollars)

	<u>Three months ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
Net income	\$ 148,839	\$ 138,814	\$ 274,416	\$ 263,846
Other comprehensive income (loss), before tax:				
Interest rate swap amounts reclassified into interest expense	(2,472)	(1,273)	(4,944)	(1,872)
Fuel hedge amounts reclassified into cost of operations	—	(1,688)	—	(2,837)
Changes in fair value of interest rate swaps	(25,615)	3,196	(41,336)	14,965
Changes in fair value of fuel hedges	—	2,045	—	2,661
Foreign currency translation adjustment	43,135	(43,474)	85,315	(102,804)
Other comprehensive income (loss), before tax	15,048	(41,194)	39,035	(89,887)
Income tax (expense) benefit related to items of other comprehensive income (loss)	7,443	(594)	12,264	(3,420)
Other comprehensive income (loss), net of tax	22,491	(41,788)	51,299	(93,307)
Comprehensive income	171,330	97,026	325,715	170,539
Plus (less): Comprehensive loss (income) attributable to noncontrolling interests	9	(132)	54	(295)
Comprehensive income attributable to Waste Connections	<u>\$ 171,339</u>	<u>\$ 96,894</u>	<u>\$ 325,769</u>	<u>\$ 170,244</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

WASTE CONNECTIONS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF EQUITY

(Unaudited)
(In thousands of U.S. dollars, except share amounts)

	WASTE CONNECTIONS' EQUITY								
	COMMON SHARES		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)	TREASURY SHARES		RETAINED EARNINGS	NONCONTROLLING INTERESTS	TOTAL
	SHARES	AMOUNT			SHARES	AMOUNT			
Balances at December 31, 2018	263,141,413	\$ 4,131,307	\$ 133,577	\$ (74,786)	129,889	\$ —	\$ 2,264,510	\$ 5,580	\$ 6,460,188
Sale of common shares held in trust	43,637	3,610	—	—	(43,637)	—	—	—	3,610
Vesting of restricted share units	400,555	—	—	—	—	—	—	—	—
Vesting of performance-based restricted share units	180,258	—	—	—	—	—	—	—	—
Restricted share units released from deferred compensation plan	15,371	—	—	—	—	—	—	—	—
Tax withholdings related to net share settlements of equity-based compensation	(202,679)	—	(16,974)	—	—	—	—	—	(16,974)
Equity-based compensation	—	—	11,627	—	—	—	—	—	11,627
Exercise of warrants	8,690	—	—	—	—	—	—	—	—
Cash dividends on common shares	—	—	—	—	—	—	(42,084)	—	(42,084)
Amounts reclassified into earnings, net of taxes	—	—	—	(1,817)	—	—	—	—	(1,817)
Changes in fair value of cash flow hedges, net of taxes	—	—	—	(11,555)	—	—	—	—	(11,555)
Foreign currency translation adjustment	—	—	—	42,180	—	—	—	—	42,180
Cumulative effect adjustment from adoption of new accounting pronouncement	—	—	—	—	—	—	(2,078)	—	(2,078)
Net income (loss)	—	—	—	—	—	—	125,622	(45)	125,577
Balances at March 31, 2019	263,587,245	\$ 4,134,917	\$ 128,230	\$ (45,978)	86,252	\$ —	\$ 2,345,970	\$ 5,535	\$ 6,568,674
Sale of common shares held in trust	973	85	—	—	(973)	—	—	—	85
Vesting of restricted share units	6,495	—	—	—	—	—	—	—	—
Tax withholdings related to net share settlements of equity-based compensation	(3,081)	—	(290)	—	—	—	—	—	(290)
Equity-based compensation	—	—	10,254	—	—	—	—	—	10,254
Exercise of warrants	9,607	—	—	—	—	—	—	—	—
Cash dividends on common shares	—	—	—	—	—	—	(42,131)	—	(42,131)
Amounts reclassified into earnings, net of taxes	—	—	—	(1,817)	—	—	—	—	(1,817)
Changes in fair value of cash flow hedges, net of taxes	—	—	—	(18,827)	—	—	—	—	(18,827)
Foreign currency translation adjustment	—	—	—	43,135	—	—	—	—	43,135
Distributions to noncontrolling interests	—	—	—	—	—	—	—	(117)	(117)
Net income (loss)	—	—	—	—	—	—	148,848	(9)	148,839
Balances at June 30, 2019	<u>263,601,239</u>	<u>\$ 4,135,002</u>	<u>\$ 138,194</u>	<u>\$ (23,487)</u>	<u>85,279</u>	<u>\$ —</u>	<u>\$ 2,452,687</u>	<u>\$ 5,409</u>	<u>\$ 6,707,805</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

WASTE CONNECTIONS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF EQUITY

(Unaudited)
(In thousands of U.S. dollars, except share amounts)

	WASTE CONNECTIONS' EQUITY								
	COMMON SHARES		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)	TREASURY SHARES		RETAINED EARNINGS	NONCONTROLLING INTERESTS	TOTAL
	SHARES	AMOUNT			SHARES	AMOUNT			
Balances at December 31, 2017	263,494,670	\$ 4,187,568	\$ 115,743	\$ 108,413	166,133	\$ —	\$ 1,856,946	\$ 5,400	\$ 6,274,070
Sale of common shares held in trust	26,849	1,947	—	—	(26,849)	—	—	—	1,947
Vesting of restricted share units	452,700	—	—	—	—	—	—	—	—
Vesting of performance-based restricted share units	154,181	—	—	—	—	—	—	—	—
Restricted share units released from deferred compensation plan	114	—	—	—	—	—	—	—	—
Tax withholdings related to net share settlements of equity-based compensation	(206,084)	—	(14,121)	—	—	—	—	—	(14,121)
Equity-based compensation	—	—	7,991	—	—	—	—	—	7,991
Repurchase of common shares	(594,474)	(42,040)	—	—	—	—	—	—	(42,040)
Cash dividends on common shares	—	—	—	—	—	—	(36,814)	—	(36,814)
Amounts reclassified into earnings, net of taxes	—	—	—	(1,303)	—	—	—	—	(1,303)
Changes in fair value of cash flow hedges, net of taxes	—	—	—	9,114	—	—	—	—	9,114
Foreign currency translation adjustment	—	—	—	(59,330)	—	—	—	—	(59,330)
Cumulative effect adjustment from adoption of new accounting pronouncement	—	—	—	—	—	—	16,296	—	16,296
Distributions to noncontrolling interests	—	—	—	—	—	—	—	(103)	(103)
Net income	—	—	—	—	—	—	124,869	163	125,032
Balances at March 31, 2018	263,327,956	4,147,475	109,613	56,894	139,284	—	1,961,297	5,460	6,280,739
Sale of common shares held in trust	2,638	199	—	—	(2,638)	—	—	—	199
Vesting of restricted share units	15,723	—	—	—	—	—	—	—	—
Restricted share units released from deferred compensation plan	4,311	—	—	—	—	—	—	—	—
Tax withholdings related to net share settlements of equity-based compensation	(6,173)	—	(468)	—	—	—	—	—	(468)
Equity-based compensation	—	—	8,968	—	—	—	—	—	8,968
Exercise of options and warrants	17,571	—	—	—	—	—	—	—	—
Cash dividends on common shares	—	—	—	—	—	—	(36,770)	—	(36,770)
Amounts reclassified into earnings, net of taxes	—	—	—	(2,204)	—	—	—	—	(2,204)
Changes in fair value of cash flow hedges, net of taxes	—	—	—	3,890	—	—	—	—	3,890
Foreign currency translation adjustment	—	—	—	(43,474)	—	—	—	—	(43,474)
Cumulative effect adjustment from adoption of new accounting pronouncement	—	—	—	—	—	—	(3,053)	—	(3,053)
Net income	—	—	—	—	—	—	138,682	132	138,814
Balances at June 30, 2018	263,362,026	\$ 4,147,674	\$ 118,113	\$ 15,106	136,646	\$ —	\$ 2,060,156	\$ 5,592	\$ 6,346,641

The accompanying notes are an integral part of these condensed consolidated financial statements.

WASTE CONNECTIONS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)
(In thousands of U.S. dollars)

	Six months ended June 30,	
	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	\$ 274,416	\$ 263,846
Adjustments to reconcile net income to net cash provided by operating activities:		
Loss on disposal of assets and impairments	18,924	10,090
Depreciation	303,623	275,634
Amortization of intangibles	61,886	52,573
Amortization of leases	13,183	—
Deferred income taxes, net of acquisitions	18,911	26,399
Amortization of debt issuance costs	2,414	2,081
Share-based compensation	26,763	20,262
Interest accretion	8,143	7,403
Payment of contingent consideration recorded in earnings	—	(11)
Adjustments to contingent consideration	1,466	349
Other	(1,514)	64
Net change in operating assets and liabilities, net of acquisitions	24,833	6,241
Net cash provided by operating activities	<u>753,048</u>	<u>664,931</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Payments for acquisitions, net of cash acquired	(381,422)	(485,519)
Capital expenditures for property and equipment	(253,790)	(201,712)
Proceeds from disposal of assets	1,198	2,074
Change in restricted investments, net of interest income	(6,206)	—
Other	(70)	(77)
Net cash used in investing activities	<u>(640,290)</u>	<u>(685,234)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from long-term debt	1,016,154	165,736
Principal payments on notes payable and long-term debt	(1,134,589)	(338,137)
Payment of contingent consideration recorded at acquisition date	(550)	(4,976)
Change in book overdraft	(534)	(1,132)
Payments for repurchase of common shares	—	(42,040)
Payments for cash dividends	(84,215)	(73,584)
Tax withholdings related to net share settlements of equity-based compensation	(17,264)	(14,589)
Debt issuance costs	(5,838)	(2,757)
Proceeds from sale of common shares held in trust	3,695	2,146
Other	(117)	(103)
Net cash used in financing activities	<u>(223,258)</u>	<u>(309,436)</u>
Effect of exchange rate changes on cash, cash equivalents and restricted cash	<u>270</u>	<u>(915)</u>
Net decrease in cash, cash equivalents and restricted cash	(110,230)	(330,654)
Cash, cash equivalents and restricted cash at beginning of period	403,966	556,467
Plus: change in cash held for sale	—	33
Cash, cash equivalents and restricted cash at end of period	<u>\$ 293,736</u>	<u>\$ 225,846</u>
Non-cash financing activities:		
Liabilities assumed and notes payable issued to sellers of businesses acquired	\$ 105,584	\$ 99,390

The accompanying notes are an integral part of these condensed consolidated financial statements.

WASTE CONNECTIONS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)
(DOLLAR AMOUNTS IN THOUSANDS OF U.S. DOLLARS, EXCEPT PER SHARE, PER TON AND PER GALLON
AMOUNTS)

1. BASIS OF PRESENTATION AND SUMMARY

The accompanying condensed consolidated financial statements relate to Waste Connections, Inc. and its subsidiaries (“WCI” or the “Company”) for the three and six month periods ended June 30, 2019 and 2018. In the opinion of management, the accompanying balance sheets and related interim statements of net income, comprehensive income, cash flows and equity include all adjustments, consisting only of normal recurring items, necessary for their fair statement in conformity with U.S. generally accepted accounting principles (“GAAP”). Preparing financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Examples include accounting for landfills, self-insurance accruals, income taxes, allocation of acquisition purchase price, contingent consideration accruals and asset impairments. An additional area that involves estimation is when the Company estimates the amount of potential exposure it may have with respect to litigation, claims and assessments in accordance with the accounting guidance on contingencies. Actual results for all estimates could differ materially from the estimates and assumptions that the Company uses in the preparation of its condensed consolidated financial statements.

Interim results are not necessarily indicative of results for a full year. These interim financial statements should be read in conjunction with the financial statements and notes thereto included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

2. REPORTING CURRENCY

The functional currency of the Company, as the parent corporate entity, and its operating subsidiaries in the United States, is the U.S. dollar. The functional currency of the Company’s Canadian operations is the Canadian dollar. The reporting currency of the Company is the U.S. dollar. The Company’s consolidated Canadian dollar financial position is translated to U.S. dollars by applying the foreign currency exchange rate in effect at the consolidated balance sheet date. The Company’s consolidated Canadian dollar results of operations and cash flows are translated to U.S. dollars by applying the average foreign currency exchange rate in effect during the reporting period. The resulting translation adjustments are included in other comprehensive income or loss. Gains and losses from foreign currency transactions are included in earnings for the period.

3. NEW ACCOUNTING STANDARDS

Accounting Standards Adopted

Lease Accounting. In February 2016, the Financial Accounting Standards Board (“FASB”) issued guidance that requires lessees to recognize a right-of-use asset and a lease liability for virtually all of their leases (other than leases that meet the definition of a short-term lease). The liability will be equal to the present value of lease payments. The asset will be based on the liability, subject to adjustment, such as for initial direct costs. For income statement purposes, the FASB retained a dual model, requiring leases to be classified as either operating or finance. Operating leases will result in straight-line expense (similar to current operating leases) while finance leases will result in a front-loaded expense pattern (similar to current capital leases). Classification will be based on criteria that are largely similar to those applied in current lease accounting, but without explicit bright lines. The new standard was effective for public companies for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018, with early adoption permitted. The FASB issued new guidance in July 2018, which amended the guidance to allow the issuer to elect from two adoption alternatives: 1) apply the new guidance at the beginning of the earliest comparative period presented; or 2) apply the new guidance at the effective date and recognize a cumulative-effect adjustment, without adjusting the comparative periods presented.

WASTE CONNECTIONS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

(DOLLAR AMOUNTS IN THOUSANDS OF U.S. DOLLARS, EXCEPT PER SHARE, PER TON AND PER GALLON AMOUNTS)

The Company adopted the new standard on January 1, 2019 and elected to apply the new guidance at the effective date and recognize a cumulative-effect adjustment, without adjusting the comparative periods presented. The Company applied the package of practical expedients to leases that commenced before the effective date whereby the Company elected not to reassess the following: (1) whether any expired or existing contracts are or contain leases; (2) the lease classification for any expired or existing leases; and (3) whether initial direct costs exist for any existing leases. The Company also applied the (1) practical expedient for land easements where the Company elected to not apply the leases standard to certain existing land easements at transition and (2) practical expedient to include both the lease and nonlease components as a single component and account for it as a lease. The Company has completed its assessment of the provisions of the lease accounting guidance and implementation of its leasing software solution to manage and account for leases under the new standard.

	As reported December 31, 2018	Adoption of lease guidance increase (decrease)	Balance January 1, 2019
Operating lease right-of-use assets	\$ -	\$ 206,501	\$ 206,501
Total assets	\$ 12,627,329	\$ 206,501	\$ 12,833,830
Current portion of operating lease liabilities	\$ -	\$ 29,640	\$ 29,640
Total current liabilities	\$ 860,709	\$ 29,640	\$ 890,349
Long-term portion of operating lease liabilities	\$ -	\$ 180,005	\$ 180,005
Deferred income taxes	\$ 760,033	\$ (1,066)	\$ 758,967
Total liabilities	\$ 6,167,141	\$ 208,579	\$ 6,375,720
Retained earnings	\$ 2,264,510	\$ (2,078)	\$ 2,262,432
Total liabilities and equity	\$ 12,627,329	\$ 206,501	\$ 12,833,830

The adoption of the new standard did not have a material impact on the Company's consolidated statements of net income or consolidated statements of cash flows. See Note 9 for additional information and disclosures related to the adoption of this amended guidance.

Derivatives and Hedging: Targeted Improvements to Accounting for Hedging Activities. In August 2017, the FASB issued guidance which improves the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements and make certain targeted improvements to simplify the application of the hedge accounting guidance in current GAAP. The amendments in this update are intended to better align an entity's risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and presentation of hedge results. The effective date for the standard is for fiscal years beginning after December 15, 2018. The adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

Derivatives and Hedging: Inclusion of the Secured Overnight Financing Rate ("SOFR") Overnight Index Swap ("OIS") Rate as a Benchmark Interest Rate for Hedge Accounting. As LIBOR is expected to no longer be published by 2021, the FASB issued guidance in October 2018 which added the OIS rate based on SOFR as an eligible benchmark interest rate in order to facilitate the LIBOR to SOFR transition and provide sufficient lead time for entities to prepare for changes to interest rate risk hedging strategies for both risk management and hedge accounting purposes. The Company adopted the new guidance effective January 1, 2019 on a prospective basis. The Company is developing a plan to transition its interest rate swaps from LIBOR to SOFR. The adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

SEC Simplified and Updated Disclosure Requirements. In August 2018, the U.S. Securities and Exchange Commission (the "SEC") amended its rules to require an analysis of changes in stockholders' equity in the financial

WASTE CONNECTIONS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)
(DOLLAR AMOUNTS IN THOUSANDS OF U.S. DOLLARS, EXCEPT PER SHARE, PER TON AND PER GALLON
AMOUNTS)

statements included in Quarterly Reports on Form 10-Q. The analysis, which can be presented as a note or separate statement, is required for the current and comparative quarter and year-to-date interim periods. The amended rules became effective on November 15, 2018. In addition, the SEC's Division of Corporation Finance issued a Compliance and Disclosure Interpretation (the "CDI") that provides transition guidance related to this new disclosure. For calendar year-end companies, the CDI allows a filer the option to first present the changes in stockholders' equity in its Form 10-Q for the quarter ending March 31, 2019. The Company elected this option and has included the statement of shareholders' equity within this Form 10-Q.

SEC modernizes and simplifies certain Regulation S-K disclosure requirements. In March 2019, the SEC amended its rules to modernize and simplify certain disclosure requirements in Regulation S-K and the related rules and forms. These changes include, among other things, (1) allowing registrants to redact confidential information from most exhibits to their filings without filing a confidential treatment request; (2) revising the requirements for management's discussion and analysis to allow flexibility, including allowing registrants providing three years of financial statements to omit discussion of the earliest year and cross-reference its discussion in a previous filing; (3) removing the example risk factors in Regulation S-K to encourage more meaningful company-specific disclosure; (4) clarifying the description of property requirements to emphasize that those disclosures should only include properties that are material to the registrant; and (5) requiring XBRL data tagging for items on the cover pages of certain filings, as well as the use of hyperlinks for information that is incorporated by reference and available on EDGAR. The provisions regarding the redaction of confidential information in exhibits were effective upon publication in the Federal Register. The provisions requiring XBRL data tagging are subject to a three-year phase-in, depending on the filing status of the registrant, which, for the Company, were effective for the period ending June 30, 2019. All other provisions were effective on May 2, 2019.

Accounting Standards Pending Adoption

Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments. In June 2016, the FASB issued guidance which introduces a new forward-looking approach, based on expected losses, to estimate credit losses on certain types of financial instruments, including trade receivables, which will require entities to incorporate considerations of historical information, current information and reasonable and supportable forecasts. The standard will be effective for public business entities that are SEC filers for annual periods beginning after December 15, 2019 and interim periods within those years. Early adoption is permitted. The Company does not expect the adoption of this guidance to have a material impact on its consolidated financial statements.

4. RECLASSIFICATION

As disclosed within other footnotes of the financial statements, segment information reported in the Company's prior year has been reclassified to conform with the 2019 presentation.

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5. REVENUE

The Company's operations primarily consist of providing non-hazardous waste collection, transfer, disposal and recycling services, non-hazardous exploration and production ("E&P") waste treatment, recovery and disposal services and intermodal services. The following table disaggregates the Company's revenues by service line for the periods indicated:

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Commercial	\$ 396,641	\$ 360,364	\$ 778,150	\$ 710,718
Residential	346,128	297,076	668,532	581,901
Industrial and construction roll off	215,355	197,279	402,795	371,747
Total collection	958,124	854,719	1,849,477	1,664,366
Landfill	296,840	271,674	541,440	504,111
Transfer	204,561	168,863	365,752	307,355
Recycling	16,730	22,703	36,534	46,188
E&P	68,039	62,663	134,869	121,022
Intermodal and other	31,134	37,324	63,971	71,327
Intercompany	(205,789)	(177,978)	(377,768)	(334,270)
Total	\$ 1,369,639	\$ 1,239,968	\$ 2,614,275	\$ 2,380,099

The factors that impact the timing and amount of revenue recognized for each service line may vary based on the nature of the service performed. Generally, the Company recognizes revenue at the time it performs a service. In the event that the Company bills for services in advance of performance, it recognizes deferred revenue for the amount billed and subsequently recognizes revenue at the time the service is provided. Substantially all of the deferred revenue recorded as of March 31, 2019 was recognized as revenue during the three months ended June 30, 2019 when the service was performed.

See Note 11 for additional information regarding revenue by reportable segment.

Contract Acquisition Costs

The incremental direct costs of obtaining a contract, which consist of sales incentives, are recognized as Other assets in the Company's Condensed Consolidated Balance Sheet, and are amortized to Selling, general and administrative expense over the estimated life of the relevant customer relationship, which ranges from one to five years. The Company recognizes the incremental costs of obtaining a contract as an expense when incurred if the amortization period of the asset that the entity would have recognized is one year or less. The Company had approximately \$16,900 of deferred sales incentives at both June 30, 2019 and December 31, 2018.

6. LANDFILL ACCOUNTING

At June 30, 2019, the Company's landfills consisted of 85 owned landfills, seven landfills operated under life-of-site operating agreements and four landfills operated under limited-term operating agreements. The Company's landfills had site costs with a net book value of \$2,949,959 at June 30, 2019. For the Company's landfills operated under limited-term operating agreements and life-of-site operating agreements, the owner of the property (generally a municipality) usually owns the permit and the Company operates the landfill for a contracted term. Where the contracted term is not the life of the landfill, the property owner is generally responsible for final capping, closure and post-closure obligations. The

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Company is responsible for all final capping, closure and post-closure liabilities at the landfills it operates under life-of-site operating agreements.

The Company's internal and third-party engineers perform surveys at least annually to estimate the remaining disposal capacity at its landfills. Many of the Company's existing landfills have the potential for expanded disposal capacity beyond the amount currently permitted. The Company's landfill depletion rates are based on the remaining disposal capacity, considering both permitted and probable expansion airspace, at the landfills it owns and landfills it operates, but does not own, under life-of-site agreements. The Company's landfill depletion rate is based on the term of the operating agreement at its operated landfill that has capitalized expenditures. Expansion airspace consists of additional disposal capacity being pursued through means of an expansion that has not yet been permitted. Expansion airspace that meets certain criteria is included in the estimate of total landfill airspace.

Based on remaining permitted capacity as of June 30, 2019, and projected annual disposal volumes, the average remaining landfill life for the Company's owned landfills and landfills operated under life-of-site operating agreements is estimated to be approximately 27 years. As of June 30, 2019, the Company is seeking to expand permitted capacity at seven of its owned landfills and three landfills that it operates under life-of-site operating agreements, and considers the achievement of these expansions to be probable. Although the Company cannot be certain that all future expansions will be permitted as designed, the average remaining life, when considering remaining permitted capacity, probable expansion capacity and projected annual disposal volume, of the Company's owned landfills and landfills operated under life-of-site operating agreements is approximately 30 years, with lives ranging from approximately 1 to 177 years.

During the six months ended June 30, 2019 and 2018, the Company expensed \$107,364 and \$97,156, respectively, or an average of \$4.77 and \$4.56 per ton consumed, respectively, related to landfill depletion at owned landfills and landfills operated under life-of-site agreements.

The Company reserves for estimated final capping, closure and post-closure maintenance obligations at the landfills it owns and landfills it operates under life-of-site operating agreements. The Company calculates the net present value of its final capping, closure and post-closure liabilities by estimating the total obligation in current dollars, inflating the obligation based upon the expected date of the expenditure and discounting the inflated total to its present value using a credit-adjusted risk-free rate. Any changes in expectations that result in an upward revision to the estimated undiscounted cash flows are treated as a new liability and are inflated and discounted at rates reflecting current market conditions. Any changes in expectations that result in a downward revision (or no revision) to the estimated undiscounted cash flows result in a liability that is inflated and discounted at rates reflecting the market conditions at the time the cash flows were originally estimated. This policy results in the Company's final capping, closure and post-closure liabilities being recorded in "layers." The Company's discount rate assumption for purposes of computing 2019 and 2018 "layers" for final capping, closure and post-closure obligations was 4.75% for both years, which reflects the Company's long-term credit adjusted risk free rate as of the end of both 2018 and 2017. The Company's inflation rate assumption is 2.5% for the years ending December 31, 2019 and 2018. The resulting final capping, closure and post-closure obligations are recorded on the condensed consolidated balance sheet along with an offsetting addition to site costs which is amortized to depletion expense as the remaining landfill airspace is consumed. Interest is accreted on the recorded liability using the corresponding discount rate. During the six months ended June 30, 2019 and 2018, the Company expensed \$7,063 and \$6,386 respectively, or an average of \$0.31 and \$0.30 per ton consumed, respectively, related to final capping, closure and post-closure accretion expense.

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The following is a reconciliation of the Company's final capping, closure and post-closure liability balance from December 31, 2018 to June 30, 2019:

Final capping, closure and post-closure liability at December 31, 2018	\$ 251,782
Liabilities incurred	11,263
Accretion expense associated with landfill obligations	7,063
Closure payments	(334)
Assumption of closure liabilities from acquisitions	8,707
Foreign currency translation adjustment	1,614
Final capping, closure and post-closure liability at June 30, 2019	<u>\$ 280,095</u>

Liabilities incurred of \$11,263 for the six months ended June 30, 2019, represent non-cash increases to final capping, closure and post-closure liabilities and are recorded on the Condensed Consolidated Balance Sheets along with an offsetting addition to site costs, which is amortized to depletion expense as the remaining landfill airspace is consumed. The final capping, closure and post-closure liability is included in Other long-term liabilities in the Condensed Consolidated Balance Sheets. The Company performs its annual review of its cost and capacity estimates in the first quarter of each year.

At June 30, 2019 and December 31, 2018, \$6,795 and \$12,325, respectively, of the Company's restricted cash balance and \$51,902 and \$44,939, respectively, of the Company's restricted investments balance was for purposes of securing its performance of future final capping, closure and post-closure obligations.

7. ACQUISITIONS

The Company acquired ten individually immaterial non-hazardous solid waste collection, transfer and disposal businesses during the six months ended June 30, 2019. The total acquisition-related costs incurred during the six months ended June 30, 2019 for these acquisitions was \$7,021. These expenses are included in Selling, general and administrative expenses in the Company's Condensed Consolidated Statements of Net Income.

The Company acquired 12 individually immaterial non-hazardous solid waste collection, recycling, transfer and disposal businesses during the six months ended June 30, 2018. The purchase price for one of these acquisitions included contingent consideration of \$11,593, representing the fair value of up to \$12,582 of amounts payable to the former owners based on the achievement of certain operating targets specified in the asset purchase agreement. The fair value of the contingent consideration was determined using probability assessments of the expected future cash flows over the three-year period in which the obligation is expected to be settled, and applying a discount rate of 2.7%. As of June 30, 2019, the obligation recognized at the purchase date has not materially changed. Any changes in the fair value of the contingent consideration subsequent to the acquisition date will be charged or credited to expense until the contingency is settled. The total acquisition-related costs incurred during the six months ended June 30, 2018 for these acquisitions was \$4,584. These expenses are included in Selling, general and administrative expenses in the Company's Condensed Consolidated Statements of Net Income.

The results of operations of the acquired businesses have been included in the Company's Condensed Consolidated Financial Statements from their respective acquisition dates. The Company expects these acquired businesses to contribute towards the achievement of the Company's strategy to expand through acquisitions. Goodwill acquired is attributable to the synergies and ancillary growth opportunities expected to arise after the Company's acquisition of these businesses.

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The following table summarizes the consideration transferred to acquire these businesses and the preliminary amounts of identifiable assets acquired and liabilities assumed at the acquisition dates for the acquisitions consummated in the six months ended June 30, 2019 and 2018:

	2019 Acquisitions	2018 Acquisitions
Fair value of consideration transferred:		
Cash	\$ 381,422	\$ 485,519
Debt assumed	50,574	65,010
	<u>431,996</u>	<u>550,529</u>
Recognized amounts of identifiable assets acquired and liabilities assumed associated with businesses acquired:		
Accounts receivable	11,143	12,234
Prepaid expenses and other current assets	2,608	2,352
Property and equipment	195,728	340,922
Long-term franchise agreements and contracts	9,820	9,787
Customer lists	25,513	23,905
Permits and other intangibles	17,835	30,000
Other assets	7	—
Accounts payable and accrued liabilities	(24,108)	(14,413)
Deferred revenue	(8,504)	(3,646)
Contingent consideration	(398)	(11,669)
Other long-term liabilities	(8,706)	(4,408)
Deferred income taxes	(13,294)	(244)
Total identifiable net assets	<u>207,644</u>	<u>384,820</u>
Goodwill	<u>\$ 224,352</u>	<u>\$ 165,709</u>

Goodwill acquired during the six months ended June 30, 2019 and 2018, totaling \$82,769 and \$165,465, respectively, is expected to be deductible for tax purposes.

The fair value of acquired working capital related to ten individually immaterial acquisitions completed during the twelve months ended June 30, 2019, is provisional pending receipt of information from the acquirees to support the fair value of the assets acquired and liabilities assumed. Any adjustments recorded relating to finalizing the working capital for these ten acquisitions are not expected to be material to the Company's financial position.

