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 March 31, 2021

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: 1-14267

REPUBLIC SERVICES, INC.
(Exact name of registrant as specified in its charter)

Delaware	**65-0716904**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
18500 North Allied Way	
Phoenix, Arizona	**85054**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (480) 627-2700

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 Stock, par value $0.01 per share	RSG	New York Stock Exchange

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 (§232.405 of this chapter) 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, 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.

Large accelerated filer	☑	Accelerated filer	☐	Smaller reporting company	☐
Non-accelerated filer	☐			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 ☑

As of April 30, 2021, the registrant had outstanding 319,033,411 shares of Common Stock, par value $0.01 per share (excluding treasury shares of 305,422).

REPUBLIC SERVICES, INC.

INDEX

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

REPUBLIC SERVICES, INC.
CONSOLIDATED BALANCE SHEETS
(in millions, except per share data)

	March 31, 2021	December 31, 2020
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 23.2	$ 38.2
Accounts receivable, less allowance for doubtful accounts and other of $36.0 and $34.7, respectively	1,095.4	1,091.3
Prepaid expenses and other current assets	324.5	392.3
Total current assets	1,443.1	1,521.8
Restricted cash and marketable securities	134.6	149.1
Property and equipment, net	8,679.2	8,726.2
Goodwill	12,047.2	12,046.4
Other intangible assets, net	181.5	173.1
Other assets	767.0	817.4
Total assets	$ 23,252.6	$ 23,434.0
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 678.3	$ 779.0
Notes payable and current maturities of long-term debt	168.7	168.1
Deferred revenue	359.3	345.6
Accrued landfill and environmental costs, current portion	116.9	114.5
Accrued interest	53.2	54.6
Other accrued liabilities	772.4	820.2
Total current liabilities	2,148.8	2,282.0
Long-term debt, net of current maturities	8,594.2	8,766.1
Accrued landfill and environmental costs, net of current portion	1,713.6	1,694.7
Deferred income taxes and other long-term tax liabilities, net	1,254.7	1,238.8
Insurance reserves, net of current portion	284.4	281.8
Other long-term liabilities	618.6	681.8
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, par value $0.01 per share; 50 shares authorized; none issued	—	—
Common stock, par value $0.01 per share; 750 shares authorized; 319.3 and 318.8 issued including shares held in treasury, respectively	3.2	3.2
Additional paid-in capital	2,757.3	2,741.4
Retained earnings	5,911.2	5,751.8
Treasury stock, at cost; 0.3 and — shares, respectively	(27.5)	(0.1)
Accumulated other comprehensive loss, net of tax	(11.3)	(12.4)
Total Republic Services, Inc. stockholders' equity	8,632.9	8,483.9
Non-controlling interests in consolidated subsidiary	5.4	4.9
Total stockholders' equity	8,638.3	8,488.8
Total liabilities and stockholders' equity	$ 23,252.6	$ 23,434.0

The accompanying notes are an integral part of these statements.

REPUBLIC SERVICES, INC.
UNAUDITED CONSOLIDATED STATEMENTS OF INCOME
(in millions, except per share data)

	Three Months Ended March 31,	
	2021	2020
Revenue	$ 2,596.4	$ 2,553.9
Expenses:		
Cost of operations	1,534.3	1,550.0
Depreciation, amortization and depletion	282.1	268.6
Accretion	20.5	20.9
Selling, general and administrative	265.4	277.1
Withdrawal costs - multiemployer pension funds	—	4.3
Gain on business divestitures and impairments, net	(1.1)	(3.9)
Restructuring charges	2.8	3.8
Operating income	492.4	433.1
Interest expense	(78.4)	(96.7)
Loss from unconsolidated equity method investments	(16.5)	(13.2)
Interest income	0.8	0.3
Other income (loss), net	1.8	(0.9)
Income before income taxes	400.1	322.6
Provision for income taxes	103.7	75.8
Net income	296.4	246.8
Net income attributable to non-controlling interests in consolidated subsidiary	(0.5)	(0.5)
Net income attributable to Republic Services, Inc.	$ 295.9	$ 246.3
Basic earnings per share attributable to Republic Services, Inc. stockholders:		
Basic earnings per share	$ 0.93	$ 0.77
Weighted average common shares outstanding	319.4	319.6
Diluted earnings per share attributable to Republic Services, Inc. stockholders:		
Diluted earnings per share	$ 0.93	$ 0.77
Weighted average common and common equivalent shares outstanding	319.8	320.2
Cash dividends per common share	$ 0.425	$ 0.405

The accompanying notes are an integral part of these statements.

REPUBLIC SERVICES, INC.
UNAUDITED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in millions)

	Three Months Ended March 31,	
	2021	2020
Net income	$ 296.4	$ 246.8
Other comprehensive income (loss), net of tax		
Hedging activity:		
Realized loss reclassified into earnings	1.1	0.8
Unrealized loss	—	(22.2)
Pension activity:		
Change in funded status of pension plan obligations	—	1.6
Other comprehensive income (loss), net of tax	1.1	(19.8)
Comprehensive income	297.5	227.0
Comprehensive income attributable to non-controlling interests	(0.5)	(0.5)
Comprehensive income attributable to Republic Services, Inc.	$ 297.0	$ 226.5

The accompanying notes are an integral part of these statements.