The gross amount of trade receivables due under contracts acquired during the six months ended June 30, 2019, is \$12,120, of which \$977 is expected to be uncollectible. The gross amount of trade receivables due under contracts acquired during the six months ended June 30, 2018, is \$12,806, of which \$572 is expected to be uncollectible. The Company did not acquire any other class of receivable as a result of the acquisitions of these businesses.

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8. INTANGIBLE ASSETS, NET

Intangible assets, exclusive of goodwill, consisted of the following at June 30, 2019:

	Gross Carrying Amount	Accumulated Amortization	Accumulated Impairment Loss	Net Carrying Amount
Finite-lived intangible assets:				
Long-term franchise agreements and contracts	\$ 485,419	\$ (175,301)	\$ —	\$ 310,118
Customer lists	559,883	(270,461)	—	289,422
Permits and other	359,079	(56,734)	—	302,345
	<u>1,404,381</u>	<u>(502,496)</u>	<u>—</u>	<u>901,885</u>
Indefinite-lived intangible assets:				
Solid waste collection and transportation permits	158,591	—	—	158,591
Material recycling facility permits	42,283	—	—	42,283
E&P facility permits	59,855	—	(38,507)	21,348
	<u>260,729</u>	<u>—</u>	<u>(38,507)</u>	<u>222,222</u>
Intangible assets, exclusive of goodwill	<u>\$ 1,665,110</u>	<u>\$ (502,496)</u>	<u>\$ (38,507)</u>	<u>\$ 1,124,107</u>

The weighted-average amortization period of long-term franchise agreements and contracts acquired during the six months ended June 30, 2019 was 24.4 years. The weighted-average amortization period of customer lists acquired during the six months ended June 30, 2019 was 9.9 years. The weighted-average amortization period of finite-lived permits and other intangibles acquired during the six months ended June 30, 2019 was 36.8 years.

Intangible assets, exclusive of goodwill, consisted of the following at December 31, 2018:

	Gross Carrying Amount	Accumulated Amortization	Accumulated Impairment Loss	Net Carrying Amount
Finite-lived intangible assets:				
Long-term franchise agreements and contracts	\$ 476,833	\$ (157,986)	\$ —	\$ 318,847
Customer lists	530,614	(232,461)	—	298,153
Permits and other	338,601	(49,195)	—	289,406
	<u>1,346,048</u>	<u>(439,642)</u>	<u>—</u>	<u>906,406</u>
Indefinite-lived intangible assets:				
Solid waste collection and transportation permits	158,591	—	—	158,591
Material recycling facility permits	42,283	—	—	42,283
E&P facility permits	59,855	—	(38,507)	21,348
	<u>260,729</u>	<u>—</u>	<u>(38,507)</u>	<u>222,222</u>
Intangible assets, exclusive of goodwill	<u>\$ 1,606,777</u>	<u>\$ (439,642)</u>	<u>\$ (38,507)</u>	<u>\$ 1,128,628</u>

Estimated future amortization expense for the next five years relating to finite-lived intangible assets is as follows:

For the year ending December 31, 2019	\$ 124,754
For the year ending December 31, 2020	\$ 111,566
For the year ending December 31, 2021	\$ 97,479
For the year ending December 31, 2022	\$ 83,422
For the year ending December 31, 2023	\$ 70,559

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9. LEASES

The Company rents certain equipment and facilities under both short-term agreements and non-cancelable operating lease agreements. The Company determines if an arrangement is or contains a lease at contract inception. The Company recognizes a right-of-use (“ROU”) asset and a lease liability at the lease commencement date. The lease liability is initially measured at the present value of the unpaid lease payments at the lease commencement date.

Key estimates and judgments include how the Company determines (1) the discount rate it uses to discount the unpaid lease payments to present value, (2) lease term and (3) lease payments.

The lease guidance requires a lessee to discount its unpaid lease payments using the interest rate implicit in the lease or, if that rate cannot be readily determined, its incremental borrowing rate. Generally, the Company cannot determine the interest rate implicit in the lease because it does not have access to the lessor’s estimated residual value or the amount of the lessor’s deferred initial direct costs. Therefore, the Company generally uses its incremental borrowing rate as the discount rate for the lease. The Company’s incremental borrowing rate for a lease is the rate of interest it would have to pay on a collateralized basis to borrow an amount equal to the lease payments under similar terms.

The lease term for the Company’s leases includes the noncancelable period of the lease, plus any additional periods covered by either a Company option to extend (or not to terminate) the lease that the Company is reasonably certain to exercise, or an option to extend (or not to terminate) the lease controlled by the lessor.

Lease payments included in the measurement of the lease liability comprise fixed payments or variable lease payments. The variable lease payments take into account annual changes in the consumer price index and common area maintenance charges, if known.

ROU assets for operating leases are periodically reviewed for impairment losses. The Company uses the long-lived assets impairment guidance in ASC Subtopic 360-10, Property, Plant, and Equipment – Overall, to determine whether an ROU asset is impaired, and if so, the amount of the impairment loss to recognize.

The Company monitors for events or changes in circumstances that require a reassessment of one of its leases. When a reassessment results in the remeasurement of a lease liability, a corresponding adjustment is made to the carrying amount of the corresponding ROU asset.

The Company has elected not to recognize ROU assets and lease liabilities for short-term leases that have a lease term of 12 months or less. The Company has elected to apply the short-term lease recognition and measurement exemption allowed for in the lease accounting standard. The Company recognizes the lease payments associated with its short-term leases as an expense on a straight-line basis over the lease term.

Lease cost for operating leases for the three and six months ended June 30, 2019 was as follows:

	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Operating lease cost	\$ 9,657	\$ 19,190

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Supplemental cash flow information and non-cash activity related to the Company's operating leases are as follows:

	Six months ended June 30, 2019
Operating cash flow information:	
Cash paid for amounts included in the measurement of lease liabilities	\$ 18,873
Non-cash activity:	
Right-of-use assets obtained in exchange for lease liabilities	\$ 4,554

Weighted-average remaining lease term and discount rate for the Company's operating leases are as follows:

	Six months ended June 30, 2019
Weighted average remaining lease term	9.0 years
Weighted average discount rate	3.98 %

As of June 30, 2019, future minimum lease payments, as calculated under the new lease guidance and reconciled to the operating lease liability, are as follows:

Last 6 months of 2019	\$ 19,052
2020	36,032
2021	32,979
2022	31,617
2023	28,287
Thereafter	93,995
Minimum lease payments	241,962
Less: imputed interest	(40,878)
Present value of minimum lease payments	201,084
Less: current portion of operating lease liabilities	(30,255)
Long-term portion of operating lease liabilities	<u>\$ 170,829</u>

As of December 31, 2018, minimum lease payments under non-cancelable operating leases by period were expected to be as follows:

2019	\$ 37,902
2020	35,204
2021	32,259
2022	30,974
2023	27,882
Thereafter	94,205
	<u>\$ 258,426</u>

A summary of rent expense for both short-term agreements and non-cancelable operating lease agreements for the years ended December 31, 2018 and 2017 was as follows:

	2018	2017
Rent expense	\$ 42,646	\$ 43,383

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10. LONG-TERM DEBT

The following table presents the Company's long-term debt as of June 30, 2019 and December 31, 2018:

	June 30, 2019	December 31, 2018
Revolver under Credit Agreement, bearing interest ranging from 3.06% to 3.50% (a)	\$ 472,179	\$ 481,610
Term loan under Credit Agreement, bearing interest at 3.50% (a)	700,000	1,237,500
5.25% Senior Notes due 2019	175,000	175,000
4.64% Senior Notes due 2021	100,000	100,000
2.39% Senior Notes due 2021	150,000	150,000
3.09% Senior Notes due 2022	125,000	125,000
2.75% Senior Notes due 2023	200,000	200,000
3.24% Senior Notes due 2024	150,000	150,000
3.41% Senior Notes due 2025	375,000	375,000
3.03% Senior Notes due 2026	400,000	400,000
3.49% Senior Notes due 2027	250,000	250,000
4.25% Senior Notes due 2028	500,000	500,000
3.50% Senior Notes due 2029	500,000	—
Tax-exempt bonds	—	15,930
Notes payable to sellers and other third parties, bearing interest ranging from 2.75% to 10.90%, principal and interest payments due periodically with due dates ranging from 2019 to 2036 (a)	9,982	14,653
	4,107,161	4,174,693
Less – current portion	(798)	(1,786)
Less – debt issuance costs	(23,487)	(19,442)
	<u>\$ 4,082,876</u>	<u>\$ 4,153,465</u>

(a) Interest rates represent the interest rates incurred at June 30, 2019.

2029 Senior Notes

On April 16, 2019, the Company completed an underwritten public offering of \$500,000 aggregate principal amount of 3.50% Senior Notes due 2029 (the “2029 Senior Notes”). The 2029 Senior Notes were issued under the Indenture, dated as of November 16, 2018 (the “Base Indenture”), by and between the Company and U.S. Bank National Association, as trustee (the “Trustee”), as supplemented by the Second Supplemental Indenture, dated as of April 16, 2019 (the Base Indenture as so supplemented, the “Indenture”).

The Company will pay interest on the 2029 Senior Notes semi-annually, commencing on November 1, 2019, and the 2029 Senior Notes will mature on May 1, 2029. The 2029 Senior Notes are senior unsecured obligations, ranking equally in right of payment with the Company's other existing and future unsubordinated debt and senior to any of the Company's future subordinated debt. The 2029 Senior Notes are not guaranteed by any of the Company's subsidiaries.

The Company may redeem some or all of the 2029 Senior Notes at its option prior to February 1, 2029 (three months before the maturity date) at any time and from time to time at a redemption price equal to the greater of 100% of the principal amount of the 2029 Senior Notes redeemed, or the sum of the present values of the remaining scheduled payments of principal and interest on the 2029 Senior Notes redeemed, plus accrued and unpaid interest to, but

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excluding, the redemption date. Commencing on February 1, 2029 (three months before the maturity date), the Company may redeem some or all of the 2029 Senior Notes, at any time and from time to time, at a redemption price equal to the principal amount of the 2029 Senior Notes being redeemed plus accrued and unpaid interest to, but excluding, the redemption date.

Under certain circumstances, the Company may become obligated to pay additional amounts (the “Additional Amounts”) with respect to the 2029 Senior Notes to ensure that the net amounts received by each holder of the 2029 Senior Notes will not be less than the amount such holder would have received if withholding taxes or deductions were not incurred on a payment under or with respect to the 2029 Senior Notes. If such payment of Additional Amounts is a result of a change in the laws or regulations, including a change in any official position, the introduction of an official position or a holding by a court of competent jurisdiction, of any jurisdiction from or through which payment is made by or on behalf of the 2029 Senior Notes having power to tax, and the Company cannot avoid such payments of Additional Amounts through reasonable measures, then the Company may redeem the 2029 Senior Notes then outstanding at a redemption price equal to 100% of the principal amount thereof, plus accrued and unpaid interest, if any, to, but excluding, the redemption date (subject to the right of holders of record on the relevant record date to receive interest due on an interest payment date that is on or prior to the redemption date).

If the Company experiences certain kinds of changes of control, each holder of the 2029 Senior Notes may require the Company to repurchase all or a portion of the 2029 Senior Notes for cash at a price equal to 101% of the aggregate principal amount of such 2029 Senior Notes, plus any accrued but unpaid interest to, but excluding, the date of repurchase.

The covenants in the Indenture include limitations on liens, sale-leaseback transactions and mergers and sales of all or substantially all of the Company’s assets. The Indenture also includes customary events of default with respect to the 2029 Senior Notes. As of June 30, 2019, the Company was in compliance with all applicable covenants in the Indenture.

Upon an event of default, the principal of and accrued and unpaid interest on all the 2029 Senior Notes may be declared to be due and payable by the Trustee or the holders of not less than 25% in principal amount of the outstanding 2029 Senior Notes. Upon such a declaration, such principal and accrued interest on all of the 2029 Senior Notes will be due and payable immediately. In the case of an event of default resulting from certain events of bankruptcy, insolvency or reorganization, the principal (or such specified amount) of and accrued and unpaid interest, if any, on all outstanding 2029 Senior Notes will become and be immediately due and payable without any declaration or other act on the part of the Trustee or any holder of the 2029 Senior Notes.

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Credit Agreement

Details of the Credit Agreement are as follows:

	June 30, 2019	December 31, 2018
<i>Revolver under Credit Agreement</i>		
Available	\$ 982,249	\$ 955,779
Letters of credit outstanding	\$ 108,072	\$ 125,111
Total amount drawn, as follows:	\$ 472,179	\$ 481,610
Amount drawn - U.S. LIBOR rate loan	\$ 401,500	\$ 357,000
Interest rate applicable - U.S. LIBOR rate loan	3.50 %	3.62 %
Amount drawn – Canadian bankers’ acceptance	\$ 70,679	\$ 124,610
Interest rate applicable – Canadian bankers’ acceptance	3.06 %	3.40 %
Commitment – rate applicable	0.12 %	0.12 %
<i>Term loan under Credit Agreement</i>		
Amount drawn – U.S. based LIBOR loan	\$ 700,000	\$ 1,237,500
Interest rate applicable – U.S. based LIBOR loan	3.50 %	3.62 %

Tax Exempt Bonds

In January 2019, the Company gave notice to redeem its LeMay Washington Bond with a remaining principal balance of \$15,930. The Company paid in full the principal and accrued interest on this bond on March 6, 2019.

11. SEGMENT REPORTING

The Company’s revenues are generated from the collection, transfer, recycling and disposal of non-hazardous solid waste and the treatment, recovery and disposal of non-hazardous E&P waste. No single contract or customer accounted for more than 10% of the Company’s total revenues at the consolidated or reportable segment level during the periods presented.

The Company manages its operations through five geographic operating segments and its E&P segment, which includes the majority of the Company’s E&P waste treatment and disposal operations. The Company’s five geographic operating segments and its E&P segment comprise the Company’s reportable segments. Each operating segment is responsible for managing several vertically integrated operations, which are comprised of districts. In the first quarter of 2019, the Company moved two districts from the Eastern segment to the Central segment because their locations in Iowa were closer in proximity to operations in the Company’s Central segment. The segment information presented herein reflects the realignment of these districts.

Under the current orientation, the Company’s Eastern segment services customers located in northern Illinois, Kentucky, Maryland, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, eastern Tennessee, Vermont, Virginia and Wisconsin; the Company’s Southern segment services customers located in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, southern Oklahoma, western Tennessee and Texas; the Company’s Western segment services customers located in Alaska, California, Idaho, Montana, Nevada, Oregon, Washington and western Wyoming; the Company’s Central segment services customers located in Arizona, Colorado, Iowa, southern Illinois, Kansas, Minnesota, Missouri, Nebraska, New Mexico, Oklahoma, South Dakota, western Texas, Utah and eastern Wyoming; and the Company’s Canada segment services customers located in the state of Michigan and in the provinces of Alberta, British Columbia, Manitoba, Ontario, Québec and Saskatchewan. The E&P segment services E&P

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customers located in Arkansas, Louisiana, New Mexico, North Dakota, Oklahoma, Texas, Wyoming and along the Gulf of Mexico.

The Company's Chief Operating Decision Maker evaluates operating segment profitability and determines resource allocations based on several factors, of which the primary financial measure is segment EBITDA. The Company defines segment EBITDA as earnings before interest, taxes, depreciation, amortization, impairments and other operating items, other income (expense) and foreign currency transaction gain (loss). Segment EBITDA is not a measure of operating income, operating performance or liquidity under GAAP and may not be comparable to similarly titled measures reported by other companies. The Company's management uses segment EBITDA in the evaluation of segment operating performance as it is a profit measure that is generally within the control of the operating segments. A reconciliation of segment EBITDA to Income before income tax provision is included at the end of this Note 11.

Summarized financial information concerning the Company's reportable segments for the three and six months ended June 30, 2019 and 2018, is shown in the following tables:

Three Months Ended June 30, 2019	Revenue	Intercompany Revenue ^(b)	Reported Revenue	Segment EBITDA ^(c)
Eastern	\$ 390,476	\$ (66,855)	\$ 323,621	\$ 85,048
Southern	339,461	(41,446)	298,015	74,511
Western	311,702	(34,704)	276,998	86,440
Central	250,467	(32,106)	218,361	74,506
Canada	216,306	(27,779)	188,527	67,664
E&P	67,016	(2,899)	64,117	33,433
Corporate ^(a)	—	—	—	(7,446)
	<u>\$ 1,575,428</u>	<u>\$ (205,789)</u>	<u>\$ 1,369,639</u>	<u>\$ 414,156</u>

Three Months Ended June 30, 2018	Revenue	Intercompany Revenue ^(b)	Reported Revenue	Segment EBITDA ^(c)
Eastern	\$ 320,404	\$ (53,945)	\$ 266,459	\$ 73,755
Southern	321,051	(37,941)	283,110	68,787
Western	295,730	(32,031)	263,699	81,175
Central	207,209	(27,705)	179,504	64,172
Canada	211,787	(24,949)	186,838	67,305
E&P	61,765	(1,407)	60,358	31,231
Corporate ^(a)	—	—	—	260
	<u>\$ 1,417,946</u>	<u>\$ (177,978)</u>	<u>\$ 1,239,968</u>	<u>\$ 386,685</u>

Six Months Ended June 30, 2019	Revenue	Intercompany Revenue ^(b)	Reported Revenue	Segment EBITDA ^(c)
Eastern	\$ 737,323	\$ (120,875)	\$ 616,448	\$ 162,005
Southern	663,942	(78,599)	585,343	148,889
Western	597,877	(65,900)	531,977	163,444
Central	453,260	(57,022)	396,238	137,534
Canada	406,591	(49,717)	356,874	126,908
E&P	133,050	(5,655)	127,395	65,042
Corporate ^(a)	—	—	—	(11,304)
	<u>\$ 2,992,043</u>	<u>\$ (377,768)</u>	<u>\$ 2,614,275</u>	<u>\$ 792,518</u>

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Six Months Ended June 30, 2018	Revenue	Intercompany Revenue ^(b)	Reported Revenue	Segment EBITDA ^(c)
Eastern	\$ 603,952	\$ (99,905)	\$ 504,047	\$ 140,040
Southern	630,007	(73,558)	556,449	137,694
Western	570,850	(61,988)	508,862	153,832
Central	386,700	(49,116)	337,584	123,742
Canada	403,475	(46,662)	356,813	126,571
E&P	119,385	(3,041)	116,344	59,910
Corporate ^(a)	—	—	—	(6,083)
	<u>\$ 2,714,369</u>	<u>\$ (334,270)</u>	<u>\$ 2,380,099</u>	<u>\$ 735,706</u>

- (a) Corporate functions include accounting, legal, tax, treasury, information technology, risk management, human resources, training and other administrative functions. Amounts reflected are net of allocations to the six operating segments.
- (b) Intercompany revenues reflect each segment's total intercompany sales, including intercompany sales within a segment and between segments. Transactions within and between segments are generally made on a basis intended to reflect the market value of the service.
- (c) For those items included in the determination of segment EBITDA, the accounting policies of the segments are the same as those described in the Company's most recent Annual Report on Form 10-K.

Total assets for each of the Company's reportable segments at June 30, 2019 and December 31, 2018, were as follows:

	June 30, 2019	December 31, 2018
Eastern	\$ 2,720,643	\$ 2,673,316
Southern	2,965,048	2,892,994
Western	1,680,268	1,596,129
Central	1,880,010	1,506,326
Canada	2,496,286	2,412,971
E&P	974,023	969,808
Corporate	429,494	575,785
Total Assets	<u>\$ 13,145,772</u>	<u>\$ 12,627,329</u>

The following tables show changes in goodwill during the six months ended June 30, 2019 and 2018, by reportable segment:

	Eastern	Southern	Western	Central	Canada	E&P	Total
Balance as of December 31, 2018	\$ 1,143,355	\$ 1,517,610	\$ 398,174	\$ 523,566	\$ 1,448,980	\$ —	\$ 5,031,685
Goodwill transferred	(16,869)	—	—	16,869	—	—	—
Goodwill acquired	25,294	7,726	1,122	190,383	—	—	224,525
Goodwill acquisition adjustments	—	—	—	—	(173)	—	(173)
Goodwill divested	—	(845)	—	—	—	—	(845)
Impact of changes in foreign currency	—	—	—	—	61,478	—	61,478
Balance as of June 30, 2019	<u>\$ 1,151,780</u>	<u>\$ 1,524,491</u>	<u>\$ 399,296</u>	<u>\$ 730,818</u>	<u>\$ 1,510,285</u>	<u>\$ —</u>	<u>\$ 5,316,670</u>

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	Eastern	Southern	Western	Central	Canada	E&P	Total
Balance as of December 31, 2017	\$ 804,133	\$ 1,436,320	\$ 397,508	\$ 468,275	\$ 1,575,538	\$ —	\$ 4,681,774
Goodwill transferred	(16,869)	—	—	16,869	—	—	—
Goodwill acquired	120,979	4,909	666	39,155	—	—	165,709
Impact of changes in foreign currency	—	—	—	—	(74,517)	—	(74,517)
Balance as of June 30, 2018	<u>\$ 908,243</u>	<u>\$ 1,441,229</u>	<u>\$ 398,174</u>	<u>\$ 524,299</u>	<u>\$ 1,501,021</u>	<u>\$ —</u>	<u>\$ 4,772,966</u>

A reconciliation of the Company's primary measure of segment profitability (segment EBITDA) to Income before income tax provision in the Condensed Consolidated Statements of Net Income is as follows:

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Eastern segment EBITDA	\$ 85,048	\$ 73,755	\$ 162,005	\$ 140,040
Southern segment EBITDA	74,511	68,787	148,889	137,694
Western segment EBITDA	86,440	81,175	163,444	153,832
Central segment EBITDA	74,506	64,172	137,534	123,742
Canada segment EBITDA	67,664	67,305	126,908	126,571
E&P segment EBITDA	33,433	31,231	65,042	59,910
Subtotal reportable segments	421,602	386,425	803,822	741,789
Unallocated corporate overhead	(7,446)	260	(11,304)	(6,083)
Depreciation	(156,776)	(142,450)	(303,623)	(275,634)
Amortization of intangibles	(31,344)	(26,474)	(61,886)	(52,573)
Impairments and other operating items	(3,902)	(7,073)	(20,014)	(8,104)
Interest expense	(37,245)	(32,426)	(74,533)	(64,796)
Interest income	1,818	1,056	5,129	2,210
Other income, net	805	2,031	3,363	1,644
Foreign currency transaction gain (loss)	1,115	30	1,218	(190)
Income before income tax provision	<u>\$ 188,627</u>	<u>\$ 181,379</u>	<u>\$ 342,172</u>	<u>\$ 338,263</u>

12. DERIVATIVE FINANCIAL INSTRUMENTS

The Company recognizes all derivatives on the Condensed Consolidated Balance Sheets at fair value. All of the Company's derivatives have been designated as cash flow hedges; therefore, the gain or loss on the derivatives will be recognized in accumulated other comprehensive income (loss) ("AOCIL") and reclassified into earnings in the same period during which the hedged transaction affects earnings and is presented in the same income statement line item as the earnings effect of the hedged item. The Company classifies cash inflows and outflows from derivatives within operating activities on the Condensed Consolidated Statements of Cash Flows.

One of the Company's objectives for utilizing derivative instruments is to reduce its exposure to fluctuations in cash flows due to changes in the variable interest rates of certain borrowings under the Credit Agreement. The Company's strategy to achieve that objective involves entering into interest rate swaps. The interest rate swaps outstanding at June 30, 2019 were specifically designated to the Credit Agreement and accounted for as cash flow hedges.

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At June 30, 2019, the Company's derivative instruments included 17 interest rate swap agreements as follows:

Date Entered	Notional Amount	Fixed Interest	Variable Interest Rate	Effective Date	Expiration Date
		Rate Paid*	Received		
April 2014	\$ 100,000	1.800 %	1-month LIBOR	July 2014	July 2019
May 2014	\$ 50,000	2.344 %	1-month LIBOR	October 2015	October 2020
May 2014	\$ 25,000	2.326 %	1-month LIBOR	October 2015	October 2020
May 2014	\$ 50,000	2.350 %	1-month LIBOR	October 2015	October 2020
May 2014	\$ 50,000	2.350 %	1-month LIBOR	October 2015	October 2020
April 2016	\$ 100,000	1.000 %	1-month LIBOR	February 2017	February 2020
June 2016	\$ 75,000	0.850 %	1-month LIBOR	February 2017	February 2020
June 2016	\$ 150,000	0.950 %	1-month LIBOR	January 2018	January 2021
June 2016	\$ 150,000	0.950 %	1-month LIBOR	January 2018	January 2021
July 2016	\$ 50,000	0.900 %	1-month LIBOR	January 2018	January 2021
July 2016	\$ 50,000	0.890 %	1-month LIBOR	January 2018	January 2021
August 2017	\$ 100,000	1.900 %	1-month LIBOR	July 2019	July 2022
August 2017	\$ 200,000	2.200 %	1-month LIBOR	October 2020	October 2025
August 2017	\$ 150,000	1.950 %	1-month LIBOR	February 2020	February 2023
June 2018	\$ 200,000	2.925 %	1-month LIBOR	October 2020	October 2025
June 2018	\$ 200,000	2.925 %	1-month LIBOR	October 2020	October 2025
December 2018	\$ 200,000	2.850 %	1-month LIBOR	July 2022	July 2027

* Plus applicable margin.

Another of the Company's objectives for utilizing derivative instruments is to reduce its exposure to fluctuations in cash flows due to changes in the price of diesel fuel. The Company's strategy to achieve that objective involves periodically entering into fuel hedges that are specifically designated to certain forecasted diesel fuel purchases and accounted for as cash flow hedges. The Company had one fuel hedge agreement in place at June 30, 2018, which expired at December 31, 2018. At June 30, 2019, the Company had no fuel hedge agreements in place.

The fair values of derivative instruments designated as cash flow hedges as of June 30, 2019, were as follows:

Derivatives Designated as Cash Flow Hedges	Asset Derivatives		Liability Derivatives	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Interest rate swaps	Prepaid expenses and other current assets ^(a)	\$ 4,766	Accrued liabilities ^(a)	\$ (1,116)
	Other assets, net	1,033	Other long-term liabilities	(38,866)
Total derivatives designated as cash flow hedges		\$ 5,799		\$ (39,982)

(a) Represents the estimated amount of the existing unrealized gains and losses, respectively, on interest rate swaps as of June 30, 2019 (based on the interest rate yield curve at that date), included in AOCIL expected to be reclassified into pre-tax earnings within the next 12 months. The actual amounts reclassified into earnings are dependent on future movements in interest rates.

The fair values of derivative instruments designated as cash flow hedges as of December 31, 2018, were as follows:

Derivatives Designated as Cash Flow Hedges	Derivative Assets		Derivative Liabilities	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Interest rate swaps	Prepaid expenses and other current assets ^(a)	\$ 10,737	Other long-term liabilities	\$ (9,314)
	Other assets, net	10,675		
Total derivatives designated as cash flow hedges		\$ 21,412		\$ (9,314)

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The following table summarizes the impact of the Company's cash flow hedges on the results of operations, comprehensive income (loss) and AOCIL for the three and six months ended June 30, 2019 and 2018:

Derivatives Designated as Cash Flow Hedges	Amount of Gain or (Loss) Recognized as AOCIL on Derivatives, Net of Tax ^(a)		Statement of Net Income Classification	Amount of (Gain) or Loss Reclassified from AOCIL into Earnings, Net of Tax ^{(b), (c)}	
	Three Months Ended June 30,			Three Months Ended June 30,	
	2019	2018		2019	2018
Interest rate swaps	\$ (18,827)	\$ 2,349	Interest expense	\$ (1,817)	\$ (936)
Fuel hedges	—	1,541	Cost of operations	—	(1,268)
Total	\$ (18,827)	\$ 3,890		\$ (1,817)	\$ (2,204)

Derivatives Designated as Cash Flow Hedges	Amount of Gain or (Loss) Recognized as AOCIL on Derivatives, Net of Tax ^(a)		Statement of Net Income (Loss) Classification	Amount of (Gain) or Loss Reclassified from AOCIL into Earnings, Net of Tax ^{(b), (c)}	
	Six Months Ended June 30,			Six Months Ended June 30,	
	2019	2018		2019	2018
Interest rate swaps	\$ (30,382)	\$ 11,000	Interest expense	\$ (3,634)	\$ (1,376)
Fuel hedges	—	2,004	Cost of operations	—	(2,131)
Total	\$ (30,382)	\$ 13,004		\$ (3,634)	\$ (3,507)

(a) In accordance with the derivatives and hedging guidance, the changes in fair values of interest rate swaps and fuel hedges have been recorded in equity as a component of AOCIL. As the critical terms of the interest rate swaps match the underlying debt being hedged, all unrealized changes in fair value are recorded in AOCIL. Because changes in the actual price of diesel fuel and changes in the DOE index price did not offset exactly each reporting period, the Company assessed whether the fuel hedges were highly effective using the cumulative dollar offset approach.

(b) Amounts reclassified from AOCIL into earnings related to realized gains and losses on interest rate swaps are recognized when interest payments or receipts occur related to the swap contracts, which correspond to when interest payments are made on the Company's hedged debt.

(c) Amounts reclassified from AOCIL into earnings related to realized gains and losses on the fuel hedges are recognized when settlement payments or receipts occur related to the hedge contracts, which correspond to when the underlying fuel is consumed.

See Note 16 for further discussion on the impact of the Company's hedge accounting to its consolidated comprehensive income (loss) and AOCIL.

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13. FAIR VALUE OF FINANCIAL INSTRUMENTS

The Company's financial instruments consist primarily of cash and equivalents, trade receivables, restricted cash and investments, trade payables, debt instruments, contingent consideration obligations, interest rate swaps and fuel hedges. As of June 30, 2019 and December 31, 2018, the carrying values of cash and equivalents, trade receivables, restricted cash and investments, trade payables and contingent consideration are considered to be representative of their respective fair values. The carrying values of the Company's debt instruments, excluding certain notes as listed in the table below, approximate their fair values as of June 30, 2019 and December 31, 2018, based on current borrowing rates, current remaining average life to maturity and borrower credit quality for similar types of borrowing arrangements, and are classified as Level 2 within the fair value hierarchy. The carrying values and fair values of the Company's debt instruments where the carrying values do not approximate their fair values as of June 30, 2019 and December 31, 2018, are as follows:

	Carrying Value at		Fair Value* at	
	June 30, 2019	December 31, 2018	June 30, 2019	December 31, 2018
5.25% Senior Notes due 2019	\$ 175,000	\$ 175,000	\$ 176,250	\$ 177,870
4.64% Senior Notes due 2021	\$ 100,000	\$ 100,000	\$ 102,936	\$ 101,292
2.39% Senior Notes due 2021	\$ 150,000	\$ 150,000	\$ 148,603	\$ 144,305
3.09% Senior Notes due 2022	\$ 125,000	\$ 125,000	\$ 125,924	\$ 120,682
2.75% Senior Notes due 2023	\$ 200,000	\$ 200,000	\$ 198,899	\$ 188,363
3.24% Senior Notes due 2024	\$ 150,000	\$ 150,000	\$ 152,209	\$ 142,877
3.41% Senior Notes due 2025	\$ 375,000	\$ 375,000	\$ 384,334	\$ 355,541
3.03% Senior Notes due 2026	\$ 400,000	\$ 400,000	\$ 400,776	\$ 367,143
3.49% Senior Notes due 2027	\$ 250,000	\$ 250,000	\$ 257,054	\$ 234,243
4.25% Senior Notes due 2028	\$ 500,000	\$ 500,000	\$ 548,650	\$ 506,100
3.50% Senior Notes due 2029	\$ 500,000	\$ —	\$ 519,150	\$ —

*Senior Notes are classified as Level 2 within the fair value hierarchy. Fair value is based on quotes of bonds with similar ratings in similar industries.

For details on the fair value of the Company's interest rate swaps, fuel hedges, restricted cash and investments and contingent consideration, refer to Note 15.

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14. NET INCOME PER SHARE INFORMATION

The following table sets forth the calculation of the numerator and denominator used in the computation of basic and diluted net income per common share attributable to the Company's shareholders for the three and six months ended June 30, 2019 and 2018:

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Numerator:				
Net income attributable to Waste Connections for basic and diluted earnings per share	\$ 148,848	\$ 138,682	\$ 274,470	\$ 263,551
Denominator:				
Basic shares outstanding	263,846,970	263,691,172	263,725,867	263,757,179
Dilutive effect of equity-based awards	647,973	640,857	690,743	695,606
Diluted shares outstanding	264,494,943	264,332,029	264,416,610	264,452,785

15. FAIR VALUE MEASUREMENTS

The Company uses a three-tier fair value hierarchy to classify and disclose all assets and liabilities measured at fair value on a recurring basis in periods subsequent to their initial measurement. These tiers include: Level 1, defined as quoted market prices in active markets for identical assets or liabilities; Level 2, defined as inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, model-based valuation techniques for which all significant assumptions are observable in the market, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and Level 3, defined as unobservable inputs that are not corroborated by market data.

The Company's financial assets and liabilities recorded at fair value on a recurring basis include derivative instruments and restricted cash and investments. At June 30, 2018, the Company's derivative instruments included pay-fixed, receive-variable interest rate swaps and pay-fixed, receive-variable diesel fuel hedges. At June 30, 2019 and December 31, 2018, the Company's derivative instruments included pay-fixed, receive-variable interest rate swaps. The Company's interest rate swaps are recorded at their estimated fair values based on quotes received from financial institutions that trade these contracts. The Company verifies the reasonableness of these quotes using similar quotes from another financial institution as of each date for which financial statements are prepared. The Company uses a discounted cash flow ("DCF") model to determine the estimated fair value of the diesel fuel hedges. The assumptions used in preparing the DCF model include: (i) estimates for the forward DOE index curve; and (ii) the discount rate based on risk-free interest rates over the term of the hedge contracts. The DOE index curve used in the DCF model was obtained from financial institutions that trade these contracts. Significant increases (decreases) in the forward DOE index curve would result in a significantly higher (lower) fair value measurement. For the Company's interest rate swaps and fuel hedges, the Company also considers the Company's creditworthiness in its determination of the fair value measurement of these instruments in a net liability position and the counterparties' creditworthiness in its determination of the fair value measurement of these instruments in a net asset position. The Company's restricted cash and investments are valued at quoted market prices in active markets for similar assets, which the Company receives from the financial institutions that hold such investments on its behalf. The Company's restricted cash and investments measured at fair value are invested primarily in money market accounts, bank time deposits, U.S. government and agency securities and Canadian bankers' acceptance notes.

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The Company's assets and liabilities measured at fair value on a recurring basis at June 30, 2019 and December 31, 2018, were as follows:

	Fair Value Measurement at June 30, 2019 Using			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Interest rate swap derivative instruments – net liability position	\$ (34,183)	\$ —	\$ (34,183)	\$ —
Restricted cash and investments	\$ 138,635	\$ —	\$ 138,635	\$ —
Contingent consideration	\$ (57,000)	\$ —	\$ —	\$ (57,000)

	Fair Value Measurement at December 31, 2018 Using			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Interest rate swap derivative instruments – net asset position	\$ 12,098	\$ —	\$ 12,098	\$ —
Restricted cash and investments	\$ 131,422	\$ —	\$ 131,422	\$ —
Contingent consideration	\$ (54,615)	\$ —	\$ —	\$ (54,615)

The following table summarizes the changes in the fair value for Level 3 derivatives for the six months ended June 30, 2019 and 2018:

	Six Months Ended June 30,	
	2019	2018
Beginning balance	\$ —	\$ 3,880
Realized gains included in earnings	—	(2,837)
Unrealized gains included in AOCIL	—	2,661
Ending balance	\$ —	\$ 3,704

The following table summarizes the changes in the fair value for Level 3 liabilities related to contingent consideration for the six months ended June 30, 2019 and 2018:

	Six Months Ended June 30,	
	2019	2018
Beginning balance	\$ 54,615	\$ 47,285
Contingent consideration recorded at acquisition date	398	11,669
Payment of contingent consideration recorded at acquisition date	(550)	(4,976)
Payment of contingent consideration recorded in earnings	—	(11)
Adjustments to contingent consideration	1,466	349
Interest accretion expense	919	852
Foreign currency translation adjustment	152	(180)
Ending balance	\$ 57,000	\$ 54,988

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16. OTHER COMPREHENSIVE INCOME (LOSS)

Other comprehensive income (loss) includes changes in the fair value of interest rate swaps and fuel hedges that qualify for hedge accounting. The components of other comprehensive income (loss) and related tax effects for the three and six months ended June 30, 2019 and 2018 are as follows:

Three months ended June 30, 2019			
	Gross	Tax effect	Net of tax
Interest rate swap amounts reclassified into interest expense	\$ (2,472)	\$ 655	\$ (1,817)
Changes in fair value of interest rate swaps	(25,615)	6,788	(18,827)
Foreign currency translation adjustment	43,135	—	43,135
	<u>\$ 15,048</u>	<u>\$ 7,443</u>	<u>\$ 22,491</u>

Three months ended June 30, 2018			
	Gross	Tax effect	Net of tax
Interest rate swap amounts reclassified into interest expense	\$ (1,273)	\$ 337	\$ (936)
Fuel hedge amounts reclassified into cost of operations	(1,688)	420	(1,268)
Changes in fair value of interest rate swaps	3,196	(847)	2,349
Changes in fair value of fuel hedges	2,045	(504)	1,541
Foreign currency translation adjustment	(43,474)	—	(43,474)
	<u>\$ (41,194)</u>	<u>\$ (594)</u>	<u>\$ (41,788)</u>

Six Months Ended June 30, 2019			
	Gross	Tax effect	Net of tax
Interest rate swap amounts reclassified into interest expense	\$ (4,944)	\$ 1,310	\$ (3,634)
Changes in fair value of interest rate swaps	(41,336)	10,954	(30,382)
Foreign currency translation adjustment	85,315	—	85,315
	<u>\$ 39,035</u>	<u>\$ 12,264</u>	<u>\$ 51,299</u>

Six Months Ended June 30, 2018			
	Gross	Tax effect	Net of tax
Interest rate swap amounts reclassified into interest expense	\$ (1,872)	\$ 496	\$ (1,376)
Fuel hedge amounts reclassified into cost of operations	(2,837)	706	(2,131)
Changes in fair value of interest rate swaps	14,965	(3,965)	11,000
Changes in fair value of fuel hedges	2,661	(657)	2,004
Foreign currency translation adjustment	(102,804)	—	(102,804)
	<u>\$ (89,887)</u>	<u>\$ (3,420)</u>	<u>\$ (93,307)</u>

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A rollforward of the amounts included in AOCIL, net of taxes, for the six months ended June 30, 2019 and 2018, is as follows:

	Interest Rate Swaps	Foreign Currency Translation Adjustment	Accumulated Other Comprehensive Income (Loss)
Balance at December 31, 2018	\$ 8,892	\$ (83,678)	\$ (74,786)
Amounts reclassified into earnings	(3,634)	—	(3,634)
Changes in fair value	(30,382)	—	(30,382)
Foreign currency translation adjustment	—	85,315	85,315
Balance at June 30, 2019	<u>\$ (25,124)</u>	<u>\$ 1,637</u>	<u>\$ (23,487)</u>

	Fuel Hedges	Interest Rate Swaps	Foreign Currency Translation Adjustment	Accumulated Other Comprehensive Income (Loss)
Balance at December 31, 2017	\$ 2,907	\$ 13,951	\$ 91,555	\$ 108,413
Amounts reclassified into earnings	(2,131)	(1,376)	—	(3,507)
Changes in fair value	2,004	11,000	—	13,004
Foreign currency translation adjustment	—	—	(102,804)	(102,804)
Balance at June 30, 2018	<u>\$ 2,780</u>	<u>\$ 23,575</u>	<u>\$ (11,249)</u>	<u>\$ 15,106</u>

See Note 12 for further discussion on the Company's derivative instruments.

17. SHAREHOLDERS' EQUITY

Share-Based Compensation

Restricted Share Units

A summary of activity related to restricted share units ("RSUs") during the six-month period ended June 30, 2019, is presented below:

	Unvested Shares
Outstanding at December 31, 2018	987,563
Granted	340,198
Forfeited	(32,035)
Vested and issued	(407,050)
Outstanding at June 30, 2019	<u>888,676</u>

The weighted average grant-date fair value per share for the common shares underlying the RSUs granted during the six-month period ended June 30, 2019 was \$81.12.

Recipients of RSUs who participate in the Company's Nonqualified Deferred Compensation Plan may have elected in years prior to 2015 to defer some or all of their RSUs as they vest until a specified date or dates they choose. At the end of the deferral periods, unless a qualified participant makes certain other elections, the Company issues to recipients who deferred their RSUs common shares of the Company underlying the deferred RSUs. At June 30, 2019 and 2018, the Company had 249,003 and 349,799 vested deferred RSUs outstanding, respectively.

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Performance-Based Restricted Share Units

A summary of activity related to performance-based restricted share units (“PSUs”) during the six-month period ended June 30, 2019, is presented below:

	<u>Unvested Shares</u>
Outstanding at December 31, 2018	532,086
Granted	152,656
Vested and issued	<u>(180,258)</u>
Outstanding at June 30, 2019	<u>504,484</u>

During the six months ended June 30, 2019, the Company’s Compensation Committee granted PSUs with three-year performance-based metrics that the Company must meet before those awards may be earned, and the performance period for those grants ends on December 31, 2021. During the same period, the Company’s Compensation Committee also granted PSUs with a one-year performance-based metric that the Company must meet before those awards may be earned, with the awards then subject to time-based vesting for the remaining three years of their four-year vesting period. The Compensation Committee will determine the achievement of performance results and corresponding vesting of PSUs for each performance period. The weighted average grant-date fair value per share for the common shares underlying all PSUs granted during the six-month period ended June 30, 2019 was \$80.85.

Deferred Share Units

A summary of activity related to deferred share units (“DSUs”) during the six-month period ended June 30, 2019, is presented below:

	<u>Vested Shares</u>
Outstanding at December 31, 2018	17,176
Granted	3,300
Cash settled	<u>(2,010)</u>
Outstanding at June 30, 2019	<u>18,466</u>

The DSUs consist of a combination of DSU grants outstanding under the Progressive Waste share-based compensation plans that were continued by the Company following the Progressive Waste acquisition and DSUs granted by the Company since the Progressive Waste acquisition. The weighted average grant-date fair value per share for the common shares underlying the DSUs granted during the six-month period ended June 30, 2019 was \$82.82.

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Other Restricted Share Units

RSU grants outstanding under the Progressive Waste share-based compensation plans were continued by the Company following the Progressive Waste acquisition and allow for the issuance of shares or cash settlement to employees upon vesting. A summary of activity related to Progressive Waste RSUs during the six-month period ended June 30, 2019, is presented below:

Outstanding at December 31, 2018	122,259
Cash settled	(42,258)
Forfeited	(2,352)
Outstanding at June 30, 2019	<u>77,649</u>

A summary of vesting activity related to Progressive Waste RSUs during the six-month period ended June 30, 2019, is presented below:

Vested at December 31, 2018	120,153
Vested over remaining service period	2,106
Cash settled	(42,258)
Forfeited	(2,352)
Vested at June 30, 2019	<u>77,649</u>

No RSUs under the Progressive Waste share-based compensation plans were granted subsequent to June 1, 2016. During the six months ended June 30, 2019, 964 Progressive Waste RSUs were forfeited and have been redistributed to the other remaining active participants. All remaining RSUs were vested as of March 31, 2019.

Other Performance-Based Restricted Share Units

PSU grants outstanding under the Progressive Waste share-based compensation plans were continued by the Company following the Progressive Waste acquisition and allow for cash settlement only to employees upon vesting based on achieving target results. A summary of activity related to Progressive Waste PSUs during the six-month period ended June 30, 2019, is presented below:

Outstanding at December 31, 2018	22,791
Cash settled, net of notional dividend	(22,791)
Outstanding at June 30, 2019	<u>—</u>

No PSUs under the Progressive Waste share-based compensation plans were granted subsequent to June 1, 2016. All outstanding PSUs were vested as of December 31, 2018.

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Share Based Options

Share based options outstanding under the Progressive Waste share-based compensation plans were continued by the Company following the Progressive Waste acquisition and allow for the issuance of shares or cash settlement to employees upon vesting. A summary of activity related to Progressive Waste share based options during the six-month period ended June 30, 2019, is presented below:

Outstanding at December 31, 2018	165,156
Cash settled	(7,097)
Outstanding at June 30, 2019	<u>158,059</u>

No share based options under the Progressive Waste share-based compensation plans were granted subsequent to June 1, 2016. All outstanding share based options were vested as of December 31, 2017.

Normal Course Issuer Bid

On July 24, 2018, the Board of Directors of the Company approved, subject to receipt of regulatory approvals, the annual renewal of the Company's normal course issuer bid (the "NCIB") to purchase up to 13,174,976 of the Company's common shares during the period of August 8, 2018 to August 7, 2019 or until such earlier time as the NCIB is completed or terminated at the option of the Company. The renewal followed the conclusion of the Company's NCIB that expired August 7, 2018. The Company received Toronto Stock Exchange (the "TSX") approval for its annual renewal of the NCIB on August 2, 2018. Under the NCIB, the Company may make share repurchases only in the open market, including on the New York Stock Exchange (the "NYSE"), the TSX, and/or alternative Canadian trading systems, at the prevailing market price at the time of the transaction.

In accordance with TSX rules, any daily repurchases made through the TSX and alternative Canadian trading systems is limited to a maximum of 71,114 common shares, which represents 25% of the average daily trading volume on the TSX of 284,459 common shares for the period from February 1, 2018 to July 31, 2018. The TSX rules also allow the Company to purchase, once a week, a block of common shares not owned by any insiders, which may exceed such daily limit. The maximum number of shares that can be purchased per day on the NYSE will be 25% of the average daily trading volume for the four calendar weeks preceding the date of purchase, subject to certain exceptions for block purchases.

The timing and amounts of any repurchases pursuant to the NCIB will depend on many factors, including the Company's capital structure, the market price of the common shares and overall market conditions. All common shares purchased under the NCIB shall be immediately cancelled following their repurchase.

During the six months ended June 30, 2019, the Company did not repurchase any common shares pursuant to its NCIB in effect during such period. For the six months ended June 30, 2018, the Company repurchased 594,474 common shares pursuant to its NCIB in effect during such period at an aggregate cost of \$42,040. As of June 30, 2019, the remaining maximum number of shares available for repurchase under the current NCIB was 12,937,746.

Cash Dividend

In October 2018, the Company announced that its Board of Directors increased its regular quarterly cash dividend by \$0.02, from \$0.14 to \$0.16 per Company common share. Cash dividends of \$84,215 and \$73,584 were paid during the six months ended June 30, 2019 and 2018, respectively.

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18. COMMITMENTS AND CONTINGENCIES

In the normal course of its business and as a result of the extensive governmental regulation of the solid waste and E&P waste industries, the Company is subject to various judicial and administrative proceedings involving Canadian regulatory authorities as well as U.S. federal, state and local agencies. In these proceedings, an agency may subpoena the Company for records, or seek to impose fines on the Company or revoke or deny renewal of an authorization held by the Company, including an operating permit. From time to time, the Company may also be subject to actions brought by special interest or other groups, adjacent landowners or residents in connection with the permitting and licensing of landfills, transfer stations, and E&P waste treatment, recovery and disposal operations, or alleging environmental damage or violations of the permits and licenses pursuant to which the Company operates.

In addition, the Company is a party to various claims and suits pending for alleged damages to persons and property, alleged violations of certain laws and alleged liabilities arising out of matters occurring during the normal operation of the Company's business. Except as noted in the matters described below, as of June 30, 2019, there is no current proceeding or litigation involving the Company or its property that the Company believes could have a material adverse effect on its business, financial condition, results of operations or cash flows.

Lower Duwamish Waterway Superfund Site Allocation Process

In November 2012, the Company's subsidiary, Northwest Container Services, Inc. ("NWCS"), was named by the U.S. Environmental Protection Agency, Region 10 (the "EPA") as a potentially responsible party ("PRP"), along with more than 100 others, under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA" or the "Superfund" law) with respect to the Lower Duwamish Waterway Superfund Site (the "LDW Site"). Listed on the National Priorities List in 2001, the LDW Site is a five-mile stretch of the Duwamish River flowing into Elliott Bay in Seattle, Washington. A group of PRPs known as the Lower Duwamish Working Group ("LDWG") and consisting of the City of Seattle, King County, the Port of Seattle, and Boeing Company conducted a Remedial Investigation/Feasibility Study for the LDW Site. On December 2, 2014, the EPA issued its Record of Decision (the "ROD") describing the selected clean-up remedy, and therein estimated that clean-up costs (in present value dollars as of November 2014) would total approximately \$342,000. However, it is possible that additional costs could be incurred based upon various factors. The EPA estimates that it will take seven years to implement the clean-up. The ROD also requires ten years of monitoring following the clean-up, and provides that if clean-up goals have not been met by the end of this period, then additional clean-up activities, at additional cost, may be required at that time. Implementation of the clean-up will not begin until after the ongoing Early Action Area ("EAA") clean-ups have been completed. Typically, costs for monitoring may be in addition to those expended for the clean-up. While three of the EAA clean-ups have been completed to date, some work remains to be done on three other EAAs. Implementation of the clean-up also must await additional baseline sampling throughout the LDW Site and the preparation of a remedial design for performing the clean-up. On April 27, 2016, the LDWG entered into a third amendment of its Administrative Order on Consent with the EPA (the "AOC 3") in which it agreed to perform the additional baseline sediment sampling and certain technical studies needed to prepare the actual remedial design. The LDWG and the EPA entered into a fourth amendment to the AOC in July 2018 primarily addressing development of a proposed remedy for the upper reach of the LDW Site, river mile 3 to river mile 5. At the April 24, 2019 stakeholders meeting the LDWG projected completion of the remedial design for the upper reach could be completed by August 2024.

On August 16, 2016, the EPA sent individual letters to each of the PRPs for the LDW Site, including NWCS, stating that it expects to initiate negotiations with all PRPs in early 2018 relating to a Remedial Design/Remedial Action ("RD/RA") Consent Decree. An RD/RA Consent Decree provides for the cleanup of the entire site and is often referred to as a "global settlement." In August 2014, NWCS entered into an Alternative Dispute Resolution Memorandum of Agreement with several dozen other PRPs and a neutral allocator to conduct a confidential and non-binding allocation of

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certain past response costs allegedly incurred at the LDW Site as well as the anticipated future response costs associated with the clean-up. The pre-remedial design work under the AOC 3 is now not expected to conclude until the end of 2019, and in March 2017, the PRPs provided the EPA with notice that the allocation was not scheduled to conclude until mid-2019. Later extensions pushed the allocation conclusion date to early 2020 and the EPA was informed of that schedule. The allocation participants voted in June 2019 to extend the final allocation report deadline to July 2020. The EPA will be informed of that change soon. In June 2017, attorneys for the EPA informed attorneys for several PRPs that the EPA expected to begin RD/RA negotiations in the late summer or early fall of 2018.

Those negotiations have not been scheduled and there is no recent indication from the EPA regarding when they will begin. NWCS is defending itself vigorously in this confidential allocation process. At this point, the Company is not able to determine the likelihood of the allocation process being completed as intended by the participating PRPs, its specific allocation, or the likelihood of the parties then negotiating a global settlement with the EPA. Thus, NWCS cannot reasonably determine the likelihood of any outcome in this matter, including its potential liability.

On February 11, 2016, NWCS received a letter (the “Letter”) from the United States Department of Commerce, National Oceanic and Atmospheric Administration (“NOAA”), describing certain investigatory activities conducted by the Elliott Bay Trustee Council (the “Council”). The Council consists of all of the natural resources trustees for the LDW Site as well as two nearby Superfund sites, the Harbor Island site and the Lockheed West site. The members of the Council include the United States, on behalf of the U.S. National Oceanic and Atmospheric Administration and the U.S. Department of the Interior, the Washington State Department of Ecology, and the Suquamish and Muckleshoot Indian Tribes (together, the “Trustees”). The Letter appears to allege that NWCS may be a potentially liable party that allegedly contributed to the release of hazardous substances that have injured natural resources at the LDW Site. Damages to natural resources are in addition to clean-up costs. The Letter, versions of which NWCS believes were sent to all or a group of the PRPs for the LDW Site, also notified its recipients of their opportunity to participate in the Trustees’ development of an Assessment Plan and the performance of a Natural Resources Damages Assessment (“NRDA”) in accordance with the Assessment Plan for both the LDW Site and the east and west waterways of the Harbor Island site. NWCS timely responded with correspondence to the NOAA Office of General Counsel, in which it declined the invitation at that time. NWCS does not know how other PRPs responded to the Letter, and has not received any further communication from NOAA or the Trustees. The Trustees have not responded to NWCS’ letter. The Trustees released their Assessment Plan in March 2019. The Assessment Plan does not set forth a timeline for implementation. At this point, the Company is not able to determine the likelihood or amount of an assessment of natural resource damages against NWCS in connection with this matter.

Los Angeles County, California Landfill Expansion Litigation

A. Chiquita Canyon, LLC Lawsuit Against Los Angeles County

In October 2004, the Company’s subsidiary, Chiquita Canyon, LLC (“CCL”), then under prior ownership, filed an application (the “Application”) with the County of Los Angeles (the “County”) Department of Regional Planning (“DRP”) for a conditional use permit (the “CUP”) to authorize the continued operation and expansion of the Chiquita Canyon Landfill (the “Landfill”). The Landfill has operated since 1972, and as a regional landfill, accepted approximately three million tons of materials for disposal and beneficial use in 2016. The Application requested expansion of the existing waste footprint on CCL’s contiguous property, an increase in maximum elevation, creation of a new entrance and new support facilities, construction of a facility for the County or another third-party operator to host household hazardous waste collection events, designation of an area for mixed organics/composting, and other modifications.

After many years of reviews and delays, upon the recommendation of County staff, the County’s Regional Planning Commission (the “Commission”) approved the Application on April 19, 2017, but imposed operating conditions, fees

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and exactions that substantially reduce the historical landfill operations and represent a large increase in aggregate taxes and fees. CCL objected to many of the requirements imposed by the Commission. Current estimates for new costs imposed on CCL under the CUP are in excess of \$300,000.

CCL appealed the Commission's decision to the County Board of Supervisors, but the appeal was not successful. At a subsequent hearing, on July 25, 2017, the Board of Supervisors approved the CUP. On October 20, 2017, CCL filed in the Superior Court of California, County of Los Angeles a verified petition for writ of mandate and complaint against the County and the County Board of Supervisors captioned *Chiquita Canyon, LLC v. County of Los Angeles*, No. BS171262 (Los Angeles Co. Super Ct.) (the "Complaint"). The Complaint challenges the terms of the CUP in 13 counts generally alleging that the County violated multiple California and federal statutes and California and federal constitutional protections. CCL seeks the following relief: (a) an injunction and writ of mandate against certain of the CUP's operational restrictions, taxes and fees, (b) a declaration that the challenged conditions are unconstitutional and in violation of state and federal statutes, (c) reimbursement for any such illegal fees paid under protest, (d) damages, (e) an award of just compensation for a taking, (f) attorney fees, and (g) all other appropriate legal and equitable relief.

On December 6, 2017, the County filed a demurrer to the Complaint arguing that the Complaint is legally insufficient to proceed. At an initial trial-setting hearing on February 8, 2018, the Superior Court suggested that the Complaint should be amended to separate the claims seeking a writ of mandamus against the County. CCL filed its First Amended Complaint on March 23, 2018. The County filed its demurrer and motion to strike challenging portions of the First Amended Complaint on April 25, 2018. CCL filed its combined opposition to the demurrer and motion to strike on July 3, 2018. The County filed a combined reply brief on July 10, 2018. The hearing on the demurrer took place on July 17, 2018. The Superior Court sustained the demurrer and granted the motion to strike. The effect of the Court's rulings was to bar CCL from proceeding with its challenges to 14 of the 29 CUP conditions at issue in the litigation, including 13 operational conditions and CCL's challenge to the \$11,600 B&T Fee discussed below. The Superior Court set a trial date of June 18, 2019 for the remaining mandamus claims. The Superior Court granted CCL leave to amend its Complaint if CCL chose to pay the \$11,600 B&T fee to allow a challenge to the B&T fee to proceed under the Mitigation Fee Act. CCL paid the \$11,600 B&T fee on August 10, 2018 and filed its Second Amended Complaint on August 16, 2018, reflecting that the B&T fee had been paid under protest and allowing the challenges to the B&T fee to go forward.

On September 14, 2018, CCL sought discretionary review by the California Court of Appeal of the Superior Court's July 17, 2018 decision barring the challenge to 13 operational conditions. On October 5, 2018, the Court of Appeal decided to hear CCL's appeal and, after full briefing by the parties, heard oral argument on January 9, 2019.

On February 25, 2019, the Court of Appeal issued its decision, reversing the trial court orders that granted the County's motion to strike and demurrer. The Court of Appeal ruled that CCL had adequately pled a claim that the County was equitably estopped from contending that CCL had forfeited its rights to challenge the legality of the 13 operational conditions. CCL's Complaint sets forth that CCL relied on representations made by the County in 2017 that CCL could reserve its legal rights to challenge the CUP in a separate reservation of rights letter rather than the affidavit of acceptance of the CUP that the County compelled Chiquita to file.

At a trial setting conference on May 28, 2019, the equitable estoppel issues in this case were discussed and the Superior Court continued the June 18, 2019 trial date to April 23, 2020. The Superior Court also set an evidentiary hearing on the equitable estoppel issues for November 12, 2019. CCL will continue to vigorously prosecute the lawsuit. However, at this point, the Company is not able to determine the likelihood of any outcome in this matter.

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B. CEQA Lawsuit Against Los Angeles County Challenging Environmental Review for Landfill Expansion

A separate lawsuit involving CCL and the Landfill was filed on August 24, 2017 by community activists alleging that the environmental review underlying the CUP was inadequate under state law. The Val Verde Civic Association, Citizens for Chiquita Canyon Landfill Compliance, and the Santa Clarita Organization for Planning the Environment filed a petition for writ of mandate in the Superior Court of California, County of Los Angeles against the County, naming CCL as the real party in interest. The lawsuit seeks to overturn the County's approval of the CUP for the expansion of the Landfill and the certification of the final Environmental Impact Report, arguing that the report violates the California Environmental Quality Act. Pursuant to Condition No. 6 of the CUP, which requires CCL to defend, indemnify, and hold harmless the County, its agents, officers, and employees from any claim or proceeding against the County brought by any third party to attack, set aside, void, or annul the CUP approval, CCL has agreed to reimburse the County for its legal costs associated with defense of the lawsuit. As the real party in interest, CCL has a right to notice and an opportunity to be heard in opposition to the petition for writ of mandate. The petitioners filed their Opening Brief with the court on September 27, 2018. CCL filed its Opposition Brief with the court on November 28, 2018 and the petitioners filed their Reply Brief on December 20, 2018. A trial date had been scheduled for February 8, 2019, but on February 6, 2019, the court reassigned the case to a different judge and vacated the trial date. A new trial date has been scheduled for August 23, 2019. CCL intends to vigorously defend the lawsuit as the real party in interest. However, at this point, the Company is not able to determine the likelihood of any outcome in this matter.