REPUBLIC SERVICES, INC.
UNAUDITED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in millions)

	Republic Services, Inc. Stockholders' Equity								
	Common Stock		Additional Paid-In Capital	Retained Earnings	Treasury Stock		Accumulated Other Comprehensive Loss, Net of Tax	Non-controlling Interests In Consolidated Subsidiary	Total
	Shares	Amount			Shares	Amount			
Balance as of December 31, 2020	318.8	$ 3.2	$ 2,741.4	$ 5,751.8	—	$ (0.1)	$ (12.4)	$ 4.9	$ 8,488.8
Net income	—	—	—	295.9	—	—	—	0.5	296.4
Other comprehensive loss	—	—	—	—	—	—	1.1	—	1.1
Cash dividends declared	—	—	—	(135.6)	—	—	—	—	(135.6)
Issuances of common stock	0.5	—	2.4	—	(0.2)	(14.7)	—	—	(12.3)
Stock-based compensation	—	—	13.5	(0.9)	—	—	—	—	12.6
Purchase of common stock for treasury	—	—	—	—	(0.1)	(12.7)	—	—	(12.7)
Balance as of March 31, 2021	319.3	$ 3.2	$ 2,757.3	$ 5,911.2	(0.3)	$ (27.5)	$ (11.3)	$ 5.4	$ 8,638.3

	Republic Services, Inc. Stockholders' Equity								
	Common Stock		Additional Paid-In Capital	Retained Earnings	Treasury Stock		Accumulated Other Comprehensive Income (Loss), Net of Tax	Non-controlling Interests In Consolidated Subsidiary	Total
	Shares	Amount			Shares	Amount			
Balance as of December 31, 2019	353.3	$ 3.5	$ 4,994.8	$ 5,317.3	(34.5)	$ (2,199.6)	$ 2.2	$ 2.7	$ 8,120.9
Net income	—	—	—	246.3	—	—	—	0.5	246.8
Other comprehensive loss	—	—	—	—	—	—	(19.8)	—	(19.8)
Cash dividends declared	—	—	—	(128.9)	—	—	—	—	(128.9)
Issuances of common stock	0.7	—	7.5	—	(0.2)	(17.0)	—	—	(9.5)
Stock-based compensation	—	—	10.8	(1.1)	—	—	—	—	9.7
Purchase of common stock for treasury	—	—	—	—	(1.2)	(98.8)	—	—	(98.8)
Distributions paid	—	—	—	—	—	—	—	(0.2)	(0.2)
Balance as of March 31, 2020	354.0	$ 3.5	$ 5,013.1	$ 5,433.6	(35.9)	$ (2,315.4)	$ (17.6)	$ 3.0	$ 8,120.2

The accompanying notes are an integral part of these statements.

REPUBLIC SERVICES, INC.
UNAUDITED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	Three Months Ended March 31,	
	2021	2020
Cash provided by operating activities:		
Net income	$ 296.4	$ 246.8
Adjustments to reconcile net income to cash provided by operating activities:		
Depreciation, amortization, depletion and accretion	302.6	289.5
Non-cash interest expense	16.0	15.0
Stock-based compensation	12.6	9.9
Deferred tax provision	15.3	17.6
Provision for doubtful accounts, net of adjustments	4.3	4.9
Gain on disposition of assets and asset impairments, net	(0.6)	(4.9)
Environmental adjustments	(1.5)	(0.4)
Loss from unconsolidated equity method investments	16.5	13.2
Other non-cash items	(0.5)	5.5
Change in assets and liabilities, net of effects from business acquisitions and divestitures:		
Accounts receivable	(8.9)	28.0
Prepaid expenses and other assets	62.5	88.2
Accounts payable	27.6	(37.2)
Capping, closure and post-closure expenditures	(11.0)	(8.7)
Remediation expenditures	(8.9)	(17.2)
Other liabilities	(61.4)	(54.4)
Cash provided by operating activities	661.0	595.8
Cash used in investing activities:		
Purchases of property and equipment	(331.0)	(373.1)
Proceeds from sales of property and equipment	2.1	6.0
Cash used in acquisitions and investments, net of cash and restricted cash acquired	(18.0)	(61.0)
Cash received from business divestitures	0.8	(0.2)
Purchases of restricted marketable securities	(7.4)	(14.0)
Sales of restricted marketable securities	8.9	5.6
Other	—	(25.0)
Cash used in investing activities	(344.6)	(461.7)
Cash (used in) provided by financing activities:		
Proceeds from notes payable and long-term debt, net of fees	1,242.4	1,974.9
Proceeds from issuance of senior notes, net of discount and fees	—	985.6
Payments of notes payable and long-term debt and senior notes	(1,422.5)	(2,688.7)
Issuances of common stock, net	(12.3)	(9.5)
Purchases of common stock for treasury	(12.7)	(98.8)
Cash dividends paid	(135.5)	(129.2)
Distributions paid to non-controlling interests in consolidated subsidiary	—	(0.2)
Contingent consideration payments	(1.7)	(2.2)
Cash (used in) provided by financing activities	(342.3)	31.9
(Decrease) increase in cash, cash equivalents, restricted cash and restricted cash equivalents	(25.9)	166.0
Cash, cash equivalents, restricted cash and restricted cash equivalents at beginning of year	114.2	177.4
Cash, cash equivalents, restricted cash and restricted cash equivalents at end of period	$ 88.3	$ 343.4

The accompanying notes are an integral part of these statements.