C. December 11, 2017 Notice of Violation Regarding Certain CUP Conditions.

The County, through its DRP, issued a Notice of Violation, dated December 11, 2017 (the "NOV"), alleging that CCL violated certain conditions of the CUP, including Condition 79(B)(6) of the CUP by failing to pay an \$11,600 Bridge & Thoroughfare Fee ("B&T Fee") that was purportedly due on July 25, 2017. The alleged B&T fee was ostensibly to fund the construction of transportation infrastructure in the area of the Landfill. At the time the NOV was issued, CCL had already contested the legality of the B&T fee in the October 20, 2017 Complaint filed against the County in Los Angeles County Superior Court.

On January 12, 2018, CCL filed an appeal of the alleged violations in the NOV. Subsequently, CCL filed additional legal arguments and exhibits contesting the NOV. On March 6, 2018, a DRP employee designated as hearing officer sustained the NOV, including the \$11,600 B&T fee, and imposed an administrative penalty in the amount of \$83 and a noncompliance fee of \$0.75. A written decision memorializing the hearing officer's findings and order, dated July 10, 2018, was received by CCL on July 12, 2018. On April 13, 2018, CCL filed in the Superior Court of California, County of Los Angeles a Petition for Writ of Administrative Mandamus against the County seeking to overturn the decision sustaining the NOV, contending that the NOV and decision are not supported by the facts or law. On June 22, 2018, Chiquita filed a Motion for Stay seeking to halt enforcement of the B&T fee and penalty and the accrual of any further penalties pending the resolution of the Petition for Writ of Mandamus. The motion was heard and denied by the Court on July 17, 2018. As explained above, the Court granted CCL leave to pay the \$11,600 B&T fee and to amend its Complaint to reflect the payment under protest, allowing the challenge to the B&T fee to proceed. CCL paid the B&T fee on August 10, 2018, and also paid on that date the administrative penalty of \$83 and a noncompliance fee of \$0.75. As directed by the Court, CCL amended its Complaint in a Second Amended Complaint filed in the CUP action on August 16, 2018. The Court indicated that the NOV case would likely be tried in conjunction with the CUP case, set for June 18, 2019, and that the cases would be coordinated. At the May 29, 2019 trial setting conference referenced above where the trial of the CUP case was set for April 23, 2020, the Superior Court set the trial for the B&T fee/NOV case for June 25, 2020. At this point, the Company is not able to determine the likelihood of any outcome in this matter.

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Town of Colonie, New York Landfill Expansion Litigation

On April 16, 2014, the Town of Colonie (the “Town”) filed an application (the “Application”) with the New York State Department of Environmental Conservation (“DEC”) to modify the Town’s then-current Solid Waste Management Facility Permit and for other related permits to authorize the development and operation of Area 7 of the Town of Colonie Landfill (the “Landfill”), which is located in Albany County, New York. DEC issued the requested permits on April 5, 2018 (the “Permits”). The Company’s subsidiary, Capital Region Landfills, Inc. (“CRL”), has been the sole operator of the Landfill since September 2011 pursuant to an operating agreement between CRL and the Town.

On May 7, 2018, the Town of Halfmoon, New York, and five of its residents, commenced an Article 78 special proceeding in the Supreme Court of the State of New York, Saratoga County, against DEC, the Town, CRL, and the Company (the “Halfmoon Proceeding”). On that same date, the Town of Waterford, New York, and eleven of its residents, also commenced an Article 78 special proceeding in the Supreme Court of the State of New York, Saratoga County, against the same respondents (the “Waterford Proceeding”). On June 4, 2018, the Town and CRL filed Verified Answers, including motions to dismiss the petitions, and the Company separately moved to dismiss the petitions. The Waterford Petitioners stipulated to removing the Company as a respondent when they filed an Amended Verified Petition on June 15, 2018. The Halfmoon Petitioners served an Amended Verified Petition on July 5, 2018, retaining all originally-named parties, including the Company.

The Petitioners alleged that, in granting the Permits, DEC failed to comply with the procedural and substantive requirements of New York’s Environmental Conservation Law and State Environmental Quality Review Act, and their implementing regulations. The Petitioners asked the court to: annul the Permits and invalidate DEC’s Findings Statement, enjoin the Town and CRL from taking any action authorized by the Permits, require an issues conference and possibly an adjudicatory hearing before DEC can re-consider the Town’s permit application; remand all regulatory issues to a DEC Administrative Law Judge; and award costs and disbursements. The Waterford Petitioners also requested reasonable attorneys’ fees.

On July 13, 2018, the Honorable Ann C. Crowell granted a venue change motion filed by DEC, and ordered that the Halfmoon Proceeding and the Waterford Proceeding be transferred to the Supreme Court, Albany County. CRL’s opposition submissions, including its responsive pleadings, Memorandum of Law, and supporting Affidavits, were filed and served on or before July 25, 2018. On August 28, 2018, the Towns of Waterford and Halfmoon filed a motion seeking an order preliminarily enjoining during the pendency of the proceedings all activities relating to the expansion of the Landfill which are authorized by the Permits. On September 18, 2018, CRL and the Company filed and served Memoranda of Law in opposition to the preliminary injunction motion, with supporting Affidavits, and, on September 24, 2018, the Towns of Waterford and Halfmoon filed a Reply Memorandum of Law in further support of their injunctive motion. The Honorable Debra J. Young denied the Petitioners’ motion for preliminary injunction on November 30, 2018.

On January 23, 2019, the court held that the Petitioners lacked standing to maintain the proceedings and dismissed both the Waterford and Halfmoon Amended Verified Petitions in their entirety. In late February and early March 2019, the Waterford and Halfmoon Petitioners filed notices of appeal to the Appellate Division, Third Department, of both Judge Crowell’s decision to transfer the proceedings to Albany County and of Judge Young’s dismissal of the Amended Verified Petitions.

On March 7, 2019, the Waterford Petitioners moved, with consent of the Halfmoon Petitioners, to consolidate the appeals. Respondents opposed the consolidation motion to the extent that it may result in inequitable briefing under the Appellate Division rules. On April 4, 2019, the Appellate Division, Third Department granted the consolidation motion “to the extent that the appeals shall be heard together and may be perfected upon a joint record on appeal.”

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(DOLLAR AMOUNTS IN THOUSANDS OF U.S. DOLLARS, EXCEPT PER SHARE, PER TON AND PER GALLON
AMOUNTS)

On April 26, 2019, the Waterford Petitioners filed a motion with the Appellate Division, Third Department, seeking an order preliminarily enjoining construction activities or the acceptance of waste at the Landfill. The Company, CRL, and the Town of Colonie opposed the motion, which was summarily denied by the Third Department, Appellate Division on June 20, 2019.

On June 25, 2019, the Waterford Petitioners filed their appellate brief and the joint record on appeal. If no extensions are granted, briefing with respect to the Waterford Petitioners' appeals will be completed in early August 2019. The Halfmoon Petitioners have not yet filed an appellate brief.

19. SUBSEQUENT EVENTS

On July 25, 2019, the Company's Board of Directors approved, subject to receipt of regulatory approvals, the annual renewal of its NCIB. The renewal will follow on the conclusion of the Company's current NCIB expiring August 7, 2019. Upon approval, the Company anticipates that it will be authorized to make purchases during the period of August 8, 2019 to August 7, 2020 or until such earlier time as the NCIB is completed or terminated at the Company's option.

On July 29, 2019, the Company announced that its Board of Directors approved a regular quarterly cash dividend of \$0.16 per Company common share. The dividend will be paid on August 26, 2019, to shareholders of record on the close of business on August 12, 2019.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

FORWARD-LOOKING STATEMENTS

Certain statements contained in this Quarterly Report on Form 10-Q are forward-looking in nature, including statements related to our ability and intent to draw on our Credit Agreement or raise other capital, the responsibilities of our subsidiaries with regard to possible cleanup obligations imposed by the EPA or other regulatory authorities, the impact of global, regional and local economic conditions, including the price of crude oil, on our volume, business and results of operations, the effects of seasonality on our business and results of operations, our ability to address any impacts of inflation on our business, demand for recyclable commodities (including landfill gas reclamation) and recyclable commodity pricing, our expectations with respect to capital expenditures, our expectations with respect to our ability to obtain expansions of permitted landfill capacity and to provide collection services under exclusive arrangements, our expectations with respect to our normal course issuer bid (our share repurchase program) and future dividend payments, our expectations with respect to the outcomes of our legal proceedings, our expectations with respect to the potential financial impairment of our reporting units caused by dispositions of certain operating units, our expectations about new accounting standards, our expectations about potential non-performance by counterparties to our hedge agreements and our expectations with respect to the anticipated benefits of any acquisitions. These statements can be identified by the use of forward-looking terminology such as "believes," "expects," "may," "will," "should" or "anticipates," or the negative thereof or comparable terminology, or by discussions of strategy.

Factors that could cause actual results to differ from those projected include, but are not limited to, those listed below and elsewhere in this report. There may be additional risks of which we are not presently aware or that we currently believe are immaterial which could have an adverse impact on our business. We make no commitment to revise or update any forward-looking statements in order to reflect events or circumstances that may change, except where we are expressly required to do so by law.

Our business and operations are subject to a variety of risks and uncertainties and, consequently, actual results may differ materially from those projected by any forward-looking statements. Factors that could cause actual results to differ from those projected include, but are not limited to, the following:

- Our results are vulnerable to economic conditions;
- Our industry is highly competitive and includes companies with lower prices, return expectations or other advantages, and governmental service providers, which could adversely affect our ability to compete and our operating results;
- Competition for acquisition candidates, consolidation within the waste industry and economic and market conditions may limit our ability to grow through acquisitions;
- Price increases may not be adequate to offset the impact of increased costs, or may cause us to lose customers;
- We may lose contracts through competitive bidding, early termination or governmental action;
- Our financial and operating performance may be affected by the inability to renew landfill operating permits, obtain new landfills and expand existing ones;
- Lower crude oil prices may adversely affect the level of exploration, development and production activity of E&P companies and the demand for our E&P waste services;
- Increases in labor costs and limitations on labor availability could impact our financial results;
- Increases in capital expenditures could impact our financial results;

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- A portion of our growth and future financial performance depends on our ability to integrate acquired businesses, and the success of our acquisitions;
- The seasonal nature of our business and “event-driven” waste projects cause our results to fluctuate;
- Our results will be affected by changes in recycled commodity prices and quantities;
- Our results will be affected by changes in the value of renewable fuels;
- Increases in the price of diesel or compressed natural gas fuel may adversely affect our collection business and reduce our operating margins;
- Our financial results are based upon estimates and assumptions that may differ from actual results;
- Our accruals for our landfill site closure and post-closure costs may be inadequate;
- Increases in insurance costs and the amount that we self-insure for various risks could reduce our operating margins and reported earnings;
- We may be subject in the normal course of business to judicial, administrative or other third-party proceedings that could interrupt or limit our operations, require expensive remediation, result in adverse judgments, settlements or fines and create negative publicity;
- Pending or future litigation or governmental proceedings could result in material adverse consequences, including judgments or settlements;
- Our financial results could be adversely affected by impairments of goodwill, indefinite-lived intangibles or property and equipment;
- Income and other taxes may be uncertain;
- Future changes to U.S., Canadian and foreign income and other tax laws could materially adversely affect us;
- Each business that we acquire or have acquired may have liabilities or risks that we fail or are unable to discover, or that become more adverse to our business than we anticipated at the time of acquisition;
- Our indebtedness could adversely affect our financial condition and limit our financial flexibility;
- We may be unable to obtain performance or surety bonds, letters of credit or other financial assurances or to maintain adequate insurance coverage;
- Our operations in Canada expose us to exchange rate fluctuations that could adversely affect our financial performance and our reported results of operations;
- Alternatives to landfill disposal may cause our revenues and operating results to decline;
- Labor union activity could divert management attention and adversely affect our operating results;
- We could face significant withdrawal liability if we withdraw from participation in one or more multiemployer pension plans in which we participate and the accrued pension benefits are not fully funded;

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- We rely on computer systems to run our business and disruptions or privacy breaches in these systems could impact our ability to service our customers and adversely affect our financial results, damage our reputation, and expose us to litigation risk;
- Extensive and evolving environmental, health and safety laws and regulations may restrict our operations and growth and increase our costs;
- Our business is subject to operational and safety risks, including the risk of personal injury to employees and others;
- Future changes in laws regulating the flow of solid waste in interstate commerce could adversely affect our operating results;
- Extensive regulations that govern the design, operation, expansion and closure of landfills may restrict our landfill operations or increase our costs of operating landfills;
- Our E&P waste business could be adversely affected by changes in laws regulating E&P waste;
- Liabilities for environmental damage may adversely affect our financial condition, business and earnings;
- We depend significantly on the services of the members of our senior and regional management team, and the departure of any of those persons could cause our operating results to suffer;
- Our decentralized decision-making structure could allow local managers to make decisions that may adversely affect our operating results; and
- If we are not able to develop and protect intellectual property, or if a competitor develops or obtains exclusive rights to a breakthrough technology, our financial results may suffer.

These risks and uncertainties, as well as others, are discussed in greater detail in this Quarterly Report on Form 10-Q and in other filings with the U.S. Securities and Exchange Commission, or SEC, made by the Company, including its most recent Annual Report on Form 10-K, as well as in the Company's filings during the year with the Canadian Securities Administrators. There may be additional risks of which we are not presently aware or that we currently believe are immaterial which could have an adverse impact on our business. We make no commitment to revise or update any forward-looking statements in order to reflect events or circumstances that may change, except where we are expressly required to do so by law.

OVERVIEW OF OUR BUSINESS

We are an integrated solid waste services company that provides non-hazardous waste collection, transfer, disposal and recycling services in mostly exclusive and secondary markets in the U.S. and Canada. Through our R360 Environmental Solutions subsidiary, we are also a leading provider of non-hazardous exploration and production, or E&P, waste treatment, recovery and disposal services in several of the most active natural resource producing areas in the U.S. We also provide intermodal services for the rail haul movement of cargo and solid waste containers in the Pacific Northwest through a network of intermodal facilities.

We generally seek to avoid highly competitive, large urban markets and instead target markets where we can attain high market share either through exclusive contracts, vertical integration or asset positioning. In markets where waste collection services are provided under exclusive arrangements, or where waste disposal is municipally owned or funded or available at multiple municipal sources, we believe that controlling the waste stream by providing collection services under exclusive arrangements is often more important to our growth and profitability than owning or operating landfills. We also target niche markets, like E&P waste treatment and disposal services.

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As of June 30, 2019, we served residential, commercial, industrial and E&P customers in 41 states in the U.S. and six provinces in Canada: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Wisconsin and Wyoming, and the provinces of Alberta, British Columbia, Manitoba, Ontario, Québec and Saskatchewan.

The solid waste industry is local and highly competitive in nature, requiring substantial labor and capital resources. The participants compete for collection accounts primarily on the basis of price and, to a lesser extent, the quality of service, and compete for landfill business on the basis of tipping fees, geographic location and quality of operations. The solid waste industry has been consolidating and continues to consolidate as a result of a number of factors, including the increasing costs and complexity associated with waste management operations and regulatory compliance. Many small independent operators and municipalities lack the capital resources, management, operating skills and technical expertise necessary to operate effectively in such an environment. The consolidation trend has caused solid waste companies to operate larger landfills that have complementary collection routes that can use company-owned disposal capacity. Controlling the point of transfer from haulers to landfills has become increasingly important as landfills continue to close and disposal capacity moves farther from the collection markets it serves.

Generally, the most profitable operators within the solid waste industry are those companies that are vertically integrated or enter into long-term collection contracts. A vertically integrated operator will benefit from: (1) the internalization of waste, which is bringing waste to a company-owned landfill; (2) the ability to charge third-party haulers tipping fees either at landfills or at transfer stations; and (3) the efficiencies gained by being able to aggregate and process waste at a transfer station prior to landfilling.

The E&P waste services industry is regional in nature and is also highly fragmented, with acquisition opportunities available in several active natural resource basins. Competition for E&P waste comes primarily from smaller regional companies that utilize a variety of disposal methods and generally serve specific geographic markets, and other solid waste companies. In addition, customers in many markets have the option of using internal disposal methods or outsourcing to another third-party disposal company. The principal competitive factors in this business include: gaining customer approval of treatment and disposal facilities; location of facilities in relation to customer activity; reputation; reliability of services; track record of environmental compliance; ability to accept multiple waste types at a single facility; and price. The demand for our E&P waste services depends on the continued demand for, and production of, oil and natural gas. Crude oil and natural gas prices historically have been volatile. If the prices of crude oil and natural gas substantially decline, it could lead to declines in the level of production activity and demand for our E&P waste services, which could result in the recognition of impairment charges on our intangible assets and property and equipment associated with our E&P operations.

CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

The preparation of financial statements in conformity with U.S. generally accepted accounting principles, or GAAP, requires estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses and related disclosures of contingent assets and liabilities in the condensed consolidated financial statements. As described by the SEC, critical accounting estimates and assumptions are those that may be material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and that have a material impact on the financial condition or operating performance of a company. Such critical accounting estimates and assumptions are applicable to our reportable segments. Refer to our most recent Annual Report on Form 10-K for a complete description of our critical accounting estimates and assumptions.

NEW ACCOUNTING PRONOUNCEMENTS

For a description of the new accounting standards that affect us, see Note 3 to our Condensed Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

RESULTS OF OPERATIONS FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2019 AND 2018

The following table sets forth items in our Condensed Consolidated Statements of Net Income in thousands of U.S. dollars and as a percentage of revenues for the periods indicated.

	Three months ended June 30,			Six months ended June 30,					
	2019		2018		2019		2018		
Revenues	\$ 1,369,639	100.0	% \$ 1,239,968	100.0	% \$ 2,614,275	100.0	% \$ 2,380,099	100.0	%
Cost of operations	815,819	59.5	725,022	58.5	1,549,508	59.3	1,384,825	58.2	
Selling, general and administrative	139,664	10.2	128,261	10.3	272,249	10.4	259,568	10.9	
Depreciation	156,776	11.5	142,450	11.5	303,623	11.6	275,634	11.6	
Amortization of intangibles	31,344	2.3	26,474	2.1	61,886	2.3	52,573	2.2	
Impairments and other operating items	3,902	0.3	7,073	0.6	20,014	0.8	8,104	0.3	
Operating income	222,134	16.2	210,688	17.0	406,995	15.6	399,395	16.8	
Interest expense	(37,245)	(2.7)	(32,426)	(2.6)	(74,533)	(2.9)	(64,796)	(2.7)	
Interest income	1,818	0.1	1,056	0.1	5,129	0.2	2,210	0.1	
Other income (expense), net	805	0.1	2,031	0.1	3,363	0.1	1,644	0.0	
Foreign currency transaction gain (loss)	1,115	0.1	30	0.0	1,218	0.1	(190)	(0.0)	
Income tax provision	(39,788)	(2.9)	(42,565)	(3.4)	(67,756)	(2.6)	(74,417)	(3.1)	
Net income	148,839	10.9	138,814	11.2	274,416	10.5	263,846	11.1	
Net loss (income) attributable to noncontrolling interests	9	0.0	(132)	(0.0)	54	0.0	(295)	(0.0)	
Net income attributable to Waste Connections	\$ 148,848	10.9	% \$ 138,682	11.2	% \$ 274,470	10.5	% \$ 263,551	11.1	%

Revenues. Total revenues increased \$129.6 million, or 10.5%, to \$1.370 billion for the three months ended June 30, 2019, from \$1.240 billion for the three months ended June 30, 2018. Total revenues increased \$234.2 million, or 9.8%, to \$2.614 billion for the six months ended June 30, 2019, from \$2.380 billion for the six months ended June 30, 2018.

During the three months ended June 30, 2019, incremental revenue from acquisitions closed during, or subsequent to, the three months ended June 30, 2018, increased revenues by approximately \$84.2 million. During the six months ended June 30, 2019, incremental revenue from acquisitions closed during, or subsequent to, the six months ended June 30, 2018, increased revenues by approximately \$159.5 million.

Operations that were divested subsequent to June 30, 2018 decreased revenues by approximately \$6.8 million and \$13.1 million, respectively, for the three and six months ended June 30, 2019.

During the three months ended June 30, 2019, the net increase in prices charged to our customers at our existing operations was \$58.5 million, consisting of \$56.3 million of core price increases and \$2.2 million from surcharges. During the six months ended June 30, 2019, the net increase in prices charged to our customers at our existing operations was \$113.4 million, consisting of \$108.4 million of core price increases and \$5.0 million from surcharges.

During the three months ended June 30, 2019, volume increases in our existing business increased solid waste revenues by \$9.3

million, due primarily to increased commercial collection and landfill volumes in our Western and Central segments. During the six months ended June 30, 2019, volume decreases in our existing business decreased

solid waste revenues by \$3.3 million due primarily to decreased landfill volumes and residential collection volumes in our Southern segment and reduced residential collection volumes in our Canada segment due primarily to contracts that were not renewed subsequent to June 30, 2018 exceeding increased commercial collection and landfill volumes in our Western segment.

E&P revenues at facilities owned and fully-operated during the three and six months ended June 30, 2019 increased by \$3.5 million and \$11.1 million, respectively, due to increased drilling activity and E&P disposal volumes at the majority of basins we operate.

A decrease in the average Canadian dollar to U.S. dollar currency exchange rate resulted in a decrease in revenues of \$6.4 million and \$14.7 million, respectively, for the three and six months ended June 30, 2019. The average Canadian dollar to U.S. dollar exchange rates on our Canadian revenues were 0.7476 and 0.7743 in the three months ended June 30, 2019 and 2018, respectively. The average Canadian dollar to U.S. dollar exchange rates on our Canadian revenues were 0.7498 and 0.7820 in the six months ended June 30, 2019 and 2018, respectively.

Revenues from sales of recyclable commodities at facilities owned during the three and six months ended June 30, 2019 and 2018 decreased \$7.1 million and \$12.4 million, respectively, due primarily to decreased prices for old corrugated cardboard and other fiber products resulting from a reduction in overseas demand.

Other revenues decreased by \$5.6 million and \$6.3 million, respectively, during the three and six months ended June 30, 2019, due primarily to a decrease in intermodal revenues resulting from customer losses causing a reduction in cargo volume and a decrease in landfill gas sales primarily at our Canada segment.

Cost of Operations. Total cost of operations increased \$90.8 million, or 12.5%, to \$815.8 million for the three months ended June 30, 2019, from \$725.0 million for the three months ended June 30, 2018. The increase was primarily the result of \$55.3 million of operating costs from acquisitions closed during, or subsequent to, the three months ended June 30, 2018 and an increase in operating costs at our existing operations of \$44.7 million, assuming foreign currency parity, partially offset by a decrease of \$3.6 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods and a decrease in operating costs of \$5.6 million at operations divested during, or subsequent to, the three months ended June 30, 2018.

The increase in operating costs at our existing operations of \$44.7 million for the three months ended June 30, 2019, assuming foreign currency parity, was comprised of an increase in labor expenses of \$13.5 million due primarily to employee pay rate increases, an increase in third-party trucking and transportation expenses of \$9.4 million due primarily to outsourcing transportation services to third party operators at certain locations and increased rates charged by third parties to provide trucking and transportation services, an increase in truck, container, equipment and facility maintenance and repair expenses of \$8.2 million due to parts and service rate increases and variability impacting the timing of major repairs, an increase of \$2.8 million resulting from higher costs per ton charged by third party processors of recyclable commodities, an increase in employee benefits expenses of \$2.1 million due to higher costs of health care services provided under our benefit plans, an increase in taxes on revenues of \$1.9 million due primarily to increased revenues in our solid waste markets, an increase in diesel fuel expense of \$1.8 million due primarily to the prior year period benefiting from purchasing a portion of our diesel fuel needs under a favorable fuel hedge agreement that expired in December 2018, an increase in 401(k) matching expenses of \$1.8 million due to our increasing the maximum matching contribution rate to our employees, an increase in third party disposal expenses of \$1.6 million due primarily to disposal rate increases exceeding the benefits of improved internalization of waste collected in our Southern segment, an increase in leachate disposal expenses of \$1.6 million due to increased precipitation from harsh weather generating higher leachate volumes primarily in our Eastern and Southern segments as well as higher costs per gallon for leachate treatment, an increase in subcontracted operating expenses of \$1.0 million due primarily to subcontracting certain operating activities at our E&P segment, an increase in equipment and facility rental expenses of \$0.8 million due primarily to increased truck rental expenses in our Southern segment and the adoption on January 1, 2019 of new accounting standards associated with leases and \$2.7 million of other net expense increases, partially offset by a \$2.4 million decrease in expenses for auto and workers' compensation claims due primarily to higher adjustments recorded in the current year period to reduce projected losses on outstanding claims incurred in prior periods and a \$2.1 million decrease in intermodal expenses resulting from a decrease in intermodal cargo volume due to customer losses.

Total cost of operations increased \$164.7 million, or 11.9%, to \$1.550 billion for the six months ended June 30, 2019, from \$1.385 billion for the six months ended June 30, 2018. The increase was primarily the result of \$102.3 million of operating costs from acquisitions closed during, or subsequent to, the six months ended June 30, 2018 and an increase in operating costs at our existing operations of \$81.6 million, assuming foreign currency parity, partially offset by a decrease of \$8.1 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods and a decrease in operating costs of \$11.1 million at operations divested during, or subsequent to, the six months ended June 30, 2018.

The increase in operating costs at our existing operations of \$81.6 million for the six months ended June 30, 2019, assuming foreign currency parity, was comprised of an increase in labor expenses of \$21.0 million due primarily to employee pay rate increases, an increase in truck, container, equipment and facility maintenance and repair expenses of \$15.1 million due to parts and service rate increases and variability impacting the timing of major repairs, an increase in third-party trucking and transportation expenses of \$13.6 million due primarily to outsourcing transportation services to third party operators at certain locations and increased rates charged by third parties to provide trucking and transportation services, an increase of \$5.1 million resulting from higher costs per ton charged by third party processors of recyclable commodities, an increase in leachate disposal expenses of \$4.4 million due to increased precipitation from harsh weather generating higher leachate volumes primarily in our Eastern and Southern segments as well as higher costs per gallon for leachate treatment, an increase in 401(k) matching expenses of \$3.6 million due to our increasing the maximum matching contribution rate to our employees, an increase in compressed natural gas expense of \$3.3 million due primarily to a non-recurring reduction in expense during the prior year period resulting from recording retroactive tax credits associated with purchases of compressed natural gas fuel, an increase in taxes on revenues of \$3.3 million due primarily to increased revenues in our solid waste markets, an increase in diesel fuel expense of \$2.8 million due primarily to the prior year period benefiting from purchasing a portion of our diesel fuel needs under a favorable fuel hedge agreement that expired in December 2018, an increase in insurance premiums for our auto and workers' compensation policies of \$2.7 million due primarily to our growth from acquisitions and a non-recurring reduction in expense during the prior year period in our Canada segment resulting from an annual workers' compensation premium audit, an increase in subcontracted operating expenses of \$2.2 million due primarily to subcontracting certain operating activities at our E&P segment, an increase in equipment and facility rental expenses of \$1.7 million due primarily to increased truck rental expenses in our Southern segment and the adoption on January 1, 2019 of new accounting standards associated with leases, an increase in cell processing expenses at our E&P segment of \$1.2 million due primarily to increased disposal volumes and \$4.2 million of other net expense increases, partially offset by a \$2.6 million decrease in intermodal expenses resulting from a decrease in intermodal cargo volume due to customer losses.

Cost of operations as a percentage of revenues increased 1.0 percentage point to 59.5% for the three months ended June 30, 2019, from 58.5% for the three months ended June 30, 2018. The increase as a percentage of revenues consisted of a 0.5 percentage point increase from the net impact of cost of operations expenses from acquisitions closed during, or subsequent to, the three months ended June 30, 2018, a 0.3 percentage point increase from higher labor expenses, a 0.3 percentage point increase from higher third-party trucking and transportation expenses, a 0.2 percentage point increase from higher maintenance and repair expenses, a 0.1 percentage point increase from an increase in recyclable commodities processing expenses, a 0.1 percentage point increase from higher leachate disposal expenses and a 0.1 percentage point increase from higher 401(k) matching expenses, partially offset by a 0.3 percentage point decrease from reduced auto and workers' compensation claims expenses and a 0.3 percentage point decrease from improved internalization of collected waste volumes disposed at third party locations.

Cost of operations as a percentage of revenues increased 1.1 percentage points to 59.3% for the six months ended June 30, 2019, from 58.2% for the six months ended June 30, 2018. The increase as a percentage of revenues consisted of a 0.4 percentage point increase from the net impact of cost of operations expenses from acquisitions closed during, or subsequent to, the six months ended June 30, 2018, a 0.2 percentage point increase from higher maintenance and repair expenses, a 0.2 percentage point increase from higher third-party trucking and transportation expenses, a 0.2 percentage point increase from higher leachate disposal expenses, a 0.1 percentage point increase from higher labor expenses, a 0.1 percentage point increase from higher expenses for compressed natural gas, a 0.1 percentage point increase from higher 401(k) matching expenses, a 0.1 percentage point increase from an increase in recyclable commodities processing

expenses and a 0.1 percentage point increase from all other net changes, partially offset by a 0.4 percentage point decrease from improved internalization of collected waste volumes disposed at third party locations.

SG&A. SG&A expenses increased \$11.4 million, or 8.9%, to \$139.7 million for the three months ended June 30, 2019, from \$128.3 million for the three months ended June 30, 2018. The increase was comprised of \$7.0 million of additional SG&A expenses from operating locations at acquisitions closed during, or subsequent to, the three months ended June 30, 2018 and a \$5.4 million increase in SG&A expenses at our existing operations, assuming foreign currency parity, partially offset by a decrease of \$0.6 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods and a decrease of \$0.4 million consisting of SG&A expenses from operations divested during, or subsequent to, the three months ended June 30, 2018.

The increase in SG&A expenses at our existing operations, assuming foreign currency parity, of \$5.4 million for the three months ended June 30, 2019 was comprised of an increase in direct acquisition expenses of \$4.0 million due to higher acquisition activity, an increase in accrued recurring cash incentive compensation expense to our management of \$1.7 million, an increase in equity-based compensation expenses of \$1.4 million associated with our annual recurring grant of restricted share units to our personnel, an increase in 401(k) matching expenses of \$0.6 million due to our increasing the maximum matching contribution rate to our employees, an increase in deferred compensation expenses of \$0.5 million as a result of increases in the market value of investments to which employee deferred compensation liability balances are tracked and \$1.1 million of other net expense increases, partially offset by a decrease of \$2.6 million in professional fees expense resulting primarily from reduced legal expenses resulting from the settlement of certain legal matters subsequent to June 30, 2018 and a decrease of \$1.3 million in integration-related expenses incurred in the prior year period resulting from the acquisition of Progressive Waste.

SG&A expenses increased \$12.6 million, or 4.9%, to \$272.2 million for the six months ended June 30, 2019, from \$259.6 million for the six months ended June 30, 2018. The increase was comprised of \$12.8 million of additional SG&A expenses from operating locations at acquisitions closed during, or subsequent to, the six months ended June 30, 2018 and a \$2.0 million increase in SG&A expenses at our existing operations, assuming foreign currency parity, partially offset by a decrease of \$1.4 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods and a decrease of \$0.8 million consisting of SG&A expenses from operations divested during, or subsequent to, the six months ended June 30, 2018.

The increase in SG&A expenses at our existing operations of \$2.0 million, assuming foreign currency parity, for the six months ended June 30, 2019 was comprised of an increase in equity-based compensation expenses of \$7.2 million associated with our annual recurring grant of restricted share units to our personnel and increased share price volatility in the current period for equity awards accounted for as liabilities that were granted to employees of Progressive Waste prior to June 1, 2016 which are subject to valuation adjustments each period based on changes in fair value, an increase in deferred compensation expenses of \$2.6 million as a result of increases in the market value of investments to which employee deferred compensation liability balances are tracked, an increase in direct acquisition expenses of \$2.4 million due to higher acquisition activity, an increase in accrued recurring cash incentive compensation expense to our management of \$1.9 million and an increase in 401(k) matching expenses of \$1.1 million due to our increasing the maximum matching contribution rate to our employees, partially offset by a decrease in professional fees expense of \$8.4 million resulting primarily from reduced legal expenses resulting from the settlement of certain legal matters subsequent to June 30, 2018, a decrease in integration-related expenses of \$2.4 million incurred in the prior year period resulting from the acquisition of Progressive Waste, a decrease in salaries expense of \$1.0 million due primarily to a reduction in sales department headcount and \$1.4 million of other net expense decreases.

SG&A expenses as a percentage of revenues decreased 0.1 percentage points to 10.2% for the three months ended June 30, 2019, from 10.3% for the three months ended June 30, 2018. The decrease as a percentage of revenues consisted of a 0.3 percentage point decrease from lower legal expenses and a 0.1 percentage point decrease from integration-related expenses resulting from the acquisition of Progressive Waste, partially offset by a 0.3 percentage point increase from higher direct acquisition costs.

SG&A expenses as a percentage of revenues decreased 0.5 percentage points to 10.4% for the six months ended June 30, 2019, from 10.9% for the six months ended June 30, 2018. The decrease as a percentage of revenues consisted

of a 0.4 percentage point decrease from lower legal expenses and a 0.1 percentage point decrease from integration-related expenses resulting from the acquisition of Progressive Waste.

Depreciation. Depreciation expense increased \$14.3 million, or 10.1%, to \$156.8 million for the three months ended June 30, 2019, from \$142.5 million for the three months ended June 30, 2018. The increase was comprised of additional depletion expense of \$5.8 million at our existing landfills due primarily to higher E&P and municipal solid waste volumes, depreciation and depletion expense of \$5.8 million from acquisitions closed during, or subsequent to, the three months ended June 30, 2018 and additional depreciation expense of \$3.5 million associated with additions to our fleet and equipment purchased to support our existing operations, partially offset by a decrease of \$0.8 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods.

Depreciation expense increased \$28.0 million, or 10.2%, to \$303.6 million for the six months ended June 30, 2019, from \$275.6 million for the six months ended June 30, 2018. The increase was comprised of depreciation and depletion expense of \$11.3 million from acquisitions closed during, or subsequent to, the six months ended June 30, 2018, additional depreciation expense of \$9.4 million associated with additions to our fleet and equipment purchased to support our existing operations and an increase in depletion expense of \$9.2 million at our existing landfills due primarily to higher E&P and municipal solid waste volumes, partially offset by a decrease of \$1.9 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods.

Depreciation expense as a percentage of revenues was unchanged at 11.5% for the three months ended June 30, 2019 and 2018 and 11.6% for the six months ended June 30, 2019 and 2018.

Amortization of Intangibles. Amortization of intangibles expense increased \$4.8 million, or 18.4% to \$31.3 million for the three months ended June 30, 2019, from \$26.5 million for the three months ended June 30, 2018. The increase was the result of \$7.9 million from intangible assets acquired in acquisitions closed during, or subsequent to, the three months ended June 30, 2018, partially offset by a decrease of \$2.9 million from certain intangible assets becoming fully amortized subsequent to June 30, 2018 and a decrease of \$0.2 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods.

Amortization of intangibles expense increased \$9.3 million, or 17.7% to \$61.9 million for the six months ended June 30, 2019, from \$52.6 million for the six months ended June 30, 2018. The increase was the result of \$14.9 million from intangible assets acquired in acquisitions closed during, or subsequent to, the six months ended June 30, 2018, partially offset by a decrease of \$5.0 million from certain intangible assets becoming fully amortized subsequent to June 30, 2018 and a decrease of \$0.6 million resulting from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods.

Amortization expense as a percentage of revenues increased 0.2 percentage points to 2.3% for the three months ended June 30, 2019, from 2.1% for the three months ended June 30, 2018. Amortization expense as a percentage of revenues increased 0.1 percentage points to 2.3% for the six months ended June 30, 2019, from 2.2% for the six months ended June 30, 2018. The increases as a percentage of revenues were due primarily to the impact of amortization expense associated with acquisitions closed during, or subsequent to, the three and six months ended June 30, 2018.

Impairments and Other Operating Items. Impairments and other operating items decreased \$3.2 million, to net losses totaling \$3.9 million for the three months ended June 30, 2019, from net losses totaling \$7.1 million for the three months ended June 30, 2018.

The net losses of \$3.9 million recorded during the three months ended June 30, 2019 consisted of \$1.7 million of losses on property and equipment that were disposed of through sales or as a result of being damaged in operations, \$1.3 million of expenses associated with the settlement of various litigation claims and \$0.9 million of charges to terminate or write off the carrying cost of certain contracts that were not, or are not expected to be, renewed prior to their original estimated termination date.

The net losses of \$7.1 million recorded during the three months ended June 30, 2018 consisted of \$3.9 million of charges to write off the carrying cost of certain contracts that were not renewed prior to their original estimated termination date, \$2.9 million of losses on trucks and equipment that were scrapped, disposed of through sales or disposed of as a result of being damaged in operations and \$0.3 million of other net charges.

Impairments and other operating items increased \$11.9 million, to net losses totaling \$20.0 million for the six months ended June 30, 2019, from net losses totaling \$8.1 million for the six months ended June 30, 2018.

The net losses of \$20.0 million recorded during the six months ended June 30, 2019 consisted of \$13.1 million of charges to terminate or write off the carrying cost of certain contracts that were not, or are not expected to be, renewed prior to their original estimated termination date, \$4.2 million of losses on property and equipment that were disposed of through sales or as a result of being damaged in operations, \$1.7 million of expenses associated with the settlement of various litigation claims and a \$1.5 million expense charge to increase the fair value of amounts payable under liability-classified contingent consideration arrangements from acquisitions closed in periods prior to 2018, partially offset by \$0.5 million of other gains.

The net losses of \$8.1 million recorded during the six months ended June 30, 2018 consisted of \$5.7 million of losses on trucks and equipment that were scrapped, disposed of through sales or disposed of as a result of being damaged in operations, \$1.4 million of charges to write off the carrying cost of certain contracts that were not expected to be renewed prior to their original estimated termination date and \$1.0 million of other net charges.

Operating Income. Operating income increased \$11.4 million, or 5.4%, to \$222.1 million for the three months ended June 30, 2019, from \$210.7 million for the three months ended June 30, 2018. The increase was primarily attributable to operating income generated from acquisitions, price-led growth in our existing solid waste business and a decrease in impairments and other operating charges.

Operating income increased \$7.6 million, or 1.9%, to \$407.0 million for the six months ended June 30, 2019, from \$399.4 million for the six months ended June 30, 2018. The increase was primarily attributable to operating income generated from acquisitions, price-led growth in our existing solid waste business and gross margins recognized on E&P volume growth, partially offset by an increase in impairments and other operating charges.

Operating income as a percentage of revenues decreased 0.8 percentage points to 16.2% for the three months ended June 30, 2019, from 17.0% for the three months ended June 30, 2018. The decrease as a percentage of revenues was comprised of a 1.0 percentage point increase in cost of operations and a 0.2 percentage point increase in amortization expense, partially offset by a 0.3 percentage point decrease in impairments and other operating items and a 0.1 percentage point decrease in SG&A expense.

Operating income as a percentage of revenues decreased 1.2 percentage points to 15.6% for the six months ended June 30, 2019, from 16.8% for the six months ended June 30, 2018. The decrease as a percentage of revenues was comprised of a 1.1 percentage point increase in cost of operations, a 0.5 percentage point increase in impairments and other operating items and a 0.1 percentage point increase in amortization expense, partially offset by and a 0.5 percentage point decrease in SG&A expense.

Interest Expense. Interest expense increased \$4.8 million, or 14.9%, to \$37.2 million for the three months ended June 30, 2019, from \$32.4 million for the three months ended June 30, 2018. The increase was primarily attributable to an increase of \$5.3 million from the November 2018 issuance of our 2028 Senior Notes, an increase of \$3.6 million from the April 2019 issuance of our 2029 Senior Notes and an increase of \$0.5 million due to higher interest rates on outstanding borrowings under our Credit Agreement, partially offset by a decrease of \$4.4 million due to a decrease in the average borrowings outstanding under our Credit Agreement and \$0.2 million of other net decreases.

Interest expense increased \$9.7 million, or 15.0%, to \$74.5 million for the six months ended June 30, 2019, from \$64.8 million for the six months ended June 30, 2018. The increase was primarily attributable to an increase of \$10.6 million from the November 2018 issuance of our 2028 Senior Notes, an increase of \$3.6 million from the April 2019 issuance of our 2029 Senior Notes and an increase of \$1.9 million due to higher interest rates on outstanding borrowings.

under our Credit Agreement, partially offset by a decrease of \$5.1 million due to a decrease in the average borrowings outstanding under our Credit Agreement, a decrease of \$0.5 million from the redemption of our 2018 Senior Notes using proceeds from our Credit Agreement and \$0.8 million of other net decreases.

Interest Income. Interest income increased \$0.7 million, to \$1.8 million for the three months ended June 30, 2019, from \$1.1 million for the three months ended June 30, 2018. Interest income increased \$2.9 million, to \$5.1 million for the six months ended June 30, 2019, from \$2.2 million for the six months ended June 30, 2018. The increases were primarily attributable to higher reinvestment rates in the current period and higher average cash balances.

Other Income. Other income decreased \$1.2 million, to \$0.8 million for the three months ended June 30, 2019, from \$2.0 million for the three months ended June 30, 2018. The decrease was due primarily to prior period adjustments to reduce accrued liabilities acquired in the Progressive Waste acquisition of \$2.2 million, partially offset by a \$0.6 million increase in income earned on investments purchased to fund our employee deferred compensation obligations and a \$0.4 million increase in other net income sources.

Other income increased \$1.8 million, to \$3.4 million for the six months ended June 30, 2019, from \$1.6 million for the six months ended June 30, 2018. The increase was due primarily to a \$2.8 million increase in income earned on investments purchased to fund our employee deferred compensation obligations and a \$0.5 million increase in other net income sources, partially offset by prior period adjustments to reduce accrued liabilities acquired in the Progressive Waste acquisition of \$1.5 million.

Income Tax Provision. Income taxes decreased \$2.8 million, or 6.5%, to \$39.8 million for the three months ended June 30, 2019, from \$42.6 million for the three months ended June 30, 2018. Our effective tax rate for the three months ended June 30, 2019 was 21.1%. Our effective tax rate for the three months ended June 30, 2018 was 23.5%. Income taxes decreased \$6.6 million, or 9.0%, to \$67.8 million for the six months ended June 30, 2019, from \$74.4 million for the six months ended June 30, 2018. Our effective tax rate for the six months ended June 30, 2019 was 19.8%. Our effective tax rate for the six months ended June 30, 2018 was 22.0%.

The income tax provision for the three and six months ended June 30, 2019 included a benefit of \$0.3 million and \$5.3 million, respectively, from share-based payment awards being recognized in the income statement when settled and a portion of our internal financing being taxed at effective rates substantially lower than the U.S. federal statutory rate.

The tax provision for the three and six months ended June 30, 2018 included a \$5.6 million expense associated with the restructuring of our internal refinancing in conjunction with the Tax Cuts and Jobs Act, or the Tax Act, as well as a \$3.1 million benefit related to a reduction in our deferred income tax liabilities resulting from state legislation enacted in the current period and changes in our geographical apportionment due to acquisition activity. Additionally, the income tax provision for the three and six months ended June 30, 2018 included a benefit of \$0.2 million and \$4.8 million, respectively, from share-based payment awards being recognized in the income statement when settled and a portion of our internal financing being taxed at effective rates substantially lower than the U.S. federal statutory rate.

SEGMENT RESULTS

General

No single contract or customer accounted for more than 10% of our total revenues at the consolidated or reportable segment level during the periods presented. The following table disaggregates our revenue by service line for the periods indicated (dollars in thousands of U.S. dollars).

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Commercial	\$ 396,641	\$ 360,364	\$ 778,150	\$ 710,718
Residential	346,128	297,076	668,532	581,901
Industrial and construction roll off	215,355	197,279	402,795	371,747
Total collection	958,124	854,719	1,849,477	1,664,366
Landfill	296,840	271,674	541,440	504,111
Transfer	204,561	168,863	365,752	307,355
Recycling	16,730	22,703	36,534	46,188
E&P	68,039	62,663	134,869	121,022
Intermodal and other	31,134	37,324	63,971	71,327
Intercompany	(205,789)	(177,978)	(377,768)	(334,270)
Total	<u>\$ 1,369,639</u>	<u>\$ 1,239,968</u>	<u>\$ 2,614,275</u>	<u>\$ 2,380,099</u>

Our Chief Operating Decision Maker evaluates operating segment profitability and determines resource allocations based on several factors, of which the primary financial measure is segment EBITDA. We define segment EBITDA as earnings before interest, taxes, depreciation, amortization, impairments and other operating items, other income (expense) and foreign currency transaction gain (loss). Segment EBITDA is not a measure of operating income, operating performance or liquidity under GAAP and may not be comparable to similarly titled measures reported by other companies. Our management uses segment EBITDA in the evaluation of segment operating performance as it is a profit measure that is generally within the control of the operating segments.

We manage our operations through five geographic operating segments and our E&P segment, which includes the majority of our E&P waste treatment and disposal operations. Our five geographic operating segments and our E&P segment comprise our reportable segments. Each operating segment is responsible for managing several vertically integrated operations, which are comprised of districts. In the first quarter of 2019, we moved two districts from our Eastern segment to our Central segment because their location was closer in proximity to operations in our Central segment. The segment information presented herein reflects the realignment of these districts.

At June 30, 2019, under the current orientation, our Eastern segment services customers located in northern Illinois, Kentucky, Maryland, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, eastern Tennessee, Vermont, Virginia and Wisconsin; our Southern segment services customers located in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, southern Oklahoma, western Tennessee and Texas; our Western segment services customers located in Alaska, California, Idaho, Montana, Nevada, Oregon, Washington and western Wyoming; our Central segment services customers located in Arizona, Colorado, Iowa, southern Illinois, Kansas, Minnesota, Missouri, Nebraska, New Mexico, Oklahoma, South Dakota, western Texas, Utah and eastern Wyoming; and our Canada segment services customers located in the state of Michigan and in the provinces of Alberta, British Columbia, Manitoba, Ontario, Québec and Saskatchewan. The E&P segment services E&P customers located in Arkansas, Louisiana, New Mexico, North Dakota, Oklahoma, Texas, Wyoming and along the Gulf of Mexico.

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Revenues, net of intercompany eliminations, for our reportable segments are shown in the following table in thousands of U.S. dollars and as a percentage of total revenues for the periods indicated:

	Three months ended June 30,						Six months ended June 30,					
	2019			2018			2019			2018		
Eastern	\$ 323,621	23.6	%	\$ 266,459	21.5	%	\$ 616,448	23.6	%	\$ 504,047	21.1	%
Southern	298,015	21.8		283,110	22.8		585,343	22.4		556,449	23.4	
Western	276,998	20.2		263,699	21.2		531,977	20.3		508,862	21.4	
Central	218,361	15.9		179,504	14.5		396,238	15.2		337,584	14.2	
Canada	188,527	13.8		186,838	15.1		356,874	13.6		356,813	15.0	
E&P	64,117	4.7		60,358	4.9		127,395	4.9		116,344	4.9	
	<u>\$ 1,369,639</u>	<u>100.0</u>	<u>%</u>	<u>\$ 1,239,968</u>	<u>100.0</u>	<u>%</u>	<u>\$ 2,614,275</u>	<u>100.0</u>	<u>%</u>	<u>\$ 2,380,099</u>	<u>100.0</u>	<u>%</u>

Segment EBITDA for our reportable segments is shown in the following table in thousands of U.S. dollars and as a percentage of segment revenues for the periods indicated:

	Three months ended June 30,				Six months ended June 30,			
	2019		2018		2019		2018	
Western	\$ 86,440	31.2 %	\$ 81,175	30.8 %	\$ 163,444	30.7 %	\$ 153,832	30.2 %
Eastern	85,048	26.3 %	73,755	27.7 %	162,005	26.3 %	140,040	27.8 %
Southern	74,511	25.0 %	68,787	24.3 %	148,889	25.4 %	137,694	24.7 %
Central	74,506	34.1 %	64,172	35.7 %	137,534	34.7 %	123,742	36.7 %
Canada	67,664	35.9 %	67,305	36.0 %	126,908	35.6 %	126,571	35.5 %
E&P	33,433	52.1 %	31,231	51.7 %	65,042	51.1 %	59,910	51.5 %
Corporate ^(a)	<u>(7,446)</u>	—	<u>260</u>	—	<u>(11,304)</u>	—	<u>(6,083)</u>	—
	<u>\$ 414,156</u>	<u>30.2 %</u>	<u>\$ 386,685</u>	<u>31.2 %</u>	<u>\$ 792,518</u>	<u>30.3 %</u>	<u>\$ 735,706</u>	<u>30.9 %</u>

(a) Corporate functions include accounting, legal, tax, treasury, information technology, risk management, human resources, training and other administrative functions. Amounts reflected are net of allocations to the six operating segments.

A reconciliation of segment EBITDA to Income before income tax provision is included in Note 11 to our Condensed Consolidated Financial Statements included in Part 1, Item 1 of this report.

Significant changes in revenue and segment EBITDA for our reportable segments for the three and six month periods ended June 30, 2019, compared to the three and six month periods ended June 30, 2018, are discussed below:

Segment Revenue

Revenue in our Eastern segment increased \$57.1 million, or 21.5%, to \$323.6 million for the three months ended June 30, 2019, from \$266.5 million for the three months ended June 30, 2018. The components of the increase consisted of net revenue growth from acquisitions closed during, or subsequent to, the three months ended June 30, 2018, of \$43.9 million, net price increases of \$14.7 million and solid waste volume increases of \$0.9 million attributable primarily to higher landfill municipal solid waste, partially offset

by decreased recyclable commodity sales of \$2.2 million resulting from the impact of declines in prices for old corrugated cardboard and other fiber products and other revenue decreases of \$0.2 million.

Revenue in our Eastern segment increased \$112.4 million, or 22.3%, to \$616.4 million for the six months ended June 30, 2019, from \$504.0 million for the six months ended June 30, 2018. The components of the increase consisted of net revenue growth from acquisitions closed during, or subsequent to, the six months ended June 30, 2018, of \$85.8 million, net price increases of \$29.1 million and solid waste volume increases of \$1.6 million attributable primarily to higher landfill municipal solid waste, partially offset by decreased recyclable commodity sales of \$3.9 million resulting from the impact of declines in prices for old corrugated cardboard and other fiber products and other revenue decreases of \$0.2 million.

Revenue in our Southern segment increased \$14.9 million, or 5.3%, to \$298.0 million for the three months ended June 30, 2019, from \$283.1 million for the three months ended June 30, 2018. The components of the increase consisted of net revenue growth from acquisitions closed during, or subsequent to, the three months ended June 30, 2018, of \$12.0 million and net price increases of \$14.1 million, partially offset by net revenue reductions from divestitures closed subsequent to June 30, 2018 of \$6.8 million, solid waste volume decreases of \$2.6 million primarily from the net impact of declines in residential customers at certain locations acquired in the Progressive Waste acquisition and weather events in the current quarter adversely impacting landfill municipal solid waste volumes, decreased recyclable commodity sales of \$1.0 million resulting from the impact of declines in prices for old corrugated cardboard and other fiber products and \$0.8 million of other revenue decreases.

Revenue in our Southern segment increased \$28.9 million, or 5.2%, to \$585.3 million for the six months ended June 30, 2019, from \$556.4 million for the six months ended June 30, 2018. The components of the increase consisted of net price increases of \$28.0 million, net revenue growth from acquisitions closed during, or subsequent to, the six months ended June 30, 2018, of \$26.9 million and other revenue increases of \$0.4 million, partially offset by net revenue reductions from divestitures closed subsequent to June 30, 2018 of \$13.1 million, solid waste volume decreases of \$11.2 million primarily from the net impact of declines in residential customers at certain locations acquired in the Progressive Waste acquisition and reductions in landfill municipal solid waste volumes and decreased recyclable commodity sales of \$2.1 million resulting from the impact of declines in prices for old corrugated cardboard and other fiber products

Revenue in our Western segment increased \$13.3 million, or 5.0%, to \$277.0 million for the three months ended June 30, 2019, from \$263.7 million for the three months ended June 30, 2018. The components of the increase consisted of net price increases of \$8.6 million, solid waste volume increases of \$8.6 million due to the net impact of increases associated with landfill municipal solid waste, landfill special waste, residential collection and commercial collection and other revenue increases of \$0.4 million, partially offset by decreased intermodal revenue of \$2.4 million resulting from customer losses causing a reduction in cargo volume and decreased recyclable commodity sales of \$1.9 million resulting from the impact of declines in prices for old corrugated cardboard and other fiber products.

Revenue in our Western segment increased \$23.1 million, or 4.5%, to \$532.0 million for the six months ended June 30, 2019, from \$508.9 million for the six months ended June 30, 2018. The components of the increase consisted of net price increases of \$16.7 million and solid waste volume increases of \$12.2 million due to the net impact of increases associated with landfill municipal solid waste, landfill special waste, residential collection and commercial collection and other revenue increases of \$0.5 million, partially offset by decreased intermodal revenue of \$3.5 million resulting from customer losses causing a reduction in cargo volume and decreased recyclable commodity sales of \$2.8 million resulting from the impact of declines in prices for old corrugated cardboard and other fiber products.

Revenue in our Central segment increased \$38.9 million, or 21.6%, to \$218.4 million for the three months ended June 30, 2019, from \$179.5 million for the three months ended June 30, 2018. The components of the increase consisted of revenue growth from acquisitions closed during, or subsequent to, the three months ended June 30, 2018, of \$26.3 million, net price increases of \$10.6 million and volume increases of \$2.3 million primarily due to increased landfill municipal solid waste and landfill special waste, partially offset by other revenue decreases of \$0.3 million.

Revenue in our Central segment increased \$58.6 million, or 17.4%, to \$396.2 million for the six months ended June 30, 2019, from \$337.6 million for the six months ended June 30, 2018. The components of the increase consisted of revenue growth from acquisitions closed during, or subsequent to, the six months ended June 30, 2018, of \$42.9 million and net price increases of \$19.1 million, partially offset by solid waste volume decreases of \$3.0 million as weather events in current year adversely impacted landfill volumes and roll off activity and other revenue decreases of \$0.4 million.

Revenue in our Canada segment increased \$1.7 million, or 0.9%, to \$188.5 million for the three months ended June 30, 2019, from \$186.8 million for the three months ended June 30, 2018. The components of the increase consisted of net price increases of \$10.5 million and revenue growth from acquisitions closed during, or subsequent to, the three months ended June 30, 2018, of \$1.6 million, partially offset by a decrease of \$6.4 million resulting from a lower average foreign currency exchange rate in effect during the comparable reporting periods, other revenue decreases of

\$2.4 million due primarily to decreased landfill gas sales and decreased recyclable commodity sales of \$1.6 million resulting from the impact of declines in prices for old corrugated cardboard and other fiber products.

Revenue in our Canada segment increased \$0.1 million, to \$356.9 million for the six months ended June 30, 2019, from \$356.8 million for the six months ended June 30, 2018. The components of the increase consisted of net price increases of \$20.5 million and revenue growth from acquisitions closed during, or subsequent to, the six months ended June 30, 2018, of \$3.3 million, partially offset by a decrease of \$14.7 million resulting from a lower average foreign currency exchange rate in effect during the comparable reporting periods, other revenue decreases of \$3.3 million due primarily to decreased landfill gas sales, solid waste volume decreases of \$3.1 million primarily associated with losses in residential revenue resulting from the non-renewal of certain contracts acquired in the Progressive Waste acquisition and decreased recyclable commodity sales of \$2.6 million resulting from the impact of declines in prices for old corrugated cardboard and other fiber products.

Revenue in our E&P segment increased \$3.7 million, or 6.2%, to \$64.1 million for the three months ended June 30, 2019, from \$60.4 million for the three months ended June 30, 2018. Revenue in our E&P segment increased \$11.1 million, or 9.5%, to \$127.4 million for the six months ended June 30, 2019, from \$116.3 million for the six months ended June 30, 2018. The increases were due to increased drilling activity and E&P disposal volumes at the majority of basins we operate.

Segment EBITDA

Segment EBITDA in our Western segment increased \$5.2 million, or 6.5%, to \$86.4 million for the three months ended June 30, 2019, from \$81.2 million for the three months ended June 30, 2018. The increase was due primarily to an increase in revenues of \$13.3 million, a decrease in intermodal expenses of \$2.0 million resulting from a decrease in intermodal cargo volume due to customer losses, a decrease in professional fees of \$1.4 million resulting primarily from reduced legal expenses due to the settlement of certain legal matters subsequent to June 30, 2018 and a decrease in corporate overhead expense allocations of \$1.2 million due to a decrease in the overhead allocation rate, partially offset by an increase in direct and administrative labor expenses of \$2.9 million due primarily to employee pay rate increases, an increase in disposal expenses of \$1.8 million due primarily to higher residential and commercial collection volumes disposed at third party facilities, an increase in taxes on revenues of \$1.7 million due primarily to higher landfill and collection revenues, an increase in truck, container, equipment and facility maintenance and repair expenses of \$1.3 million due to parts and service rate increases and variability impacting the timing of major repairs, an increase in third-party trucking and transportation expenses of \$1.0 million due primarily to increased rates charged by third parties to provide trucking and transportation services, an increase in employee benefits expenses of \$0.8 million due to higher costs of health care services provided under our benefit plans, an increase of \$0.6 million resulting from higher costs per ton charged by third party processors of recyclable commodities, an increase in 401(k) matching expenses of \$0.5 million due to our increasing the maximum matching contribution rate to our employees and \$2.1 million of other net expense increases.