REPUBLIC SERVICES, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

1. BASIS OF PRESENTATION

Republic Services, Inc., a Delaware corporation, and its consolidated subsidiaries (also referred to collectively as Republic, the Company, we, us, or our), is one of the largest providers of environmental services in the United States, as measured by revenue. We manage and evaluate our operations through three operating segments, Group 1, Group 2, and environmental solutions.

The unaudited consolidated financial statements include the accounts of Republic Services, Inc. and its wholly owned and majority owned subsidiaries in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP). We account for investments in entities in which we do not have a controlling financial interest under the equity method of accounting or, for investments that do not meet the criteria to be accounted for under the equity method, we reflect these investments at their fair value when it is readily determinable. If fair value is not readily determinable, we use an alternative measurement approach. All material intercompany accounts and transactions have been eliminated in consolidation.

We have prepared these unaudited consolidated financial statements pursuant to the rules and regulations of the Securities and Exchange Commission (SEC). Certain information related to our organization, significant accounting policies and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted. In the opinion of management, these financial statements include all adjustments that, unless otherwise disclosed, are of a normal recurring nature and necessary for a fair presentation of the financial position, results of operations and cash flows for the periods presented. Operating results for interim periods are not necessarily indicative of the results you can expect for a full year. You should read these financial statements in conjunction with our audited consolidated financial statements and notes thereto appearing in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020.

For comparative purposes, certain prior year amounts have been reclassified to conform to the current year presentation. All dollar amounts in tabular presentations are in millions, except per share amounts and unless otherwise noted.

Management's Estimates and Assumptions

In preparing our financial statements, we make numerous estimates and assumptions that affect the amounts reported in these financial statements and accompanying notes. We must make these estimates and assumptions because certain information we use is dependent on future events, cannot be calculated with a high degree of precision from data available or simply cannot be readily calculated based on generally accepted methodologies. In preparing our financial statements, the more critical and subjective areas that deal with the greatest amount of uncertainty relate to our accounting for our long-lived assets, including recoverability, landfill development costs, and final capping, closure and post-closure costs; our valuation allowances for accounts receivable and deferred tax assets; our liabilities for potential litigation, claims and assessments; our liabilities for environmental remediation, multiemployer pension funds, employee benefit plans, deferred taxes, uncertain tax positions, and insurance reserves; and our estimates of the fair values of assets acquired and liabilities assumed in any acquisition. Each of these items is discussed in more detail in our description of our significant accounting policies in Note 2, *Summary of Significant Accounting Policies*, of the Notes to Consolidated Financial Statements in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020. Our actual results may differ significantly from our estimates.

In March 2020, the World Health Organization declared the outbreak of a new strain of coronavirus (COVID-19) a pandemic. The COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains and created significant volatility and disruption of financial markets. The full extent of the impact of the COVID-19 pandemic on our operations and financial performance will depend on future developments, including the duration and spread of the pandemic, all of which are uncertain and cannot be predicted at this time.

In mid-March 2020, certain customers in our small- and large-container businesses began adjusting their service levels, which included a decrease in the frequency of pickups or a temporary pause in service. In addition, we experienced a decline in volumes disposed at certain of our landfills and transfer stations. As service levels decreased, we also experienced a decrease in certain costs of our operations which are variable in nature. This decline in service activity peaked in the first half of April 2020 and improved sequentially through March 31, 2021.

In April 2020, we launched our Committed to Serve initiative and committed $20 million to support frontline employees and their families, as well as small business customers in the local communities we serve. In addition to this initiative, we have experienced an increase in certain costs of doing business as a direct result of the COVID-19 pandemic, including costs for additional safety equipment and hygiene products and increased facility and equipment cleaning. These costs are intended to assist in protecting the safety of our frontline employees as we continue to provide an essential service to our customers. In

December 2020, we recognized our frontline employees for their commitment and contributions to their communities during the pandemic with a $500 award that was paid in January 2021. In addition, we incurred incremental costs associated with expanding certain aspects of our existing healthcare programs. We expect to incur similar costs throughout 2021, and potentially into future years, although we expect the amount of such costs annually to be less than those incurred in 2020.

New Accounting Pronouncements

Accounting Standards Adopted

Effective January 1, 2021, we adopted the following accounting standards updates (ASUs) as issued by the Financial Accounting Standards Board (FASB):

ASU		Effective Date
ASU 2018-14	Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans	January 1, 2021
ASU 2019-12	Simplifying the Accounting for Income Taxes	January 1, 2021

Changes to the Disclosure Requirements for Defined Benefit Plans

Effective January 1, 2021, we adopted ASU 2018-14, *Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20) Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans* (ASU 2018-14) on a retrospective basis. The standard removes disclosures that are no longer considered cost beneficial, clarifies the specific requirements of disclosures, and adds disclosure requirements identified as relevant. Our adoption of ASU 2018-14 did not have a material impact on our consolidated financial statements.

Simplifying the Accounting for Income Taxes

Effective January 1, 2021, we adopted ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* (ASU 2019-12). ASU 2019-12 attempts to simplify aspects of accounting for franchise taxes and enacted changes in tax laws or rates, and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. Our adoption of ASU 2019-12 did not have a material impact on our consolidated financial statements.