Segment EBITDA in our Western segment increased \$9.6 million, or 6.2%, to \$163.4 million for the six months ended June 30, 2019, from \$153.8 million for the six months ended June 30, 2018. The increase was due primarily to an increase in revenues of \$23.1 million, a decrease in intermodal expenses of \$2.6 million resulting from a decrease in intermodal cargo volume due to customer losses, a decrease in professional fees of \$1.5 million resulting primarily from reduced legal expenses due to the settlement of certain legal matters subsequent to June 30, 2018 and a decrease in corporate overhead expense allocations of \$1.0 million due to a decrease in the overhead allocation rate, partially offset by an increase in direct and administrative labor expenses of \$3.8 million due primarily to employee pay rate increases, an increase in taxes on revenues of \$3.2 million due primarily to higher landfill and collection revenues, an increase in disposal expenses of \$2.2 million due primarily to higher residential and commercial collection volumes disposed at third party facilities, an increase in third-party trucking and transportation expenses of \$1.6 million due primarily to increased rates charged by third parties to provide trucking and transportation services, an increase in truck, container, equipment and facility maintenance and repair expenses of \$1.4 million due to parts and service rate increases and variability impacting the timing of major repairs, an increase in 401(k) matching expenses of \$1.2 million due to our increasing the maximum matching contribution rate to our employees, an increase of \$1.2 million resulting from higher

costs per ton charged by third party processors of recyclable commodities and \$4.0 million of other net expense increases.

Segment EBITDA in our Eastern segment increased \$11.2 million, or 15.3%, to \$85.0 million for the three months ended June 30, 2019, from \$73.8 million for the three months ended June 30, 2018. The increase was due primarily to an increase in revenues of \$57.1 million, partially offset by a net \$34.0 million increase in cost of operations and SG&A expenses attributable to acquired operations, an increase in third-party trucking and transportation expenses of \$3.3 million due primarily to increased rates charged by third parties to provide trucking and transportation services, an increase in direct and administrative labor expenses of \$2.6 million due primarily to employee pay rate increases, an increase in truck, container, equipment and facility maintenance and repair expenses of \$2.4 million due to parts and service rate increases and variability impacting the timing of major repairs, an increase of \$1.5 million resulting from higher costs per ton charged by third party processors of recyclable commodities, increased leachate disposal expenses of \$0.9 million due to increased precipitation generating higher leachate volumes as well as higher costs per gallon for leachate treatment, an increase in diesel fuel expense of \$0.7 million due primarily to the prior year period benefiting from a favorable diesel fuel hedge agreement that expired in December 2018 and an increase in 401(k) matching expenses of \$0.5 million due to our increasing the maximum matching contribution rate to our employees.

Segment EBITDA in our Eastern segment increased \$22.0 million, or 15.7%, to \$162.0 million for the six months ended June 30, 2019, from \$140.0 million for the six months ended June 30, 2018. The increase was due primarily to an increase in revenues of \$112.4 million, partially offset by a net \$65.7 million increase in cost of operations and SG&A expenses attributable to acquired operations, an increase in third-party trucking and transportation expenses of \$5.1 million due primarily to increased rates charged by third parties to provide trucking and transportation services, an increase in truck, container, equipment and facility maintenance and repair expenses of \$4.5 million due to parts and service rate increases and variability impacting the timing of major repairs, an increase in direct and administrative labor expenses of \$3.1 million due primarily to employee pay rate increases, an increase of \$2.9 million resulting from higher costs per ton charged by third party processors of recyclable commodities, increased leachate disposal expenses of \$2.7 million due to increased precipitation generating higher leachate volumes as well as higher costs per gallon for leachate treatment, an increase in corporate overhead expense allocations of \$1.7 million due to higher revenues for which overhead allocations are based, an increase in expenses for auto and workers' compensation claims of \$1.4 million due primarily to higher adjustments recorded in the prior year period to reduce projected losses on outstanding claims, an increase in diesel fuel expense of \$1.1 million due primarily to the prior year period benefiting from a favorable diesel fuel hedge agreement that expired in December 2018, an increase in 401(k) matching expenses of \$1.0 million due to our increasing the maximum matching contribution rate to our employees, an increase in compressed natural gas expense of \$0.9 million due primarily to a non-recurring reduction in expense during the prior year period resulting from recording retroactive tax credits associated with purchases of compressed natural gas fuel and \$0.3 million of other net expense increases.

Segment EBITDA in our Southern segment increased \$5.7 million, or 8.3%, to \$74.5 million for the three months ended June 30, 2019, from \$68.8 million for the three months ended June 30, 2018. The increase was due to an increase in revenues of \$21.7 million from organic growth and acquisitions, a decrease in third party disposal expenses of \$1.9 million due to improved internalization of waste collected at certain operating locations in Florida and Louisiana, a decrease in expenses for auto and workers' compensation claims of \$1.6 million due primarily to higher adjustments recorded in the current year period to reduce projected losses on outstanding claims incurred in prior periods and a decrease in corporate overhead expense allocations of \$1.3 million due to a decrease in the overhead allocation rate, partially offset by a net \$7.9 million increase in cost of operations and SG&A expenses attributable to acquired operations, an increase in truck, container, equipment and facility maintenance and repair expenses of \$3.3 million due to parts and service rate increases and variability impacting the timing of major repairs, an increase in direct and administrative labor expenses of \$2.9 million due primarily to employee pay rate increases, an increase in third-party trucking and transportation expenses of \$2.4 million due primarily to increased rates charged by third parties to provide trucking and transportation services, an increase in 401(k) matching expenses of \$0.9 million due to our increasing the maximum matching contribution rate to our employees, an increase in employee benefits expenses of \$0.9 million due to higher costs of health care services provided under our benefit plans, a decrease to EBITDA of \$0.8 million from the impact of operations disposed of during, or subsequent to, the three months ended June 30, 2018, an increase in leachate disposal expenses of \$0.5 million due to increased precipitation generating higher leachate volumes as well as higher

costs per gallon for leachate treatment, an increase in diesel fuel expense of \$0.5 million due primarily to the prior year period benefiting from purchasing a portion of our diesel fuel needs under a favorable fuel hedge agreement that expired in December 2018 and \$0.7 million of other net expense increases.

Segment EBITDA in our Southern segment increased \$11.2 million, or 8.1%, to \$148.9 million for the six months ended June 30, 2019, from \$137.7 million for the six months ended June 30, 2018. The increase was due to an increase in revenues of \$42.0 million from organic growth and acquisitions, a decrease in third party disposal expenses of \$4.3 million due to improved internalization of waste collected at certain operating locations in Florida and Louisiana, a decrease in expenses for auto and workers' compensation claims of \$1.7 million due primarily to higher adjustments recorded in the current year period to reduce projected losses on outstanding claims incurred in prior periods and a decrease in corporate overhead expense allocations of \$1.3 million due to a decrease in the overhead allocation rate, partially offset by a net \$15.9 million increase in cost of operations and SG&A expenses attributable to acquired operations, an increase in truck, container, equipment and facility maintenance and repair expenses of \$5.3 million due to parts and service rate increases and variability impacting the timing of major repairs, an increase in direct and administrative labor expenses of \$5.0 million due primarily to employee pay rate increases, an increase in third-party trucking and transportation expenses of \$3.3 million due primarily to increased rates charged by third parties to provide trucking and transportation services, an increase in 401(k) matching expenses of \$1.7 million due to our increasing the maximum matching contribution rate to our employees, an increase in compressed natural gas expense of \$1.4 million due primarily to a non-recurring reduction in expense during the prior year period resulting from recording retroactive tax credits associated with purchases of compressed natural gas fuel, increased leachate disposal expenses of \$1.4 million due to increased precipitation generating higher leachate volumes as well as higher costs per gallon for leachate treatment, a decrease to EBITDA of \$1.2 million from the impact of operations disposed of during, or subsequent to, the six months ended June 30, 2018, an increase in diesel fuel expense of \$0.9 million due primarily to the prior year period benefiting from purchasing a portion of our diesel fuel needs under a favorable fuel hedge agreement that expired in December 2018, an increase in equipment and facility rental expenses of \$0.8 million due primarily to increased truck rental expenses and the adoption on January 1, 2019 of new accounting standards associated with leases, an increase of \$0.6 million resulting from higher costs per ton charged by third party processors of recyclable commodities and \$0.6 million of other net expense increases.

Segment EBITDA in our Central segment increased \$10.3 million, or 16.1%, to \$74.5 million for the three months ended June 30, 2019, from \$64.2 million for the three months ended June 30, 2018. The increase was due primarily to an increase in revenues of \$38.9 million, partially offset by a net \$20.4 million increase in cost of operations and SG&A expenses attributable to acquired operations, an increase in third-party trucking and transportation expenses of \$2.7 million due primarily to outsourcing transportation services to third party operators at certain locations and increased rates charged by third parties to provide trucking and transportation services, an increase in direct and administrative labor expenses of \$2.1 million due primarily to employee pay rate increases, an increase in disposal expenses of \$1.1 million due to increased disposal rates and strategic adjustments to redirect certain collected waste to third party disposal facilities, an increase in truck, container, equipment and facility maintenance and repair expenses of \$0.8 million due to the variability and timing of major repairs, an increase in diesel fuel expense of \$0.6 million due primarily to the prior year period benefiting from purchasing a portion of our diesel fuel needs under a favorable fuel hedge agreement that expired in December 2018, an increase in 401(k) matching expenses of \$0.5 million due to our increasing the maximum matching contribution rate to our employees and \$0.4 million of other net expense increases.

Segment EBITDA in our Central segment increased \$13.8 million, or 11.1%, to \$137.5 million for the six months ended June 30, 2019, from \$123.7 million for the six months ended June 30, 2018. The increase was due primarily to an increase in revenues of \$58.6 million and \$0.6 million of other net expense decreases, partially offset by a net \$33.4 million increase in cost of operations and SG&A expenses attributable to acquired operations, an increase in third-party trucking and transportation expenses of \$4.1 million due primarily to outsourcing transportation services to third party operators at certain locations and increased rates charged by third parties to provide trucking and transportation services, an increase in direct and administrative labor expenses of \$3.2 million due primarily to employee pay rate increases, an increase in disposal expenses of \$1.2 million due to increased disposal rates and strategic adjustments to redirect certain collected waste to third party disposal facilities, an increase in truck, container, equipment and facility maintenance and repair expenses of \$1.0 million due to the variability and timing of major repairs, an increase in 401(k) matching expenses of \$0.9 million due to our increasing the maximum matching contribution rate to our employees, an increase in

diesel fuel expense of \$0.9 million due primarily to the prior year period benefiting from purchasing a portion of our diesel fuel needs under a favorable fuel hedge agreement that expired in December 2018 and an increase in compressed natural gas expense of \$0.7 million due primarily to a non-recurring reduction in expense during the prior year period resulting from recording retroactive tax credits associated with purchases of compressed natural gas fuel.

Segment EBITDA in our Canada segment increased \$0.4 million, or 0.5%, to \$67.7 million for the three months ended June 30, 2019, from \$67.3 million for the three months ended June 30, 2018. The increase was comprised of an increase of \$2.6 million assuming foreign currency parity during the comparable reporting periods, partially offset by a decrease of \$2.2 million from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods. The \$2.6 million increase, which assumes foreign currency parity, was due primarily to an increase in revenues of \$8.1 million, partially offset by an increase in direct labor expenses of \$2.5 million due primarily to a reduction in open employment positions and employee pay rate increases, an increase in third-party disposal expenses of \$1.8 million due to higher disposal rates charged by operators and an increase in truck, container, equipment and facility maintenance and repair expenses of \$1.2 million due to the variability and timing of major repairs.

Segment EBITDA in our Canada segment increased \$0.3 million, or 0.3%, to \$126.9 million for the six months ended June 30, 2019, from \$126.6 million for the six months ended June 30, 2018. The increase was comprised of an increase of \$5.4 million assuming foreign currency parity during the comparable reporting periods, partially offset by a decrease of \$5.1 million from a decrease in the average foreign currency exchange rate in effect during the comparable reporting periods. The \$5.4 million increase, which assumes foreign currency parity, was due primarily to an increase in revenues of \$14.8 million, partially offset by an increase in direct labor expenses of \$3.8 million due primarily to a reduction in open employment positions and employee pay rate increases, an increase in third-party disposal expenses of \$2.5 million due to higher disposal rates charged by operators, an increase in truck, container, equipment and facility maintenance and repair expenses of \$2.4 million due to the variability and timing of major repairs and other expense increases of \$0.7 million.

Segment EBITDA in our E&P segment increased \$2.2 million, or 7.1%, to \$33.4 million for the three months ended June 30, 2019, from \$31.2 million for the three months ended June 30, 2018. The increase was due primarily to an increase in revenues of \$3.7 million, partially offset by an increase in subcontracted operating expenses of \$1.5 million due primarily to subcontracting certain operating activities to third parties.

Segment EBITDA in our E&P segment increased \$5.1 million, or 8.6%, to \$65.0 million for the six months ended June 30, 2019, from \$59.9 million for the six months ended June 30, 2018. The increase was due primarily to an increase in revenues of \$11.1 million, partially offset by an increase in subcontracted operating expenses of \$2.5 million due primarily to subcontracting certain operating activities to third parties, an increase in cell processing expenses of \$1.2 million due primarily to increased disposal volumes, an increase in direct labor expenses of \$1.0 million due to employee pay rate increases and increased headcount to support higher disposal volumes, an increase in corporate overhead expense allocations of \$0.8 million due to higher revenues for which overhead allocations are based and \$0.5 million of other net expense increases.

Segment EBITDA at Corporate decreased \$7.7 million, to a loss of \$7.4 million for the three months ended June 30, 2019, from earnings of \$0.3 million for the three months ended June 30, 2018. The decrease was due to an increase in direct acquisition expenses of \$4.0 million due to higher acquisition activity in the current year period, a decrease in corporate overhead allocated to our segments of \$2.4 million due to a reduction in allocable expenses, an increase in equity-based compensation expenses of \$1.4 million associated with our annual recurring grant of restricted share units to our personnel, an increase in accrued recurring cash incentive compensation expense to our management of \$1.3 million and an increase in deferred compensation expenses of \$0.5 million as a result of increases in the market value of investments to which employee deferred compensation liability balances are tracked, partially offset by a decrease of \$1.3 million in integration-related expenses incurred in the prior year period for the Progressive Waste acquisition and \$0.6 million of other net expense decreases.

Segment EBITDA at Corporate decreased \$5.2 million, to a loss of \$11.3 million for the six months ended June 30, 2019, from a loss of \$6.1 million for the six months ended June 30, 2018. The decrease was due to an increase in equity-based compensation expenses of \$7.2 million associated with our annual recurring grant of restricted share units to our

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personnel and increased share price volatility in the current period for equity awards accounted for as liabilities that were granted to employees of Progressive Waste prior to June 1, 2016 which are subject to valuation adjustments each period based on changes in fair value, an increase in deferred compensation expenses of \$2.6 million as a result of increases in the market value of investments to which employee deferred compensation liability balances are tracked, an increase in direct acquisition expenses of \$2.4 million, an increase in accrued recurring cash incentive compensation expense to our management of \$1.3 million and \$0.5 million of other net expense increases, partially offset by a decrease of \$6.4 million in professional fees expense resulting primarily from reduced legal expenses from the settlement of certain legal matters subsequent to June 30, 2018 and a decrease of \$2.4 million in integration-related expenses incurred in the prior year period for the Progressive Waste acquisition.

LIQUIDITY AND CAPITAL RESOURCES

The following table sets forth certain cash flow information for the six months ended June 30, 2019 and 2018 (in thousands of U.S. dollars):

	Six Months Ended June 30,	
	2019	2018
Net cash provided by operating activities	\$ 753,048	\$ 664,931
Net cash used in investing activities	(640,290)	(685,234)
Net cash used in financing activities	(223,258)	(309,436)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	270	(915)
Net decrease in cash, cash equivalents and restricted cash	(110,230)	(330,654)
Cash, cash equivalents and restricted cash at beginning of year	403,966	556,467
Plus: change in cash held for sale	—	33
Cash, cash equivalents and restricted cash at end of year	<u>\$ 293,736</u>	<u>\$ 225,846</u>

Operating Activities Cash Flows

For the six months ended June 30, 2019, net cash provided by operating activities was \$753.0 million. For the six months ended June 30, 2018, net cash provided by operating activities was \$664.9 million. The \$88.1 million increase was due primarily to the following:

- 1) *Increase in earnings* — Our increase in net cash provided by operating activities was favorably impacted by \$70.0 million from an increase in net income, excluding depreciation, intangible amortization, lease amortization, deferred taxes, equity based compensation, adjustments to and payments of contingent consideration recorded in earnings and impairments and other operating items, due primarily to the impact of acquisitions closed subsequent to June 30, 2018 and price-led earnings growth at certain solid waste segments.
- 2) *Accounts payable and accrued liabilities* — Our increase in net cash provided by operating activities was favorably impacted by \$37.0 million from accounts payable and accrued liabilities due primarily to period end timing of payments to vendors for goods and services.
- 3) *Other long-term liabilities* — Our increase in net cash provided by operating activities was unfavorably impacted by \$19.1 million from other long-term liabilities due primarily to lease payments resulting from our adoption of new accounting standards associated with leases.

As of June 30, 2019, we had a working capital surplus of \$47.7 million, including cash and equivalents of \$209.2 million. Our working capital surplus decreased \$184.5 million from a working capital surplus of \$232.2 million at December 31, 2018, including cash and equivalents of \$319.3 million, due primarily to decreased cash balances and the adoption of new accounting standards associated with leases requiring a current liability to be recorded for the portion of lease payments payable with the next twelve months. To date, we have experienced no loss or lack of access to our cash and equivalents; however, we can provide no assurances that access to our cash and equivalents will not be impacted by adverse conditions in the financial markets. Our strategy in managing our working capital is generally to apply the cash generated from our operations that remains after satisfying our working capital and

along with share repurchase and dividend programs, to reduce the unhedged portion of our indebtedness under our Credit Agreement and to minimize our cash balances.

Investing Activities Cash Flows

Net cash used in investing activities decreased \$44.9 million to \$640.3 million for the six months ended June 30, 2019, from \$685.2 million for the six months ended June 30, 2018. The significant components of the decrease included the following:

- 1) A decrease in cash paid for acquisitions of \$104.1 million due primarily to a decrease in acquisitions closed during the six months ended June 30, 2019; less
- 2) An increase in capital expenditures of \$52.1 million due to higher landfill site development costs, increased additions to existing facilities and additional trucks and heavy equipment purchased for operations acquired subsequent to December 31, 2018; and
- 3) An increase in restricted investments of \$6.2 million for purposes of providing collateral for landfill closure obligations.

Financing Activities Cash Flows

Net cash used in financing activities decreased \$86.1 million to \$223.3 million for the six months ended June 30, 2019, from \$309.4 million for the six months ended June 30, 2018. The significant components of the decrease included the following:

- 1) An increase from the net change in long-term borrowings of \$54.0 million (long-term borrowings decreased \$118.4 million during the six months ended June 30, 2019 and decreased \$172.4 million during the six months ended June 30, 2018) due primarily to higher repayments in the prior year of long term debt assumed and paid in full from acquisitions; and
- 2) A decrease in payments to repurchase our common shares of \$42.0 million due to no shares being repurchased during the six months ended June 30, 2019; less
- 3) An increase in cash dividends paid of \$10.6 million due primarily to an increase in our quarterly dividend rate for the six months ended June 30, 2019 to \$0.16 per share, from \$0.14 per share for the six months ended June 30, 2018.

Our business is capital intensive. Our capital requirements include acquisitions and capital expenditures for landfill cell construction, landfill development, landfill closure activities and intermodal facility construction in the future.

On July 24, 2018, our Board of Directors approved, subject to receipt of regulatory approvals, the annual renewal of our normal course issuer bid, or the NCIB, to purchase up to 13,174,976 of our common shares during the period of August 8, 2018 to August 7, 2019 or until such earlier time as the NCIB is completed or terminated at our option. Shareholders may obtain a copy of our TSX Form 12 – Notice of Intention to Make a Normal Course Issuer Bid, without charge, by request directed to our Senior Vice President and Chief Financial Officer at (832) 442-2200. The timing and amounts of any repurchases pursuant to the NCIB will depend on many factors, including our capital structure, the market price of our common shares and overall market conditions. All common shares purchased under the NCIB shall be immediately cancelled following their repurchase. Information regarding our NCIB plan can be found under the “Shareholders’ Equity” section in Note 17 to the Condensed Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q and is incorporated herein by reference.

On July 25, 2019, our Board of Directors approved, subject to receipt of regulatory approvals, the annual renewal of our NCIB. The renewal will follow on the conclusion of our current NCIB expiring August 7, 2019. Upon approval, we anticipate that we will be authorized to make purchases during the period of August 8, 2019 to August 7, 2020 or until such earlier time as the NCIB is completed or terminated at our option.

Our Board of Directors authorized the initiation of a quarterly cash dividend in October 2010 and has increased it on an annual basis. In October 2018, our Board of Directors authorized an increase to our regular quarterly cash dividend of

\$0.02, from \$0.14 to \$0.16 per share. Cash dividends of \$84.2 million and \$73.6 million were paid during the six months ended June 30, 2019 and 2018, respectively. We cannot assure you as to the amounts or timing of future dividends.

We made \$253.8 million in capital expenditures during the six months ended June 30, 2019. We expect to make capital expenditures of between \$575 million and \$600 million in 2019 in connection with our existing business. We have funded and intend to fund the balance of our planned 2019 capital expenditures principally through cash on hand, internally generated funds and borrowings under our Credit Agreement. In addition, we may make substantial additional capital expenditures in acquiring municipal solid waste and E&P waste businesses. If we acquire additional landfill disposal facilities, we may also have to make significant expenditures to bring them into compliance with applicable regulatory requirements, obtain permits or expand our available disposal capacity. We cannot currently determine the amount of these expenditures because they will depend on the number, nature, condition and permitted status of any acquired landfill disposal facilities. We believe that our cash and equivalents, Credit Agreement and the funds we expect to generate from operations will provide adequate cash to fund our working capital and other cash needs for the foreseeable future. However, disruptions in the capital and credit markets could adversely affect our ability to draw on our Credit Agreement or raise other capital. Our access to funds under the Credit Agreement is dependent on the ability of the banks that are parties to the agreement to meet their funding commitments. Those banks may not be able to meet their funding commitments if they experience shortages of capital and liquidity or if they experience excessive volumes of borrowing requests within a short period of time.

As of June 30, 2019, \$700.0 million under the term loan and \$472.2 million under the revolving credit facility were outstanding under our Credit Agreement, exclusive of outstanding standby letters of credit of \$108.1 million. Our Credit Agreement matures in March 2023.

On April 16, 2019, we completed an underwritten public offering of \$500.0 million aggregate principal amount of our 3.50% Senior Notes due 2029, or the 2029 Senior Notes. The 2029 Senior Notes were issued under the Indenture, dated as of November 16, 2018, by and between the Company and U.S. Bank National Association, as trustee, as supplemented by the Second Supplemental Indenture, dated as of April 16, 2019.

We will pay interest on the 2029 Senior Notes semi-annually, commencing on November 1, 2019, and the 2029 Senior Notes will mature on May 1, 2029. The 2029 Senior Notes are our senior unsecured obligations, ranking equally in right of payment with our other existing and future unsubordinated debt and senior to any of our future subordinated debt. The 2029 Senior Notes are not guaranteed by any of our subsidiaries.

See Note 10 to the Condensed Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q for further details on the debt agreement.

We are a well-known seasoned issuer with an effective shelf registration statement on Form S-3 filed in May 2018, which registers an unspecified amount of debt securities, including debentures, notes or other types of debt. In the future, we may issue debt securities under our shelf registration statement or in private placements from time to time on an opportunistic basis, based on market conditions and available pricing. We expect to use the proceeds from any such offerings for general corporate purposes, including repaying, redeeming or repurchasing debt, acquiring additional assets or businesses, capital expenditures and increasing our working capital.

As of June 30, 2019, we had the following contractual obligations:

Recorded Obligations	Payments Due by Period				
	(amounts in thousands of U.S. dollars)				
	Total	Less Than 1 Year	1 to 3 Years	3 to 5 Years	Over 5 Years
Long-term debt	\$ 4,107,161	\$ 798	\$ 254,661	\$ 1,823,101	\$ 2,028,601
Cash interest payments	\$ 789,134	\$ 129,085	\$ 257,189	\$ 177,492	\$ 225,368
Contingent consideration	\$ 79,394	\$ 14,069	\$ 23,962	\$ 3,224	\$ 38,139
Final capping, closure and post-closure	\$ 1,508,736	\$ 20,639	\$ 30,165	\$ 17,666	\$ 1,440,266

Long-term debt payments include:

- 1) \$472.2 million in principal payments due March 2023 related to our revolving credit facility under our Credit Agreement. We may elect to draw amounts on our Credit Agreement in U.S. dollar LIBOR rate loans, U.S. dollar base rate loans, Canadian-based bankers' acceptances, and Canadian dollar prime rate loans. At June 30, 2019, \$401.5 million of the outstanding borrowings drawn under the revolving credit facility were in U.S. LIBOR rate loans, which bear interest at the LIBOR rate plus the applicable margin (for a total rate of 3.50% on such date) and \$70.7 million of the outstanding borrowings drawn under the revolving credit facility were in Canadian-based bankers' acceptances, which bear interest at the Canadian Dollar Offered Rate plus the applicable acceptance fee (for a total rate of 3.06% on such date).
- 2) \$700.0 million in principal payments due March 2023 related to our term loan under our Credit Agreement. Outstanding amounts on the term loan can be either base rate loans or LIBOR loans. At June 30, 2019, all amounts outstanding under the term loan were in LIBOR loans which bear interest at the LIBOR rate plus the applicable margin (for a total rate of 3.50% on such date).
- 3) \$175.0 million in principal payments due 2019 related to our 2019 Senior Notes. The 2019 Senior Notes bear interest at a rate of 5.25%. We have recorded this obligation in the payments due in 3 to 5 years category in the table above as we have the intent and ability to redeem the 2019 Senior Notes on November 1, 2019 using borrowings under our Credit Agreement.
- 4) \$100.0 million in principal payments due 2021 related to our 2021 Senior Notes. The 2021 Senior Notes bear interest at a rate of 4.64%.
- 5) \$150.0 million in principal payments due 2021 related to our New 2021 Senior Notes. The New 2021 Senior Notes bear interest at a rate of 2.39%.
- 6) \$125.0 million in principal payments due 2022 related to our 2022 Senior Notes. The 2022 Senior Notes bear interest at a rate of 3.09%.
- 7) \$200.0 million in principal payments due 2023 related to our 2023 Senior Notes. The 2023 Senior Notes bear interest at a rate of 2.75%.
- 8) \$150.0 million in principal payments due 2024 related to our 2024 Senior Notes. The 2024 Senior Notes bear interest at a rate of 3.24%.
- 9) \$375.0 million in principal payments due 2025 related to our 2025 Senior Notes. The 2025 Senior Notes bear interest at a rate of 3.41%.
- 10) \$400.0 million in principal payments due 2026 related to our 2026 Senior Notes. The 2026 Senior Notes bear interest at a rate of 3.03%.
- 11) \$250.0 million in principal payments due 2027 related to our 2027 Senior Notes. The 2027 Senior Notes bear interest at a rate of 3.49%.
- 12) \$500.0 million in principal payments due 2028 related to our 2028 Senior Notes. The 2028 Senior Notes bear interest at a rate of 4.250%.
- 13) \$500.0 million in principal payments due 2029 related to our 2029 Senior Notes. The 2029 Senior Notes bear interest at a rate of 3.500%.
- 14) \$10.0 million in principal payments related to our notes payable to sellers and other third parties. Our notes payable to sellers and other third parties bear interest at rates between 2.75% and 10.90% at June 30, 2019, and have maturity dates ranging from 2019 to 2036.

The following assumptions were made in calculating cash interest payments:

- 1) We calculated cash interest payments on the Credit Agreement using the LIBOR rate plus the applicable LIBOR margin and the Canadian Dollar Offered Rate plus the applicable acceptance fee at June 30, 2019. We assumed the Credit Agreement is paid off when it matures in March 2023.
- 2) We calculated cash interest payments on our interest rate swaps using the stated interest rate in the swap agreement less the LIBOR rate through the earlier expiration of the term of the swaps or the term of the credit facility.

Contingent consideration payments include \$57.0 million recorded as liabilities in our Condensed Consolidated Financial Statements at June 30, 2019, and \$22.4 million of future interest accretion on the recorded obligations.

The estimated final capping, closure and post-closure expenditures presented above are in current dollars.

	Amount of Commitment Expiration Per Period (amounts in thousands of U.S. dollars)				
	Total	Less Than 1 Year	1 to 3 Years	3 to 5 Years	Over 5 Years
Unrecorded Obligations ⁽¹⁾					
Operating leases	\$ 241,962	\$ 19,052	\$ 69,011	\$ 59,904	\$ 93,995
Unconditional purchase obligations	\$ 142,618	\$ 72,200	\$ 70,418	\$ —	\$ —

- (1) We are party to operating lease agreements and unconditional purchase obligations. These lease agreements and purchase obligations are established in the ordinary course of our business and are designed to provide us with access to facilities and products at competitive, market-driven prices. At June 30, 2019, our unconditional purchase obligations consisted of multiple fixed-price fuel purchase contracts under which we have 54.4 million gallons remaining to be purchased for a total of \$142.6 million. The current fuel purchase contracts expire on or before December 31, 2021. These arrangements have not materially affected our financial position, results of operations or liquidity during the six months ended June 30, 2019, nor are they expected to have a material impact on our future financial position, results of operations or liquidity.