Accounting Standards Updates Issued but not yet Adopted

Reference Rate Reform

In March 2020, the FASB issued ASU 2020-04, Reference Rate Reform (Topic 848): *Facilitation of the Effects of Reference Rate Reform on Financial Reporting* (ASU 2020-04). ASU 2020-04 provides optional guidance for a limited period of time to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. The amendments in ASU 2020-04 provide optional expedients and exceptions for applying generally accepted accounting principles to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. ASU 2020-04 is effective for all entities upon adoption during the period from March 12, 2020 through December 31, 2022. We are currently assessing the effect this guidance may have on our consolidated financial statements.

2. BUSINESS ACQUISITIONS, INVESTMENTS AND RESTRUCTURING CHARGES

Acquisitions

We acquired various environmental services businesses during the three months ended March 31, 2021 and 2020. The purchase price paid for these business acquisitions and the allocations of the purchase price follows:

	2021	2020
Purchase price:		
Cash used in acquisitions, net of cash acquired	$ 15.8	$ 52.2
Holdbacks	2.0	2.5
Fair value, future minimum finance lease payments	—	0.3
Total	$ 17.8	$ 55.0
Allocated as follows:		
Accounts receivable	$ 0.5	$ 2.3
Property and equipment	3.4	17.3
Operating right-of-use lease assets	—	0.2
Other assets	—	0.2
Accounts payable	—	(1.2)
Environmental remediation liabilities	—	(1.5)
Operating right-of-use lease liabilities	—	(0.2)
Other liabilities	(0.3)	(0.9)
Fair value of tangible assets acquired and liabilities assumed	3.6	16.2
Excess purchase price to be allocated	$ 14.2	$ 38.8
Excess purchase price allocated as follows:		
Other intangible assets	$ 1.9	$ 1.8
Goodwill	12.3	37.0
Total allocated	$ 14.2	$ 38.8

The purchase price allocations are preliminary and based on information existing at the acquisition dates. Accordingly, the purchase price allocations are subject to change. Substantially all of the goodwill and intangible assets recorded for these acquisitions are deductible for tax purposes.

These acquisitions are not material to the Company's results of operations, individually or in the aggregate. As a result, no pro forma financial information is provided.

On May 5, 2021, we acquired all of the membership interests of Santek Waste Services, LLC (Santek). Santek's vertically integrated recycling and waste services operations are primarily located in the southeastern United States and complement Republic's existing core competencies and expertise in the environmental services industry. A preliminary allocation of purchase price will be included in our consolidated balance sheet as of June 30, 2021, and we expect our valuations to be substantially completed by the end of 2021.

Investments

In 2021 and 2020, we acquired non-controlling equity interests in certain limited liability companies that qualified for investment tax credits under Section 48 of the Internal Revenue Code. In exchange for our non-controlling interests, we made capital contributions of $2.2 million and $9.4 million, which were recorded to other assets in our March 31, 2021 and 2020 consolidated balance sheets, respectively. During the three months ended March 31, 2021 and 2020, we reduced the carrying value of these investments by $13.7 million and $13.2 million, respectively, as a result of cash distributions and our share of income and loss pursuant to the terms of the limited liability company agreements. Additionally, during the three months ended March 31, 2020, we reduced the carrying value of these investments, and our effective tax rate reflected a benefit due to tax credits related to certain investments. For further discussion regarding our income taxes, see Note 8, *Income Taxes*.

Restructuring Charges

In 2020, we incurred costs related to the redesign of certain back-office software systems, which continued into 2021. In addition, in July 2020, we eliminated certain back-office support positions in response to a decline in the underlying demand for services resulting from the COVID-19 pandemic. During the three months ended March 31, 2021 and 2020, we incurred restructuring charges of $2.8 million and $3.8 million, respectively. During the same periods, we paid $4.0 million and $3.8 million, respectively, related to these restructuring efforts.

During the remainder of 2021, we expect to incur additional restructuring charges of approximately $10 million to $15 million primarily related to the redesign of certain of our back-office software systems. Substantially all of these restructuring charges will be recorded in Corporate entities and other.

3. GOODWILL AND OTHER INTANGIBLE ASSETS, NET

Goodwill

A summary of the activity and balances in goodwill accounts by reporting segment follows:

	Balance as of December 31, 2020	Acquisitions	Divestitures	Adjustments to Acquisitions	Balance as of March 31, 2021
Group 1	$ 6,404.9	$ 6.4	$ —	$ (11.5)	$ 6,399.8
Group 2	5,641.5	5.9	—	—	5,647.4
Corporate entities and other	—	—	—	—	—
Total	$ 12,046.4	$ 12.3	$ —	$ (11.5)	$ 12,047.2

Adjustments to acquisitions during the three months ended March 31, 2021 primarily related to changes in our valuation of customer relationship intangible assets as a result of obtaining new information regarding the acquisitions that closed in December 2020.