We have obtained financial surety bonds, primarily to support our financial assurance needs and landfill and E&P operations. We provided customers and various regulatory authorities with surety bonds in the aggregate amounts of approximately \$1.039 billion and \$977.6 million at June 30, 2019 and December 31, 2018, respectively. These arrangements have not materially affected our financial position, results of operations or liquidity during the six months ended June 30, 2019, nor are they expected to have a material impact on our future financial position, results of operations or liquidity.

From time to time, we evaluate our existing operations and their strategic importance to us. If we determine that a given operating unit does not have future strategic importance, we may sell or otherwise dispose of those operations. Although we believe our reporting units would not be impaired by such dispositions, we could incur losses on them.

The disposal tonnage that we received in the six month periods ended June 30, 2019 and 2018, at all of our landfills during the respective period, is shown below (tons in thousands):

	Six months ended June 30,			
	2019		2018	
	Number of Sites	Total Tons	Number of Sites	Total Tons
Owned operational landfills and landfills operated under life-of-site agreements	92	22,487	89	21,296
Operated landfills	4	278	4	263
	96	22,765	93	21,559

NON-GAAP FINANCIAL MEASURES

Adjusted Free Cash Flow

We present adjusted free cash flow, a non-GAAP financial measure, supplementally because it is widely used by investors as a valuation and liquidity measure in the solid waste industry. Management uses adjusted free cash flow as one of the principal measures to evaluate and monitor the ongoing financial performance of our operations. We define adjusted free cash flow as net cash provided by operating activities, plus or minus change in book overdraft, plus proceeds from disposal of assets, less capital expenditures for property and equipment and distributions to noncontrolling interests. We further adjust this calculation to exclude the effects of items management believes impact the ability to assess the operating performance of our business. This measure is not a substitute for, and should be used in conjunction with, GAAP liquidity or financial measures. Other companies may calculate adjusted free cash flow differently. Our adjusted free cash flow for the six month periods ended June 30, 2019 and 2018, are calculated as follows (amounts in thousands of U.S. dollars):

	Six months ended June 30,	
	2019	2018
Net cash provided by operating activities	\$ 753,048	\$ 664,931
Less: Change in book overdraft	(534)	(1,132)
Plus: Proceeds from disposal of assets	1,198	2,074
Less: Capital expenditures for property and equipment	(253,790)	(201,712)
Less: Distributions to noncontrolling interests	(117)	(103)
Adjustments:		
Payment of contingent consideration recorded in earnings ^(a)	—	11
Cash received for divestitures ^(b)	(2,376)	—
Transaction-related items ^(c)	7,021	4,584
Integration-related and other expenses ^(d)	—	2,416
Pre-existing Progressive Waste share-based grants ^(e)	2,371	4,909
Tax effect ^(f)	(2,910)	(3,279)
Adjusted free cash flow	<u>\$ 503,911</u>	<u>\$ 472,699</u>

(a) Reflects the addback of acquisition-related payments for contingent consideration that were recorded as expenses in earnings and as a component of cash flows from operating activities as the amounts paid exceeded the fair value of the contingent consideration recorded at the acquisition date.

(b) Reflects the elimination of cash received in conjunction with the divestiture of certain Progressive Waste operations.

(c) Reflects the addback of acquisition-related items, including transaction costs.

(d) Reflects the addback of integration-related items, including rebranding costs, associated with the Progressive Waste acquisition.

(e) Reflects the cash settlement of pre-existing Progressive Waste share-based awards and related payments during the period.

(f) The aggregate tax effect of footnotes (a) through (e) is calculated based on the applied tax rates for the respective periods.

Adjusted EBITDA

We present adjusted EBITDA, a non-GAAP financial measure, supplementally because it is widely used by investors as a performance and valuation measure in the solid waste industry. Management uses adjusted EBITDA as one of the principal measures to evaluate and monitor the ongoing financial performance of our operations. We define adjusted EBITDA as net income attributable to Waste Connections, plus or minus net income (loss) attributable to noncontrolling interests, plus income tax provision, plus interest expense, less interest income, plus depreciation and amortization expense, plus closure and post-closure accretion expense, plus or minus any loss or gain on impairments and other operating items, plus other expense, less other income, plus foreign currency transaction loss, less foreign currency transaction gain. We further adjust this calculation to exclude the effects of other items management believes impact the ability to assess the operating performance of our business. This measure is not a substitute for, and should be used in conjunction with, GAAP financial measures. Other companies may calculate adjusted EBITDA differently. Our adjusted EBITDA for the three and six month periods ended June 30, 2019 and 2018, are calculated as follows (amounts in thousands of U.S. dollars):

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Net income attributable to Waste Connections	\$ 148,848	\$ 138,682	\$ 274,470	\$ 263,551
Plus (less): Net income (loss) attributable to noncontrolling interests	(9)	132	(54)	295
Plus: Income tax provision	39,788	42,565	67,756	74,417
Plus: Interest expense	37,245	32,426	74,533	64,796
Less: Interest income	(1,818)	(1,056)	(5,129)	(2,210)
Plus: Depreciation and amortization	188,120	168,924	365,509	328,207
Plus: Closure and post-closure accretion	3,682	3,258	7,172	6,496
Plus: Impairments and other operating items	3,902	7,073	20,014	8,104
Less: Other income, net	(805)	(2,031)	(3,363)	(1,644)
Plus (less): Foreign currency transaction loss (gain)	(1,115)	(30)	(1,218)	190
Adjustments:				
Plus: Transaction-related expenses ^(a)	6,184	2,199	7,021	4,584
Plus: Pre-existing Progressive Waste share-based grants ^(b)	1,262	2,058	4,283	3,221
Plus: Integration-related and other expenses ^(c)	—	1,306	—	2,416
Adjusted EBITDA	<u>\$ 425,284</u>	<u>\$ 395,506</u>	<u>\$ 810,994</u>	<u>\$ 752,423</u>

(a) Reflects the addback of acquisition-related transaction costs.

(b) Reflects share-based compensation costs, including changes in fair value and related expenses, associated with share-based awards granted by Progressive Waste outstanding at the time of the Progressive Waste acquisition.

(c) Reflects the addback of integration-related items, including rebranding costs, associated with the Progressive Waste acquisition.

Adjusted Net Income Attributable to Waste Connections and Adjusted Net Income per Diluted Share Attributable to Waste Connections

We present adjusted net income attributable to Waste Connections and adjusted net income per diluted share attributable to Waste Connections, both non-GAAP financial measures, supplementally because they are widely used by investors as a valuation measure in the solid waste industry. Management uses adjusted net income attributable to Waste Connections and adjusted net income per diluted share attributable to Waste Connections as one of the principal measures to evaluate and monitor the ongoing financial performance of our operations. We provide adjusted net income attributable to Waste Connections to exclude the effects of items management believes impact the comparability of operating results between periods. Adjusted net income attributable to Waste Connections has limitations due to the fact that it excludes items that have an impact on our financial condition and results of operations. Adjusted net income attributable to Waste Connections and adjusted net income per diluted share attributable to Waste Connections are not a substitute for, and should be used in conjunction with, GAAP financial measures. Other companies may calculate these non-GAAP financial measures differently. Our adjusted net income attributable to Waste Connections and adjusted net income per diluted share attributable to Waste Connections for the three and six month periods ended June 30, 2019 and 2018, are calculated as follows (amounts in thousands of U.S. dollars, except per share amounts):

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Reported net income attributable to Waste Connections	\$ 148,848	\$ 138,682	\$ 274,470	\$ 263,551
Adjustments:				
Amortization of intangibles ^(a)	31,344	26,474	61,886	52,573
Impairments and other operating items ^(b)	3,902	7,073	20,014	8,104
Transaction-related expenses ^(c)	6,184	2,199	7,021	4,584
Pre-existing Progressive Waste share-based grants ^(d)	1,262	2,058	4,283	3,221
Integration-related and other expenses ^(e)	—	1,306	—	2,416
Tax effect ^(f)	(10,272)	(7,971)	(22,469)	(16,016)
Tax items ^(g)	—	2,515	—	2,515
Adjusted net income attributable to Waste Connections	<u>\$ 181,268</u>	<u>\$ 172,336</u>	<u>\$ 345,205</u>	<u>\$ 320,948</u>
Diluted earnings per common share attributable to Waste Connections' common shareholders:				
Reported net income	<u>\$ 0.56</u>	<u>\$ 0.52</u>	<u>\$ 1.04</u>	<u>\$ 1.00</u>
Adjusted net income	<u>\$ 0.69</u>	<u>\$ 0.65</u>	<u>\$ 1.31</u>	<u>\$ 1.21</u>

- (a) Reflects the elimination of the non-cash amortization of acquisition-related intangible assets.
- (b) Reflects the addback of impairments and other operating items.
- (c) Reflects the addback of acquisition-related transaction costs.
- (d) Reflects share-based compensation costs, including changes in fair value and related expenses, associated with share-based awards granted by Progressive Waste outstanding at the time of the Progressive Waste acquisition.
- (e) Reflects the addback of integration-related items, including rebranding costs, associated with the Progressive Waste acquisition.
- (f) The aggregate tax effect of the adjustments in footnotes (a) through (e) is calculated based on the applied tax rates for the respective periods.
- (g) Reflects items primarily associated with internal financing restructuring in conjunction with the Tax Act enacted on December 22, 2017, as well as a reduction in deferred tax liabilities resulting from state legislation enacted during the quarter and changes in our geographical apportionment due to acquisition activity.

INFLATION

Other than volatility in fuel prices, third party brokerage and labor costs in certain markets, inflation has not materially affected our operations in recent years. Consistent with industry practice, many of our contracts allow us to pass through certain costs to our customers, including increases in landfill tipping fees and, in some cases, fuel costs. Therefore, we believe that we should be able to increase prices to offset many cost increases that result from inflation in

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the ordinary course of business. However, competitive pressures or delays in the timing of rate increases under our contracts may require us to absorb at least part of these cost increases, especially if cost increases exceed the average rate of inflation. Management's estimates associated with inflation have an impact on our accounting for landfill liabilities.

SEASONALITY

We expect our operating results to vary seasonally, with revenues typically lowest in the first quarter, higher in the second and third quarters and lower in the fourth quarter than in the second and third quarters. This seasonality reflects (a) the lower volume of solid waste generated during the late fall, winter and early spring because of decreased construction and demolition activities during winter months in Canada and the U.S. and (b) reduced E&P activity during harsh weather conditions, with expected fluctuation due to such seasonality between our highest and lowest quarters of approximately 12%. In addition, some of our operating costs may be higher in the winter months. Adverse winter weather conditions slow waste collection activities, resulting in higher labor and operational costs. Greater precipitation in the winter increases the weight of collected municipal solid waste, resulting in higher disposal costs, which are calculated on a per ton basis.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

In the normal course of business, we are exposed to market risk, including changes in interest rates and prices of certain commodities. We use hedge agreements to manage a portion of our risks related to interest rates and fuel prices. While we are exposed to credit risk in the event of non-performance by counterparties to our hedge agreements, in all cases such counterparties are highly rated financial institutions and we do not anticipate non-performance. We do not hold or issue derivative financial instruments for trading purposes. We monitor our hedge positions by regularly evaluating the positions at market and by performing sensitivity analyses over the unhedged fuel and variable rate debt positions.

At June 30, 2019, our derivative instruments included 17 interest rate swap agreements that effectively fix the interest rate on the applicable notional amounts of our variable rate debt as follows (dollars in thousands of U.S. dollars):

Date Entered	Notional Amount	Fixed Interest Rate Paid*	Variable Interest Rate Received	Effective Date	Expiration Date
April 2014	\$ 100,000	1.800 %	1-month LIBOR	July 2014	July 2019
May 2014	\$ 50,000	2.344 %	1-month LIBOR	October 2015	October 2020
May 2014	\$ 25,000	2.326 %	1-month LIBOR	October 2015	October 2020
May 2014	\$ 50,000	2.350 %	1-month LIBOR	October 2015	October 2020
May 2014	\$ 50,000	2.350 %	1-month LIBOR	October 2015	October 2020
April 2016	\$ 100,000	1.000 %	1-month LIBOR	February 2017	February 2020
June 2016	\$ 75,000	0.850 %	1-month LIBOR	February 2017	February 2020
June 2016	\$ 150,000	0.950 %	1-month LIBOR	January 2018	January 2021
June 2016	\$ 150,000	0.950 %	1-month LIBOR	January 2018	January 2021
July 2016	\$ 50,000	0.900 %	1-month LIBOR	January 2018	January 2021
July 2016	\$ 50,000	0.890 %	1-month LIBOR	January 2018	January 2021
August 2017	\$ 100,000	1.900 %	1-month LIBOR	July 2019	July 2022
August 2017	\$ 200,000	2.200 %	1-month LIBOR	October 2020	October 2025
August 2017	\$ 150,000	1.950 %	1-month LIBOR	February 2020	February 2023
June 2018	\$ 200,000	2.925 %	1-month LIBOR	October 2020	October 2025
June 2018	\$ 200,000	2.925 %	1-month LIBOR	October 2020	October 2025
December 2018	\$ 200,000	2.850 %	1-month LIBOR	July 2022	July 2027

* Plus applicable margin.

Under derivatives and hedging guidance, the interest rate swap agreements are considered cash flow hedges for a portion of our variable rate debt, and we apply hedge accounting to account for these instruments. The notional amounts

and all other significant terms of the swap agreements are matched to the provisions and terms of the variable rate debt being hedged.

We have performed sensitivity analyses to determine how market rate changes will affect the fair value of our unhedged floating rate debt. Such an analysis is inherently limited in that it reflects a singular, hypothetical set of assumptions. Actual market movements may vary significantly from our assumptions. Fair value sensitivity is not necessarily indicative of the ultimate cash flow or earnings effect we would recognize from the assumed market rate movements. We are exposed to cash flow risk due to changes in interest rates with respect to the unhedged floating rate balances owed at June 30, 2019 and December 31, 2018, of \$322.2 million and \$885.0 million, respectively, including floating rate debt under our Credit Agreement and floating rate tax-exempt bond obligations. A one percentage point increase in interest rates on our variable-rate debt as of June 30, 2019 and December 31, 2018, would decrease our annual pre-tax income by approximately \$3.2 million and \$8.9 million, respectively. All of our remaining debt instruments are at fixed rates, or effectively fixed under the interest rate swap agreements described above; therefore, changes in market interest rates under these instruments would not significantly impact our cash flows or results of operations, subject to counterparty default risk.

The market price of diesel fuel is unpredictable and can fluctuate significantly. Because of the volume of fuel we purchase each year, a significant increase in the price of fuel could adversely affect our business and reduce our operating margins. To manage a portion of this risk, we periodically enter into fuel hedge agreements related to forecasted diesel fuel purchases, and we also enter into fixed price fuel purchase contracts. At June 30, 2019, we had no fuel hedge agreements in place; however, we have entered into fixed price fuel purchase contracts for 2019 as described below.

For the year ending December 31, 2019, we expect to purchase approximately 73.5 million gallons of fuel, of which 44.9 million gallons will be purchased at market prices and 28.6 million gallons will be purchased under our fixed price fuel purchase contracts. We have performed sensitivity analyses to determine how market rate changes will affect the fair value of our unhedged, market rate diesel fuel purchases. Such an analysis is inherently limited in that it reflects a singular, hypothetical set of assumptions. Actual market movements may vary significantly from our assumptions. Fair value sensitivity is not necessarily indicative of the ultimate cash flow or earnings effect we would recognize from the assumed market rate movements. During the six month period of July 1, 2019 to December 31, 2019, we expect to purchase approximately 22.5 million gallons of fuel at market prices; therefore, a \$0.10 per gallon increase in the price of fuel over the remaining six months in 2019 would decrease our pre-tax income during this period by approximately \$2.2 million.

We market a variety of recyclable materials, including cardboard, mixed paper, plastic containers, glass bottles and ferrous and aluminum metals. We own and operate recycling operations and sell other collected recyclable materials to third parties for processing before resale. To reduce our exposure to commodity price risk with respect to recycled materials, we have adopted a pricing strategy of charging collection and processing fees for recycling volume collected from third parties. In the event of a decline in recycled commodity prices, a 10% decrease in average recycled commodity prices from the average prices that were in effect during the six months ended June 30, 2019 and 2018, would have had a \$3.6 million and \$4.5 million impact on revenues for the six months ended June 30, 2019 and 2018, respectively.

We have operations in Canada and, where significant, we have quantified and described the impact of foreign currency translation on components of income, including operating revenue and operating costs. However, the impact of foreign currency has not materially affected our results of operations in 2018 or 2019. A \$0.01 change in the Canadian dollar to U.S. dollar exchange rate would impact our annual revenue and EBITDA by approximately \$9.8 million and \$3.6 million, respectively.

Item 4. Controls and Procedures

As required by Rule 13a-15(b) under the U.S. Securities Exchange Act of 1934, as amended, or the Exchange Act, we carried out an evaluation, under the supervision and with the participation of our management, including our President and Chief Executive Officer and our Senior Vice President and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Exchange Act) as of the end of the fiscal quarter covered by this Quarterly Report on Form 10-Q. In designing and evaluating the disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and our management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Based on this evaluation, our President and Chief Executive Officer and our Senior Vice President and Chief Financial Officer concluded as of June 30, 2019, that our disclosure controls and procedures were effective at the reasonable assurance level such that information required to be disclosed in our Exchange Act reports: (1) is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms; and (2) is accumulated and communicated to our management, including our President and Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

During the quarter ended June 30, 2019, there was no change in our internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

Information regarding our legal proceedings can be found in Note 18 of our Condensed Consolidated Financial Statements included in Part I, Item 1 of this report and is incorporated herein by reference.

Item 5. Other Information

On July 25, 2019, the Board of Directors appointed James M. Little, the Company's Senior Vice President–Engineering and Disposal to Executive Vice President–Engineering and Disposal, and Patrick J. Shea, the Company's Senior Vice President, General Counsel and Secretary to Executive Vice President, General Counsel and Secretary.

As previously disclosed, on July 24, 2018, the Compensation Committee of the Board (the “Compensation Committee”) and the Board of Directors of the Company's subsidiary, Waste Connections US, Inc., approved an amended and restated Separation Benefits Plan of Waste Connections US, Inc. (the “Plan”), under which certain executives of the Company may become eligible to receive certain severance and change in control benefits. An executive is eligible for the benefits provided under the Plan only if (i) the Compensation Committee designates the executive as a participant in the Plan, and (ii) Waste Connections US, Inc. and the executive enter into a letter agreement confirming the executive's eligibility for, and participation in, the Plan. The benefits under the Plan are only available to the eligible executives in the event the executive's employment with Waste Connections US, Inc. is involuntarily terminated, except in certain limited circumstances. The foregoing description of the Plan is qualified in its entirety by reference to the full text of the Plan, which can be found as Exhibit 10.1 to the Company's Current Report on Form 8-K/A, which was previously filed with the SEC on August 31, 2018.

In connection with the above appointments, on July 25, 2019, Waste Connections US, Inc. entered into an amended and restated participation letter agreement under the Plan with each of Messrs. Little and Shea (the “Letter Agreements”). Pursuant to the Letter Agreements, Messrs. Little and Shea are now designated as President/EVP Participants and, as a result, are eligible, among other things, to receive additional severance benefits under the Plan. The foregoing description of the Letter Agreements is qualified in its entirety by reference to the full text of each of the Letter Agreements filed as Exhibits 10.2 and 10.3 to this Quarterly Report on Form 10-Q.

Also, on July 25, 2019, Waste Connections US, Inc. entered into an amended and restated participation letter agreement under the Plan with Darrell W. Chambliss, the Company's Executive Vice President and Chief Operating Officer. Mr. Chambliss' amended and restated letter agreement contains certain updates intended to conform its terms to the Letter Agreements, including (i) revised severance amounts payable in the event of a termination without cause or for good reason, including following a change in control, (ii) additional events that constitute a change in control and (iii) details regarding certain other benefits, including Mr. Chambliss' expected target amount for annual grants of equity awards and his medical insurance benefit. The foregoing description of Mr. Chambliss' amended and restated participation letter agreement is qualified in its entirety by reference to the full text of the letter agreement filed as Exhibit 10.1 to this Quarterly Report on Form 10-Q.

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Item 6. Exhibits

Exhibit Number	Description of Exhibits
3.1	Articles of Amendment (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8K filed on May 26, 2017)
3.2	Articles of Amalgamation (incorporated by reference to Exhibit 3.2 of the Registrant's Form 8K filed on June 7, 2016)
3.3	Articles of Amendment (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8K filed on June 7, 2016)
3.4	By-law No. 1 of the Registrant (incorporated by reference to Exhibit 3.3 of the Registrant's Form 8K filed on June 7, 2016)
4.1	Indenture, dated as of November 16, 2018, by and between Waste Connections, Inc. and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 of the Registrant's Form 8-K filed on November 16, 2018)
4.2	Second Supplemental Indenture, dated as of April 16, 2019, by and between Waste Connections, Inc. and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.2 of the Registrant's Form 8-K filed on April 16, 2019)
10.1 +	Separation Benefits Plan Participation Letter Agreement by and between Waste Connections US, Inc. and Darrell W. Chambliss, effective July 25, 2019
10.2 +	Separation Benefits Plan Participation Letter Agreement by and between Waste Connections US, Inc. and James M. Little, effective July 25, 2019
10.3 +	Separation Benefits Plan Participation Letter Agreement by and between Waste Connections US, Inc. and Patrick J. Shea, effective July 25, 2019
31.1	Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a14(a)/15d14(a)
31.2	Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a14(a)/15d14(a)
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. §1350
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C. §1350
101.INS	The instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
+ Management contract or compensatory plan, contract or arrangement	

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

WASTE CONNECTIONS, INC.

Date: July 30, 2019

BY: /s/ Worthing F. Jackman

Worthing F. Jackman

President and Chief Executive Officer

Date: July 30, 2019

BY: /s/ Mary Anne Whitney

Mary Anne Whitney

Senior Vice President and Chief Financial Officer



WASTE CONNECTIONS US, INC.

July 25, 2019

Darrell W. Chambliss
3 Waterway Square Place, Suite 110
The Woodlands, Texas 77380

Re: **The Waste Connections US, Inc. Separation Benefits Plan**

Dear Darrell:

This letter agreement (this “**Letter Agreement**”) relates to the Separation Benefits Plan (and Summary Plan Description) of Waste Connections US, Inc., a Delaware corporation (the “**Company**”), effective July 24, 2018 (the “**Plan**”).

Through this Letter Agreement, you are being offered the opportunity to become a participant in the Plan (a “**Participant**”), and thereby to be eligible to receive the severance and change in control benefits set forth therein, effective as of July 25, 2019 (the “**Participant Effective Date**”). A copy of the Plan is attached to this Letter Agreement. You should read it carefully and become comfortable with its terms and conditions, and those set forth below.

By signing below, you will be acknowledging and agreeing to the following provisions:

1. that you have received and reviewed a copy of the Plan;
2. that terms not defined in this Letter Agreement but beginning with a capital letter have the meaning assigned to them in the Plan;
3. that participation in the Plan requires that you agree irrevocably and voluntarily to the terms of the Plan (including, without limitation, the covenants set forth in Sections 5, 6 and 12 of the Plan) and the terms set forth below; and
4. that you have had the opportunity to carefully evaluate this opportunity, and desire to participate in the Plan according to the terms and conditions set forth herein.



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Subject to the foregoing, we invite you to become a Participant in the Plan. Your participation in the Plan will be effective upon your signing and returning this Letter Agreement to the Company within thirty (30) days of your receipt of this Letter Agreement.

You and the Company (hereinafter referred to as the “parties”) hereby AGREE as follows:

1. Positions and Responsibilities. During the Term, you will be directly employed by the Company, will serve as Executive Vice President and Chief Operating Officer of Waste Connections, Inc., a corporation organized under the laws of Ontario, Canada (the “**Parent**”) and certain of its subsidiaries, including the Company, and will perform such other duties and responsibilities as may be reasonably assigned to you from time to time by the Parent’s Board of Directors (the “**Board**”) and/or Chief Executive Officer (the “**CEO**”). You will devote your attention, energies and abilities in those capacities to the proper oversight and operation of the business of the WCI Group to the exclusion of any other occupation. As Executive Vice President and Chief Operating Officer of the Parent and certain of its subsidiaries, including the Company, you will: (i) report to the CEO or his designee, (ii) be based at the Parent’s principal administrative offices in The Woodlands, Texas, and (iii) be responsible for all duties, authority and responsibility customary for such positions. You will devote such time and attention to your duties as are reasonably necessary to the proper discharge of your responsibilities hereunder. You agree to perform all duties consistent with: (a) policies established from time to time by the WCI Group; and (b) all applicable legal requirements. For purposes of the Plan, you are hereby designated as a President/EVP Participant.
2. Compensation, Benefits and Reimbursement of Expenses.
 - a. Base Salary. The Company hereby agrees to pay you an annual base salary of Five Hundred Twenty Seven Thousand Eight Hundred Seventy Five Dollars (\$527,875) (“**Base Salary**”). Your Base Salary will be payable in accordance with the Company’s normal payroll practices, and your Base Salary is subject to withholding and social security, unemployment and other taxes. Further increases in Base Salary will be considered by the Board.
 - b. Performance Bonus. You shall be entitled to an annual cash bonus (the “**Bonus**”) based on the Parent’s attainment of reasonable financial objectives to be determined annually by the Board. Your target annual Bonus will equal Eighty Five Percent (85%) of the applicable year’s ending Base Salary and will be payable if the Board determines, in its sole and exclusive discretion, that that year’s financial objectives have been attained. Nothing in the Plan or in this Letter Agreement shall invalidate any cash bonus plan approval by the Board or a Committee of the Board



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providing for higher payments in the event extraordinary or “stretch” goals are met. The Bonus will be paid in accordance with the Parent’s bonus plan, as approved by the Board; provided, that in no case shall any portion of the Bonus with respect to any such fiscal year be paid more than three (3) months after the end of such fiscal year.

- c. Grants of Equity Awards. You shall be eligible for annual grants of restricted share unit awards, performance share unit awards or other Equity Awards on such terms and to such level of participation as the Board or the Compensation Committee of the Board determines to be appropriate, bearing in mind your positions and responsibilities, provided that the target annual amount of such awards is expected to be equal in value to 172.5% of your Base Salary on the date of grant. The terms of any such Equity Awards shall be governed by the relevant plans under which they are issued and described in detail in applicable agreements between the Parent and you.
- d. Other Benefits. You will be entitled to paid annual vacation, which will accrue on the same basis as for other employees of the Company of similar rank, but which will in no event be less than four (4) weeks for any twelve (12) month period commencing January 1st of each year. You also will be entitled to participate, on the same terms as other employees of the Company participate, in any medical, dental or other health plan, pension plan, profit-sharing plan and life insurance plan that the Company may adopt or maintain, any of which may be changed, terminated or eliminated by the Company at any time in its exclusive discretion.
- e. Reimbursement of Other Expenses. The Company agrees to pay or reimburse you for all reasonable travel and other expenses incurred by you in connection with the performance of your duties on presentation of proper expense statements or vouchers. All such supporting information shall comply with all applicable Company policies relating to reimbursement for travel and other expenses.
- f. Other Perquisites. You shall be entitled to all perquisites provided to a President/EVP Participant, as approved by the Compensation Committee of the Board, and as they may exist from time to time, including reimbursement of up to \$20,000 annually for costs you incur for country club and professional association membership dues and professional financial and tax planning services.



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3. Severance and Change in Control Benefits.

- a. Termination without Cause or for Good Reason. If your employment is terminated by the Company without Cause or by you for Good Reason, the Company will pay you, in lieu of any payments under Section 4 of the Plan for the remainder of the Term, a Severance Amount equal to 2.99 times the sum of your Base Salary as of the Date of Termination plus your target annual Bonus for the year in which the termination occurs. This amount will be paid in accordance with Section 7(b) or Section 8(a) of the Plan, as applicable, in addition to any other payments specified therein.
- b. Payments on Change in Control. If a Change in Control occurs during the Term and your employment with the Company is terminated by the Company without Cause or by you for Good Reason, in each case within two (2) years after the effective date of the Change in Control, then you will be entitled to receive and the Company agrees to pay to you, in lieu of payments under Section 4 of the Plan for the remainder of the Term, a Severance Amount equal to 2.99 times the sum of your Base Salary as of the Date of Termination plus your target annual Bonus for the year in which the termination occurs. This amount will be paid in accordance with Section 10(a) of the Plan, in addition to any other payments specified therein.
- c. Additional Benefits. In addition to the Severance Amount specified in Sections 3(a) and (b) above, for two years following your termination of employment for the reasons specified under either of those Sections, the Company shall make available to you and your eligible dependents coverage under the Company's group medical insurance (including group health, dental, and visions benefits) (which shall be concurrent with any health care continuation benefits to which you or your eligible dependents are entitled under Consolidated Omnibus Budget Reconciliation Act (also known as "COBRA")); provided, however, that you shall be obligated to pay the Company for the portion of the premiums for such coverage on an after-tax basis equal to the amount paid by active employees for such coverage (the "**Medical Insurance Benefit**"). Notwithstanding the previous sentence, with regard to such continuation coverage, if the Company determines in its sole discretion that it cannot provide the foregoing benefit without potentially violating applicable law or potentially incurring penalties, excise taxes and fees pursuant to the Internal Revenue Code and the Department of Treasury regulations promulgated thereunder (including, without limitation, Section 2716 of the Public Health Service Act), the Medical Insurance Benefit shall terminate and you shall not be eligible to receive any further benefits related to the Medical Insurance Benefit other than as otherwise required by applicable law.