Other Intangible Assets, Net

Other intangible assets, net, include values assigned to customer relationships, non-compete agreements and trade names, and are amortized over periods ranging from 1 to 16 years. A summary of the activity and balances by intangible asset type follows:

	Gross Intangible Assets				Accumulated Amortization				
	Balance as of December 31, 2020	Acquisitions	Adjustments and Other	Balance as of March 31, 2021	Balance as of December 31, 2020	Additions Charged to Expense	Adjustments and Other	Balance as of March 31, 2021	Other Intangible Assets, Net as of March 31, 2021
Customer relationships	$ 788.1	$ 1.4	$ 14.0	$ 803.5	$ (639.5)	$ (5.9)	$ —	$ (645.4)	$ 158.1
Non-compete agreements	51.4	0.5	(0.2)	51.7	(39.1)	(1.3)	—	(40.4)	11.3
Other intangible assets	57.5	—	—	57.5	(45.3)	(0.1)	—	(45.4)	12.1
Total	$ 897.0	$ 1.9	$ 13.8	$ 912.7	$ (723.9)	$ (7.3)	$ —	$ (731.2)	$ 181.5

4. OTHER ASSETS

Prepaid Expenses and Other Current Assets

A summary of prepaid expenses and other current assets as of March 31, 2021 and December 31, 2020 follows:

	2021	2020
Income taxes receivable	$ 82.1	$ 170.7
Prepaid expenses	81.3	77.7
Inventories	61.1	59.1
Other non-trade receivables	46.9	32.2
Reinsurance receivable	34.8	34.1
Prepaid fees for cloud-based hosting arrangements, current	12.3	11.8
Other current assets	6.0	6.7
Total	$ 324.5	$ 392.3

Other Assets

A summary of other assets as of March 31, 2021 and December 31, 2020 follows:

	2021	2020
Operating right-of-use lease assets	$ 220.8	$ 218.8
Deferred compensation plan	135.7	131.8
Investments	130.8	145.4
Reinsurance receivable	85.0	84.8
Deferred contract costs and sales commissions	80.8	82.3
Prepaid fees and capitalized implementation costs for cloud-based hosting arrangements	30.5	29.5
Other derivative assets	24.7	63.8
Amounts recoverable for capping, closure and post-closure obligations	18.9	18.5
Interest rate swaps	8.6	10.0
Deferred financing costs	2.0	2.7
Other	29.2	29.8
Total	$ 767.0	$ 817.4

5. OTHER LIABILITIES

Other Accrued Liabilities

A summary of other accrued liabilities as of March 31, 2021 and December 31, 2020 follows:

	2021	2020
Insurance reserves, current	$ 174.6	$ 167.5
Accrued payroll and benefits	157.6	221.1
Accrued fees and taxes	137.0	132.3
Accrued dividends	135.6	135.5
Operating right-of-use lease liabilities, current	35.8	33.5
Ceded insurance reserves, current	34.8	34.1
Accrued professional fees and legal settlement reserves	24.3	7.2
Other	72.7	89.0
Total	$ 772.4	$ 820.2

Other Long-Term Liabilities

A summary of other long-term liabilities as of March 31, 2021 and December 31, 2020 follows:

	2021	2020
Operating right-of-use lease liabilities	$ 207.2	$ 206.6
Deferred compensation plan liability	128.2	126.6
Ceded insurance reserves	85.0	84.8
Contingent purchase price and acquisition holdbacks	66.0	67.3
Other derivative liabilities	60.7	103.0
Withdrawal liability - multiemployer pension funds	22.3	22.3
Pension and other post-retirement liabilities	5.5	5.5
Legal settlement reserves	4.1	20.2
Other	39.6	45.5
Total	$ 618.6	$ 681.8

6. LANDFILL AND ENVIRONMENTAL COSTS

As of March 31, 2021, we owned or operated 186 active solid waste landfills with total available disposal capacity estimated to be 5.0 billion in-place cubic yards. Additionally, we had post-closure responsibility for 128 closed landfills.

Accrued Landfill and Environmental Costs

A summary of accrued landfill and environmental liabilities as of March 31, 2021 and December 31, 2020 follows:

	2021	2020
Landfill final capping, closure and post-closure liabilities	$ 1,370.3	$ 1,346.4
Environmental remediation	460.2	462.8
Total accrued landfill and environmental costs	1,830.5	1,809.2
Less: current portion	(116.9)	(114.5)
Long-term portion	$ 1,713.6	$ 1,694.7

Final Capping, Closure and Post-Closure Costs

The following table summarizes the activity in our asset retirement obligation liabilities, which includes liabilities for final capping, closure and post-closure, for the three months ended March 31, 2021 and 2020:

	2021	2020
Asset retirement obligation liabilities, beginning of year	$ 1,346.4	$ 1,335.6
Non-cash additions	10.8	11.5
Acquisitions, net of divestitures and other adjustments	0.2	0.1
Asset retirement obligation adjustments	3.4	(0.5)
Payments	(11.0)	(8.7)
Accretion expense	20.5	20.9
Asset retirement obligation liabilities, end of period	1,370.3	1,358.9
Less: current portion	(60.1)	(74.4)
Long-term portion	$ 1,310.2	$ 1,284.5

We review annually, in the fourth quarter, and update as necessary, our estimates of asset retirement obligation liabilities. However, if there are significant changes in the facts and circumstances related to a site during the year, we will update our assumptions prospectively in the period that we know all the relevant facts and circumstances and make adjustments as appropriate.

Landfill Operating Expenses

In the normal course of business, we incur various operating costs associated with environmental compliance. These costs include, among other things, leachate treatment and disposal, methane gas and groundwater monitoring, systems maintenance, interim cap maintenance, costs associated with the application of daily cover materials, and the legal and administrative costs of ongoing environmental compliance. These costs are expensed as cost of operations in the periods in which they are incurred.