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4. Right to Other Payments. In consideration of becoming eligible to receive the severance and change in control benefits provided under the terms and conditions of the Plan, in addition to providing the waiver required by Section 7(e) or Section 8(c) of the Plan, as applicable, you agree to waive any and all rights, benefits, and privileges to severance benefits that you might otherwise be entitled to receive under any other plan or arrangement.
5. Change in Control. For purposes of this Letter Agreement, in addition to the events described in the definition of “Change in Control” in Section 27(f) of the Plan, a Change in Control shall also occur if:
- a. any “person” (as defined in Section 13(d) and 14(d) of the Exchange Act), shall become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of fifty percent (50%) or more of the outstanding voting securities of a subsidiary of Parent that owns all or substantially all of the WCI Group’s United States operations;
 - b. there is a reorganization, merger or other business combination of a subsidiary of Parent that owns all or substantially all of the WCI Group’s United States operations with any other corporation, other than any such merger or other combination that would result in the voting securities of the subsidiary outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least fifty percent (50%) of the total voting power represented by the voting securities of the subsidiary or such surviving entity outstanding immediately after such transaction; or
 - c. there is a direct or indirect sale, lease, exchange or other transfer (in one transaction or a series of related transactions) by the WCI Group of all, or substantially all, of its United States operations.
6. Entire Agreement. You understand that the waiver set forth in Section 4 above is irrevocable and that this Letter Agreement and the Plan set forth the entire agreement between the parties with respect to any subject matter covered herein. You agree and acknowledge that this Letter Agreement and the Plan supersede and replace that certain letter agreement between you and the Company, dated October 19, 2018.
7. Survival. Your participation in the Plan will continue in effect following any termination that occurs while you are a Participant in the Plan with respect to all rights and obligations accruing as a result of such termination.
8. Counterparts. This Letter Agreement may be executed in any number of counterparts, each of which shall be enforceable against the parties actually



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executing such counterparts, and all of which together shall constitute one instrument. A facsimile, telecopy or other reproduction of this Letter Agreement may be executed by one or more parties and delivered by such party by facsimile or any similar electronic transmission device pursuant to which the signature of or on behalf of each such party can be seen. Such execution and delivery shall be considered valid, binding and effective for all purposes.

9. Miscellaneous. This Letter Agreement and the Plan set forth the entire agreement between the WCI Group and you concerning the subject matter described herein, and fully supersede any and all prior oral or written agreements, promises or understandings between the WCI Group and you concerning the subject matter described herein including, without limitation, any acceleration provisions set forth in any agreement evidencing an Equity Award held by you. Further, you represent and acknowledge that in executing this Letter Agreement, you do not rely, and have not relied, on any prior oral or written communications by the WCI Group, and you expressly disclaim any reliance on any prior oral or written communications, agreements, promises, inducements, understandings, statements or representations in entering into this Letter Agreement. Therefore, you understand that you are precluded from bringing any fraud or fraudulent inducement claim against the WCI Group associated with any such communications, agreements, promises, inducements, understandings, statements or representations. The Company and you are entering into this Letter Agreement based on each party's own judgment.
10. Execution. You recognize and agree that your execution of this Letter Agreement results in your enrollment and participation in the Plan, that you agree to be bound by the terms and conditions of the Plan and this Letter Agreement, and that you understand that this Letter Agreement may not be amended or modified except pursuant to Section 20 of the Plan.

[Remainder of page left intentionally blank. Signatures to follow.]



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IN WITNESS WHEREOF, the parties have executed this Letter Agreement, which shall be deemed effective as of the Participant Effective Date.

WASTE CONNECTIONS US, INC.

By: /s/ Worthing F. Jackman
Worthing F. Jackman
President and Chief Executive Officer

PARTICIPANT

/s/ Darrell W. Chambliss
Darrell W. Chambliss



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WASTE CONNECTIONS US, INC.

July 25, 2019

James M. Little
3 Waterway Square Place, Suite 110
The Woodlands, Texas 77380

Re: **The Waste Connections US, Inc. Separation Benefits Plan**

Dear Jim:

This letter agreement (this “**Letter Agreement**”) relates to the Separation Benefits Plan (and Summary Plan Description) of Waste Connections US, Inc., a Delaware corporation (the “**Company**”), effective July 24, 2018 (the “**Plan**”).

Through this Letter Agreement, you are being offered the opportunity to become a participant in the Plan (a “**Participant**”), and thereby to be eligible to receive the severance and change in control benefits set forth therein, effective as of July 25, 2019 (the “**Participant Effective Date**”). A copy of the Plan is attached to this Letter Agreement. You should read it carefully and become comfortable with its terms and conditions, and those set forth below.

By signing below, you will be acknowledging and agreeing to the following provisions:

1. that you have received and reviewed a copy of the Plan;
2. that terms not defined in this Letter Agreement but beginning with a capital letter have the meaning assigned to them in the Plan;
3. that participation in the Plan requires that you agree irrevocably and voluntarily to the terms of the Plan (including, without limitation, the covenants set forth in Sections 5, 6 and 12 of the Plan) and the terms set forth below; and
4. that you have had the opportunity to carefully evaluate this opportunity, and desire to participate in the Plan according to the terms and conditions set forth herein.



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Subject to the foregoing, we invite you to become a Participant in the Plan. Your participation in the Plan will be effective upon your signing and returning this Letter Agreement to the Company within thirty (30) days of your receipt of this Letter Agreement.

You and the Company (hereinafter referred to as the “parties”) hereby AGREE as follows:

1. Positions and Responsibilities. During the Term, you will be directly employed by the Company, will serve as Executive Vice President–Engineering and Disposal of Waste Connections, Inc., a corporation organized under the laws of Ontario, Canada (the “**Parent**”) and certain of its subsidiaries, including the Company, and will perform such other duties and responsibilities as may be reasonably assigned to you from time to time by the Parent’s Board of Directors (the “**Board**”), Chief Executive Officer and/or President (the “**President**”). You will devote your attention, energies and abilities in those capacities to the proper oversight and operation of the business of the WCI Group to the exclusion of any other occupation. As Executive Vice President–Engineering and Disposal of the Parent and certain of its subsidiaries, including the Company, you will: (i) report to the President or his designee, (ii) be based at the Parent’s principal administrative offices in The Woodlands, Texas, and (iii) be responsible for all duties, authority and responsibility customary for such positions. You will devote such time and attention to your duties as are reasonably necessary to the proper discharge of your responsibilities hereunder. You agree to perform all duties consistent with: (a) policies established from time to time by the WCI Group; and (b) all applicable legal requirements. For purposes of the Plan, you are hereby designated as a President/EVP Participant.
2. Compensation, Benefits and Reimbursement of Expenses.
 - a. Base Salary. The Company hereby agrees to pay you an annual base salary of Four Hundred Twenty Five Thousand Three Hundred Seventy Five Dollars (\$425,375) (“**Base Salary**”). Your Base Salary will be payable in accordance with the Company’s normal payroll practices, and your Base Salary is subject to withholding and social security, unemployment and other taxes. Further increases in Base Salary will be considered by the Board.
 - b. Performance Bonus. You shall be entitled to an annual cash bonus (the “**Bonus**”) based on the Parent’s attainment of reasonable financial objectives to be determined annually by the Board. Your target annual Bonus will equal Eighty Five Percent (85%) of the applicable year’s ending Base Salary and will be payable if the Board determines, in its sole and exclusive discretion, that that year’s financial objectives have been attained. Nothing in the Plan or in this Letter Agreement shall invalidate any cash bonus plan approval by the Board or a Committee of the Board



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providing for higher payments in the event extraordinary or “stretch” goals are met. The Bonus will be paid in accordance with the Parent’s bonus plan, as approved by the Board; provided, that in no case shall any portion of the Bonus with respect to any such fiscal year be paid more than three (3) months after the end of such fiscal year.

- c. Grants of Equity Awards. You shall be eligible for annual grants of restricted share unit awards, performance share unit awards or other Equity Awards on such terms and to such level of participation as the Board or the Compensation Committee of the Board determines to be appropriate, bearing in mind your positions and responsibilities, provided that the target annual amount of such awards is expected to be equal in value to 172.5% of your Base Salary on the date of grant. The terms of any such Equity Awards shall be governed by the relevant plans under which they are issued and described in detail in applicable agreements between the Parent and you.
- d. Other Benefits. You will be entitled to paid annual vacation, which will accrue on the same basis as for other employees of the Company of similar rank, but which will in no event be less than four (4) weeks for any twelve (12) month period commencing January 1st of each year. You also will be entitled to participate, on the same terms as other employees of the Company participate, in any medical, dental or other health plan, pension plan, profit-sharing plan and life insurance plan that the Company may adopt or maintain, any of which may be changed, terminated or eliminated by the Company at any time in its exclusive discretion.
- e. Reimbursement of Other Expenses. The Company agrees to pay or reimburse you for all reasonable travel and other expenses incurred by you in connection with the performance of your duties on presentation of proper expense statements or vouchers. All such supporting information shall comply with all applicable Company policies relating to reimbursement for travel and other expenses.
- f. Other Perquisites. You shall be entitled to all perquisites provided to a President/EVP Participant, as approved by the Compensation Committee of the Board, and as they may exist from time to time, including reimbursement of up to \$20,000 annually for costs you incur for country club and professional association membership dues and professional financial and tax planning services.



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3. Severance and Change in Control Benefits.

- a. Termination without Cause or for Good Reason. If your employment is terminated by the Company without Cause or by you for Good Reason, the Company will pay you, in lieu of any payments under Section 4 of the Plan for the remainder of the Term, a Severance Amount equal to 2.99 times the sum of your Base Salary as of the Date of Termination plus your target annual Bonus for the year in which the termination occurs. This amount will be paid in accordance with Section 7(b) or Section 8(a) of the Plan, as applicable, in addition to any other payments specified therein.
- b. Payments on Change in Control. If a Change in Control occurs during the Term and your employment with the Company is terminated by the Company without Cause or by you for Good Reason, in each case within two (2) years after the effective date of the Change in Control, then you will be entitled to receive and the Company agrees to pay to you, in lieu of payments under Section 4 of the Plan for the remainder of the Term, a Severance Amount equal to 2.99 times the sum of your Base Salary as of the Date of Termination plus your target annual Bonus for the year in which the termination occurs. This amount will be paid in accordance with Section 10(a) of the Plan, in addition to any other payments specified therein.
- c. Additional Benefits. In addition to the Severance Amount specified in Sections 3(a) and (b) above, for two years following your termination of employment for the reasons specified under either of those Sections, the Company shall make available to you and your eligible dependents coverage under the Company's group medical insurance (including group health, dental, and visions benefits) (which shall be concurrent with any health care continuation benefits to which you or your eligible dependents are entitled under Consolidated Omnibus Budget Reconciliation Act (also known as "COBRA")); provided, however, that you shall be obligated to pay the Company for the portion of the premiums for such coverage on an after-tax basis equal to the amount paid by active employees for such coverage (the "**Medical Insurance Benefit**"). Notwithstanding the previous sentence, with regard to such continuation coverage, if the Company determines in its sole discretion that it cannot provide the foregoing benefit without potentially violating applicable law or potentially incurring penalties, excise taxes and fees pursuant to the Internal Revenue Code and the Department of Treasury regulations promulgated thereunder (including, without limitation, Section 2716 of the Public Health Service Act), the Medical Insurance Benefit shall terminate and you shall not be eligible to receive any further benefits related to the Medical Insurance Benefit other than as otherwise required by applicable law.



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4. Right to Other Payments. In consideration of becoming eligible to receive the severance and change in control benefits provided under the terms and conditions of the Plan, in addition to providing the waiver required by Section 7(e) or Section 8(c) of the Plan, as applicable, you agree to waive any and all rights, benefits, and privileges to severance benefits that you might otherwise be entitled to receive under any other plan or arrangement.
5. Change in Control. For purposes of this Letter Agreement, in addition to the events described in the definition of "Change in Control" in Section 27(f) of the Plan, a Change in Control shall also occur if:
- a. any "person" (as defined in Section 13(d) and 14(d) of the Exchange Act), shall become the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of fifty percent (50%) or more of the outstanding voting securities of a subsidiary of Parent that owns all or substantially all of the WCI Group's United States operations;
 - b. there is a reorganization, merger or other business combination of a subsidiary of Parent that owns all or substantially all of the WCI Group's United States operations with any other corporation, other than any such merger or other combination that would result in the voting securities of the subsidiary outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least fifty percent (50%) of the total voting power represented by the voting securities of the subsidiary or such surviving entity outstanding immediately after such transaction; or
 - c. there is a direct or indirect sale, lease, exchange or other transfer (in one transaction or a series of related transactions) by the WCI Group of all, or substantially all, of its United States operations.
6. Entire Agreement. You understand that the waiver set forth in Section 4 above is irrevocable and that this Letter Agreement and the Plan set forth the entire agreement between the parties with respect to any subject matter covered herein. You agree and acknowledge that this Letter Agreement and the Plan supersede and replace that certain letter agreement between you and the Company, dated October 19, 2018.
7. Survival. Your participation in the Plan will continue in effect following any termination that occurs while you are a Participant in the Plan with respect to all rights and obligations accruing as a result of such termination.
8. Counterparts. This Letter Agreement may be executed in any number of counterparts, each of which shall be enforceable against the parties actually



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executing such counterparts, and all of which together shall constitute one instrument. A facsimile, telecopy or other reproduction of this Letter Agreement may be executed by one or more parties and delivered by such party by facsimile or any similar electronic transmission device pursuant to which the signature of or on behalf of each such party can be seen. Such execution and delivery shall be considered valid, binding and effective for all purposes.

9. Miscellaneous. This Letter Agreement and the Plan set forth the entire agreement between the WCI Group and you concerning the subject matter described herein, and fully supersede any and all prior oral or written agreements, promises or understandings between the WCI Group and you concerning the subject matter described herein including, without limitation, any acceleration provisions set forth in any agreement evidencing an Equity Award held by you. Further, you represent and acknowledge that in executing this Letter Agreement, you do not rely, and have not relied, on any prior oral or written communications by the WCI Group, and you expressly disclaim any reliance on any prior oral or written communications, agreements, promises, inducements, understandings, statements or representations in entering into this Letter Agreement. Therefore, you understand that you are precluded from bringing any fraud or fraudulent inducement claim against the WCI Group associated with any such communications, agreements, promises, inducements, understandings, statements or representations. The Company and you are entering into this Letter Agreement based on each party's own judgment.
10. Execution. You recognize and agree that your execution of this Letter Agreement results in your enrollment and participation in the Plan, that you agree to be bound by the terms and conditions of the Plan and this Letter Agreement, and that you understand that this Letter Agreement may not be amended or modified except pursuant to Section 20 of the Plan.

[Remainder of page left intentionally blank. Signatures to follow.]



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IN WITNESS WHEREOF, the parties have executed this Letter Agreement, which shall be deemed effective as of the Participant Effective Date.

WASTE CONNECTIONS US, INC.

By: /s/ Worthing F. Jackman
Worthing F. Jackman
President and Chief Executive Officer

PARTICIPANT

/s/ James M. Little
James M. Little



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WASTE CONNECTIONS US, INC.

July 25, 2019

Patrick J. Shea
3 Waterway Square Place, Suite 110
The Woodlands, Texas 77380

Re: **The Waste Connections US, Inc. Separation Benefits Plan**

Dear Pat:

This letter agreement (this “**Letter Agreement**”) relates to the Separation Benefits Plan (and Summary Plan Description) of Waste Connections US, Inc., a Delaware corporation (the “**Company**”), effective July 24, 2018 (the “**Plan**”).

Through this Letter Agreement, you are being offered the opportunity to become a participant in the Plan (a “**Participant**”), and thereby to be eligible to receive the severance and change in control benefits set forth therein, effective as of July 25, 2019 (the “**Participant Effective Date**”). A copy of the Plan is attached to this Letter Agreement. You should read it carefully and become comfortable with its terms and conditions, and those set forth below.

By signing below, you will be acknowledging and agreeing to the following provisions:

1. that you have received and reviewed a copy of the Plan;
2. that terms not defined in this Letter Agreement but beginning with a capital letter have the meaning assigned to them in the Plan;
3. that participation in the Plan requires that you agree irrevocably and voluntarily to the terms of the Plan (including, without limitation, the covenants set forth in Sections 5, 6 and 12 of the Plan) and the terms set forth below; and
4. that you have had the opportunity to carefully evaluate this opportunity, and desire to participate in the Plan according to the terms and conditions set forth herein.



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Subject to the foregoing, we invite you to become a Participant in the Plan. Your participation in the Plan will be effective upon your signing and returning this Letter Agreement to the Company within thirty (30) days of your receipt of this Letter Agreement.

You and the Company (hereinafter referred to as the “parties”) hereby AGREE as follows:

1. Positions and Responsibilities. During the Term, you will be directly employed by the Company, will serve as Executive Vice President, General Counsel and Secretary of Waste Connections, Inc., a corporation organized under the laws of Ontario, Canada (the “**Parent**”) and certain of its subsidiaries, including the Company, and will perform such other duties and responsibilities as may be reasonably assigned to you from time to time by the Parent’s Board of Directors (the “**Board**”) and/or Chief Executive Officer (the “**CEO**”). You will devote your attention, energies and abilities in those capacities to the proper oversight and operation of the business of the WCI Group to the exclusion of any other occupation. As Executive Vice President, General Counsel and Secretary of the Parent and certain of its subsidiaries, including the Company, you will: (i) report to the CEO or his designee, (ii) be based at the Parent’s principal administrative offices in The Woodlands, Texas, and (iii) be responsible for all duties, authority and responsibility customary for such positions. You will devote such time and attention to your duties as are reasonably necessary to the proper discharge of your responsibilities hereunder. You agree to perform all duties consistent with: (a) policies established from time to time by the WCI Group; and (b) all applicable legal requirements. For purposes of the Plan, you are hereby designated as a President/EVP Participant.
2. Compensation, Benefits and Reimbursement of Expenses.
 - a. Base Salary. The Company hereby agrees to pay you an annual base salary of Four Hundred Thirty Thousand Five Hundred Dollars (\$430,500) (“**Base Salary**”). Your Base Salary will be payable in accordance with the Company’s normal payroll practices, and your Base Salary is subject to withholding and social security, unemployment and other taxes. Further increases in Base Salary will be considered by the Board.
 - b. Performance Bonus. You shall be entitled to an annual cash bonus (the “**Bonus**”) based on the Parent’s attainment of reasonable financial objectives to be determined annually by the Board. Your target annual Bonus will equal Eighty Five Percent (85%) of the applicable year’s ending Base Salary and will be payable if the Board determines, in its sole and exclusive discretion, that that year’s financial objectives have been attained. Nothing in the Plan or in this Letter Agreement shall invalidate any cash bonus plan approval by the Board or a Committee of the Board providing for higher payments in the event extraordinary or “stretch” goals



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are met. The Bonus will be paid in accordance with the Parent's bonus plan, as approved by the Board; provided, that in no case shall any portion of the Bonus with respect to any such fiscal year be paid more than three (3) months after the end of such fiscal year.

- c. Grants of Equity Awards. You shall be eligible for annual grants of restricted share unit awards, performance share unit awards or other Equity Awards on such terms and to such level of participation as the Board or the Compensation Committee of the Board determines to be appropriate, bearing in mind your positions and responsibilities, provided that the target annual amount of such awards is expected to be equal in value to 172.5% of your Base Salary on the date of grant. The terms of any such Equity Awards shall be governed by the relevant plans under which they are issued and described in detail in applicable agreements between the Parent and you.
 - d. Other Benefits. You will be entitled to paid annual vacation, which will accrue on the same basis as for other employees of the Company of similar rank, but which will in no event be less than four (4) weeks for any twelve (12) month period commencing January 1st of each year. You also will be entitled to participate, on the same terms as other employees of the Company participate, in any medical, dental or other health plan, pension plan, profit-sharing plan and life insurance plan that the Company may adopt or maintain, any of which may be changed, terminated or eliminated by the Company at any time in its exclusive discretion.
 - e. Reimbursement of Other Expenses. The Company agrees to pay or reimburse you for all reasonable travel and other expenses incurred by you in connection with the performance of your duties on presentation of proper expense statements or vouchers. All such supporting information shall comply with all applicable Company policies relating to reimbursement for travel and other expenses.
 - f. Other Perquisites. You shall be entitled to all perquisites provided to a President/EVP Participant, as approved by the Compensation Committee of the Board, and as they may exist from time to time, including reimbursement of up to \$20,000 annually for costs you incur for country club and professional association membership dues and professional financial and tax planning services.
3. Severance and Change in Control Benefits.
- a. Termination without Cause or for Good Reason. If your employment is terminated by the Company without Cause or by you for Good Reason,



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the Company will pay you, in lieu of any payments under Section 4 of the Plan for the remainder of the Term, a Severance Amount equal to 2.99 times the sum of your Base Salary as of the Date of Termination plus your target annual Bonus for the year in which the termination occurs. This amount will be paid in accordance with Section 7(b) or Section 8(a) of the Plan, as applicable, in addition to any other payments specified therein.

- b. Payments on Change in Control. If a Change in Control occurs during the Term and your employment with the Company is terminated by the Company without Cause or by you for Good Reason, in each case within two (2) years after the effective date of the Change in Control, then you will be entitled to receive and the Company agrees to pay to you, in lieu of payments under Section 4 of the Plan for the remainder of the Term, a Severance Amount equal to 2.99 times the sum of your Base Salary as of the Date of Termination plus your target annual Bonus for the year in which the termination occurs. This amount will be paid in accordance with Section 10(a) of the Plan, in addition to any other payments specified therein.
- c. Additional Benefits. In addition to the Severance Amount specified in Sections 3(a) and (b) above, for two years following your termination of employment for the reasons specified under either of those Sections, the Company shall make available to you and your eligible dependents coverage under the Company's group medical insurance (including group health, dental, and visions benefits) (which shall be concurrent with any health care continuation benefits to which you or your eligible dependents are entitled under Consolidated Omnibus Budget Reconciliation Act (also known as "COBRA")); provided, however, that you shall be obligated to pay the Company for the portion of the premiums for such coverage on an after-tax basis equal to the amount paid by active employees for such coverage (the "**Medical Insurance Benefit**"). Notwithstanding the previous sentence, with regard to such continuation coverage, if the Company determines in its sole discretion that it cannot provide the foregoing benefit without potentially violating applicable law or potentially incurring penalties, excise taxes and fees pursuant to the Internal Revenue Code and the Department of Treasury regulations promulgated thereunder (including, without limitation, Section 2716 of the Public Health Service Act), the Medical Insurance Benefit shall terminate and you shall not be eligible to receive any further benefits related to the Medical Insurance Benefit other than as otherwise required by applicable law.



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4. Right to Other Payments. In consideration of becoming eligible to receive the severance and change in control benefits provided under the terms and conditions of the Plan, in addition to providing the waiver required by Section 7(e) or Section 8(c) of the Plan, as applicable, you agree to waive any and all rights, benefits, and privileges to severance benefits that you might otherwise be entitled to receive under any other plan or arrangement.
5. Change in Control. For purposes of this Letter Agreement, in addition to the events described in the definition of "Change in Control" in Section 27(f) of the Plan, a Change in Control shall also occur if:
- a. any "person" (as defined in Section 13(d) and 14(d) of the Exchange Act), shall become the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of fifty percent (50%) or more of the outstanding voting securities of a subsidiary of Parent that owns all or substantially all of the WCI Group's United States operations;
 - b. there is a reorganization, merger or other business combination of a subsidiary of Parent that owns all or substantially all of the WCI Group's United States operations with any other corporation, other than any such merger or other combination that would result in the voting securities of the subsidiary outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least fifty percent (50%) of the total voting power represented by the voting securities of the subsidiary or such surviving entity outstanding immediately after such transaction; or
 - c. there is a direct or indirect sale, lease, exchange or other transfer (in one transaction or a series of related transactions) by the WCI Group of all, or substantially all, of its United States operations.
6. Continuing Obligations. Your role with the Company, determined as of the Participant Effective Date, requires you to provide legal services to the Company and/or other members of the WCI Group and, as a result, you have executed a separate Confidentiality and Protective Covenant Agreement (" **Protective Covenant Agreement** ") with the Company, of even date herewith, to protect the WCI Group's legitimate business interests while preserving your ability to practice law after separating from the Company. During any period in which your primary responsibility with the Company involves the provision of legal services to the Company and/or other members of the WCI Group, the limitations contained in Section 12 of the Plan shall not apply to you. In addition, if, as of your Date of Termination, your primary responsibility with the Company involves the provision of legal services to the Company and/or other members of the WCI Group, then Section 12 of the Plan shall not apply to you following your Date of



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Termination; provided, however, you shall remain bound by all continuing obligations under the Protective Covenant Agreement.

7. Entire Agreement. You understand that the waiver set forth in Section 4 above is irrevocable and that this Letter Agreement and the Plan set forth the entire agreement between the parties with respect to any subject matter covered herein. You agree and acknowledge that this Letter Agreement and the Plan supersede and replace that certain letter agreement between you and the Company, dated October 19, 2018.
8. Survival. Your participation in the Plan will continue in effect following any termination that occurs while you are a Participant in the Plan with respect to all rights and obligations accruing as a result of such termination.
9. Counterparts. This Letter Agreement may be executed in any number of counterparts, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument. A facsimile, telecopy or other reproduction of this Letter Agreement may be executed by one or more parties and delivered by such party by facsimile or any similar electronic transmission device pursuant to which the signature of or on behalf of each such party can be seen. Such execution and delivery shall be considered valid, binding and effective for all purposes.
10. Miscellaneous. This Letter Agreement and the Plan set forth the entire agreement between the WCI Group and you concerning the subject matter described herein, and fully supersede any and all prior oral or written agreements, promises or understandings between the WCI Group and you concerning the subject matter described herein including, without limitation, any acceleration provisions set forth in any agreement evidencing an Equity Award held by you. Further, you represent and acknowledge that in executing this Letter Agreement, you do not rely, and have not relied, on any prior oral or written communications by the WCI Group, and you expressly disclaim any reliance on any prior oral or written communications, agreements, promises, inducements, understandings, statements or representations in entering into this Letter Agreement. Therefore, you understand that you are precluded from bringing any fraud or fraudulent inducement claim against the WCI Group associated with any such communications, agreements, promises, inducements, understandings, statements or representations. The Company and you are entering into this Letter Agreement based on each party's own judgment.
11. Execution. You recognize and agree that your execution of this Letter Agreement results in your enrollment and participation in the Plan, that you agree to be bound by the terms and conditions of the Plan and this Letter Agreement, and that you



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understand that this Letter Agreement may not be amended or modified except pursuant to Section 20 of the Plan.

[Remainder of page left intentionally blank. Signatures to follow.]



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IN WITNESS WHEREOF, the parties have executed this Letter Agreement, which shall be deemed effective as of the Participant Effective Date.

WASTE CONNECTIONS US, INC.

By: /s/ Worthing F. Jackman

Worthing F. Jackman

President and Chief Executive Officer

PARTICIPANT

/s/ Patrick J. Shea

Patrick J. Shea



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**CERTIFICATION PURSUANT TO EXCHANGE ACT RULE 13a-14(a) OR RULE 15d-14(a) AS ADOPTED PURSUANT TO SECTION
302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Worthing F. Jackman, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Waste Connections, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 30, 2019

/s/ Worthing F. Jackman

Worthing F. Jackman
President and Chief Executive Officer
(Principal Executive Officer)

**CERTIFICATION PURSUANT TO EXCHANGE ACT RULE 13a-14(a) OR RULE 15d-14(a) AS ADOPTED PURSUANT TO SECTION
302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Mary Anne Whitney, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Waste Connections, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 30, 2019

/s/ Mary Anne Whitney

Mary Anne Whitney
Senior Vice President and Chief Financial Officer
(Principal Financial Officer)

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)**

I, Worthing F. Jackman, being the duly elected and acting President and Chief Executive Officer of Waste Connections, Inc., a corporation organized under the laws of Ontario, Canada (the "Company"), hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

1. The Quarterly Report of the Company on Form 10-Q for the period ended June 30, 2019 (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: July 30, 2019

By: /s/ Worthing F. Jackman

Worthing F. Jackman

President and Chief Executive Officer

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. Section 1350, and shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and shall not be deemed to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing, except to the extent that the Company specifically incorporates it by reference.

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)**

I, Mary Anne Whitney, being the duly elected and acting Chief Financial Officer of Waste Connections, Inc., a corporation organized under the laws of Ontario, Canada (the “Company”), hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

1. The Quarterly Report of the Company on Form 10-Q for the period ended June 30, 2019 (the “Report”), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: July 30, 2019

By: /s/ Mary Anne Whitney

Mary Anne Whitney
Senior Vice President and
Chief Financial Officer

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. Section 1350, and shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and shall not be deemed to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing, except to the extent that the Company specifically incorporates it by reference.