Environmental Remediation Liabilities

We accrue for remediation costs when they become probable and can be reasonably estimated. There can sometimes be a range of reasonable estimates of the costs associated with remediation of a site. In these cases, we use the amount within the range that constitutes our best estimate. If no amount within the range appears to be a better estimate than any other, we use the amount that is at the low end of the range. It is reasonably possible that we will need to adjust the liabilities recorded for remediation to reflect the effects of new or additional information, to the extent such information impacts the costs, timing or duration of the required actions. If we used the reasonably possible high ends of our ranges, our aggregate potential remediation liability as of March 31, 2021 would be approximately $356 million higher than the amount recorded. Future changes in our estimates of the cost, timing or duration of the required actions could have a material adverse effect on our consolidated financial position, results of operations and cash flows.

The following table summarizes the activity in our environmental remediation liabilities for the three months ended March 31, 2021 and 2020:

	2021	2020
Environmental remediation liabilities, beginning of year	$ 462.8	$ 500.2
Net adjustments charged to expense	2.0	(0.4)
Payments	(8.9)	(17.2)
Accretion expense (non-cash interest expense)	4.3	4.6
Acquisitions, net of divestitures and other adjustments	—	1.5
Environmental remediation liabilities, end of period	460.2	488.7
Less: current portion	(56.8)	(56.7)
Long-term portion	$ 403.4	$ 432.0

Bridgeton Landfill. During the three months ended March 31, 2021, we paid $3.2 million related to management and monitoring of the remediation area for our closed Bridgeton Landfill in Missouri. We continue to work with state and federal regulatory agencies on our remediation efforts. From time to time, this may require us to modify our future operating timeline and procedures, which could result in changes to our expected liability. As of March 31, 2021, the remediation liability recorded for this site was $115.7 million, of which approximately $14 million is expected to be paid during the remainder of 2021. We believe the remaining reasonably possible high end of our range would be approximately $140 million higher than the amount recorded as of March 31, 2021.

West Lake Landfill Superfund Site. Our subsidiary Bridgeton Landfill, LLC is one of several currently designated Potentially Responsible Parties for the West Lake Landfill Superfund site (West Lake) in Missouri. On September 27, 2018, the U.S. Environmental Protection Agency (EPA) issued a Record of Decision Amendment for West Lake that includes a total undiscounted cost estimate of $229 million over a four- to five-year design and construction timeline. On March 11, 2019, the EPA issued special notice letters under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) to Bridgeton Landfill, LLC and the other currently designated Potentially Responsible Parties to initiate negotiations to implement the remedy. At this time we are neither able to predict the final design of that remedy, nor estimate how much of the future response costs of the site our subsidiary may agree or be required to pay. During any subsequent administrative proceedings or litigation, our subsidiary will vigorously contest liability for the costs of remediating radiologically-impacted materials generated on behalf of the federal government during the Manhattan Project and delivered to the site by an Atomic Energy Commission licensee and its subcontractor. Currently, we believe we are adequately reserved for our expected remediation liability. However, subsequent events related to remedy design, divisibility, or allocation may require us to modify our expected remediation liability.

7. DEBT

The carrying value of our credit facilities, finance leases and long-term debt as of March 31, 2021 and December 31, 2020 is listed in the following table, and is adjusted for the fair value of interest rate swaps, unamortized discounts, deferred issuance costs and the unamortized portion of adjustments to fair value recorded in purchase accounting. Original issue discounts, deferred issuance costs, and adjustments to fair value recorded in purchase accounting are amortized to interest expense over the term of the applicable instrument using the effective interest method.

		March 31, 2021			December 31, 2020		
Maturity	Interest Rate	Principal	Adjustments	Carrying Value	Principal	Adjustments	Carrying Value
Credit facilities:							
Uncommitted Credit Facility	Variable	$ 12.6	$ —	$ 12.6	$ —	$ —	$ —
$1.0 billion - August 2021	Variable	—	—	—	—	—	—
$2.25 billion - June 2023	Variable	—	—	—	186.0	—	186.0
Senior notes:							
May 2023	4.750	300.0	3.3	303.3	300.0	4.8	304.8
August 2024	2.500	900.0	(6.2)	893.8	900.0	(6.6)	893.4
March 2025	3.200	500.0	(2.8)	497.2	500.0	(3.0)	497.0
November 2025	0.875	350.0	(3.1)	346.9	350.0	(3.3)	346.7
July 2026	2.900	500.0	(3.2)	496.8	500.0	(3.3)	496.7
November 2027	3.375	650.0	(4.3)	645.7	650.0	(4.5)	645.5
May 2028	3.950	800.0	(13.7)	786.3	800.0	(14.2)	785.8
March 2030	2.300	600.0	(6.4)	593.6	600.0	(6.5)	593.5
February 2031	1.450	650.0	(8.6)	641.4	650.0	(8.6)	641.4
February 2032	1.750	750.0	(6.9)	743.1	750.0	(7.1)	742.9
March 2035	6.086	181.9	(13.2)	168.7	181.9	(13.4)	168.5
March 2040	6.200	399.9	(3.6)	396.3	399.9	(3.6)	396.3
May 2041	5.700	385.7	(5.1)	380.6	385.7	(5.1)	380.6
March 2050	3.050	400.0	(7.2)	392.8	400.0	(7.3)	392.7
Debentures:							
May 2021	9.250	35.3	—	35.3	35.3	(0.1)	35.2
September 2035	7.400	148.1	(31.9)	116.2	148.1	(32.1)	116.0
Tax-exempt:							
2021 - 2050	0.100 - 0.300	1,111.2	(6.3)	1,104.9	1,111.2	(6.5)	1,104.7
Finance leases:							
2021 - 2063	0.806 - 12.203	207.4	—	207.4	206.5	—	206.5
Total Debt		$ 8,882.1	$ (119.2)	8,762.9	$ 9,054.6	$ (120.4)	8,934.2
Less: current portion				(168.7)			(168.1)
Long-term portion				$ 8,594.2			$ 8,766.1

Credit Facilities

The 364-Day Credit Facility

In August 2020, we entered into a $1.0 billion 364-day unsecured revolving credit facility (the 364-Day Credit Facility), which matures in August 2021. At our option, borrowings under the 364-Day Credit Facility bear interest at a Base Rate, or a Eurodollar Rate, plus an applicable margin based on our Debt Ratings (all as defined in the 364-Day Credit Facility agreement).

The 364-Day Credit Facility is subject to facility fees based on applicable rates defined in the 364-Day Credit Facility agreement and the aggregate commitment, regardless of usage. Availability under our 364-Day Credit Facility totaled

$1.0 billion as of March 31, 2021 and December 31, 2020. The 364-Day Credit Facility can be used for working capital, capital expenditures, acquisitions, and other general corporate purposes. The 364-Day Credit Facility agreement requires us to comply with financial and other covenants, which are consistent with the financial and other covenants included in our Credit Facility. We may pay dividends and repurchase common stock if we are in compliance with these covenants.

As of March 31, 2021 and December 31, 2020, we had no borrowings outstanding under our 364-Day Credit Facility.

The Credit Facility

In 2018, we entered into a $2.25 billion unsecured revolving credit facility (as amended, the Credit Facility), which matures in June 2023. As permitted by the Credit Facility, we have the right to request two one-year extensions of the maturity date, but none of the lenders are committed to participate in such extension. The Credit Facility also includes a feature that allows us to increase availability, at our option, by an aggregate amount of up to $1.0 billion through increased commitments from existing lenders or the addition of new lenders. At our option, borrowings under the Credit Facility bear interest at a Base Rate, or a Eurodollar Rate, plus an applicable margin based on our Debt Ratings (all as defined in the Credit Facility agreement).

The Credit Facility is subject to facility fees based on applicable rates defined in the Credit Facility agreement and the aggregate commitment, regardless of usage. Availability under our Credit Facility totaled $1,873.0 million and $1,671.8 million as of March 31, 2021 and December 31, 2020, respectively. The Credit Facility can be used for working capital, capital expenditures, acquisitions, letters of credit and other general corporate purposes. The Credit Facility agreement requires us to comply with financial and other covenants. We may pay dividends and repurchase common stock if we are in compliance with these covenants.

As of March 31, 2021, we had no borrowings under our Credit Facility, and as of December 31, 2020, we had $186.0 million of borrowings under our Credit Facility. We had $361.3 million and $376.5 million of letters of credit outstanding under our Credit Facility as of March 31, 2021 and December 31, 2020, respectively.

Uncommitted Credit Facility

We also have an Uncommitted Credit Facility, which bears interest at LIBOR or a Cost of Funds rate (both as defined in the Uncommitted Credit Facility agreement), plus an applicable margin. We can use borrowings under the Uncommitted Credit Facility for working capital and other general corporate purposes. The agreement governing our Uncommitted Credit Facility requires us to comply with certain covenants. The Uncommitted Credit Facility may be terminated by either party at any time. As of March 31, 2021, we had $12.6 million outstanding under our Uncommitted Credit Facility. As of December 31, 2020, we had no borrowings outstanding under our Uncommitted Credit Facility.

Senior Notes and Debentures

In November 2020, we issued $350.0 million of 0.875% senior notes due November 2025 (the 0.875% Notes) and $750.0 million of 1.750% senior notes due February 2032 (the 1.750% Notes). We used the net proceeds from the 0.875% Notes and 1.750% Notes to redeem all $850.0 million of the outstanding 3.550% senior notes due June 2022 and $250.0 million of the $550.0 million outstanding 4.750% senior notes due May 2023 (the 4.750% Notes).

In August 2020, we issued $650.0 million of 1.450% senior notes due February 2031 (the 1.450% Notes). We used the net proceeds to redeem all $600.0 million of the outstanding 5.250% senior notes due November 2021 plus a make-whole premium of $34.0 million. The remaining proceeds were used for general corporate purposes.

In February 2020, we issued $600.0 million of 2.300% senior notes due March 2030 (the 2.300% Notes) and $400.0 million of 3.050% senior notes due March 2050 (the 3.050% Notes). We used the net proceeds from the 2.300% Notes and 3.050% Notes to repay $850.0 million of 5.000% senior notes that matured in March 2020. The remaining proceeds were used to repay amounts outstanding under our unsecured credit facilities as well as for general corporate purposes.

Our senior notes and debentures are general unsecured obligations. Interest is payable semi-annually.

Interest Rate Swap and Lock Agreements

Our ability to obtain financing through the capital markets is a key component of our financial strategy. Historically, we have managed risk associated with executing this strategy, particularly as it relates to fluctuations in interest rates, by using a combination of fixed and floating rate debt. From time to time, we also have entered into interest rate swap and lock agreements to manage risk associated with interest rates, either to effectively convert specific fixed rate debt to a floating rate (fair value hedges), or to lock interest rates in anticipation of future debt issuances (cash flow hedges).

Fair Value Hedges

In 2013, we entered into various interest rate swap agreements relative to the 4.750% Notes. The goal was to reduce overall borrowing costs and rebalance our debt portfolio's ratio of fixed-to-floating interest rates. As of March 31, 2021, these swap agreements had a total notional value of $300.0 million and mature in May 2023, which is identical to the maturity of the hedged senior notes. We pay interest at floating rates based on changes in LIBOR and receive interest at a fixed rate of 4.750%. These transactions were designated as fair value hedges because the swaps hedge against the changes in fair value of the fixed rate senior notes resulting from changes in interest rates.

Contemporaneously with the $250.0 million partial redemption of the 4.750% Notes, we dedesignated the proportional share of these swap agreements as fair value hedges. There was no ineffectiveness recognized in the dedesignation of these fair value hedges. Following the dedesignation, the fair value of these free-standing derivatives was determined using standard valuation models with assumptions about interest rates being based on those observed in underlying markets (Level 2 in the fair value hierarchy). As of March 31, 2021 and December 31, 2020, these free-standing derivatives were reflected at their fair value of $7.2 million and $8.3 million, respectively, and were included in other assets in our consolidated balance sheets. For the three months ended March 31, 2021, we recognized a loss of $1.1 million directly in earnings as an adjustment to non-cash interest expense attributable to the change in fair value of the free-standing derivatives.

As of March 31, 2021 and December 31, 2020, the interest rate swap agreements that were designated as fair value hedges were reflected at their fair value of $8.6 million and $10.0 million, respectively, and were included in other assets in our consolidated balance sheets. To the extent they are effective, these interest rate swap agreements are included as an adjustment to long-term debt in our consolidated balance sheets.

We recognized net interest income of $2.0 million and $0.7 million during the three months ended March 31, 2021 and 2020, respectively, related to net settlements for these interest rate swap agreements, which was included as an offset to interest expense in our consolidated statements of income.

For the three months ended March 31, 2021, we recognized a gain of $1.5 million on the change in fair value of the hedged senior notes with an offsetting loss of $1.4 million on the related interest rate swaps. For the three months ended March 31, 2020, we recognized a loss of $9.7 million on the change in fair value of the hedged senior notes with an offsetting gain of $10.3 million on the related interest rate swaps. The change in both periods is attributable to changes in the benchmark interest rate. The difference of these fair value changes for the three months ended March 31, 2021 and 2020 was recorded directly in earnings as an adjustment to interest expense in our consolidated statements of income.

For further detail regarding the effect of our fair value hedging on interest expense, refer to Note 11, *Financial Instruments*, of the notes to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Cash Flow Hedges

We have historically entered into multiple swap agreements designated as cash flow hedges to manage exposure to fluctuations in interest rates in anticipation of planned future issuances of senior notes. Upon the expected issuance of senior notes, we terminate the interest rate locks and settle with our counterparties. These transactions were accounted for as cash flow hedges. All of our cash flow hedges settled on or before December 31, 2020, thus there was no related asset or liability as of March 31, 2021 or December 31, 2020.

The fair value of our interest rate locks is determined using standard valuation models with assumptions about interest rates being based on those observed in underlying markets (Level 2 in the fair value hierarchy).

There was no unrealized loss or gain recognized in other comprehensive income for the three months ended March 31, 2021. Total unrealized loss recognized in other comprehensive income for interest rate locks was $22.2 million, net of tax, for the three months ended March 31, 2020.

As of March 31, 2021 and December 31, 2020, our previously terminated interest rate locks were recorded as components of accumulated other comprehensive loss, net of tax of $29.3 million and $30.4 million, respectively. The amortization of the terminated interest rate locks is recorded as an adjustment to interest expense over the life of the issued debt using the effective interest method. Over the next 12 months, we expect to amortize approximately $4.5 million, net of tax, from accumulated other comprehensive loss to interest expense as a yield adjustment of our senior notes.

For further detail regarding the effect of our cash flow hedging on interest expense, refer to Note 11, *Financial Instruments*, of the notes to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Derivative Contracts

Contemporaneously with the issuance of our 2.300% Notes in February 2020, we amended interest rate lock agreements with an aggregate notional value of $550.0 million, extending the mandatory maturity date from 2020 to 2030, and dedesignated them as cash flow hedges (the 2020 Extended Interest Rate Locks). Contemporaneously with the issuance of our 2.500% Notes in August 2019, we amended interest rate lock agreements with an aggregate notional value of $375.0 million, extending the mandatory maturity date from 2019 to 2024, and dedesignated them as cash flow hedges (collectively with the 2020 Extended Interest Rate Locks referred to as the Extended Interest Rate Locks). There was no ineffectiveness recognized in the termination of these cash flow hedges. In addition, in both years we entered into offsetting interest rate swaps to offset future exposures to fair value fluctuations of the Extended Interest Rate Locks (the 2019 Offsetting Interest Rate Swap and the 2020 Offsetting Interest Rate Swap, or collectively the Offsetting Interest Rate Swaps). The fair value of these free-standing derivatives was determined using standard valuation models with assumptions about interest rates being based on those observed in underlying markets (Level 2 in the fair value hierarchy).

As of March 31, 2021 and December 31, 2020, the fair values of the Extended Interest Rate Locks were liabilities of $51.9 million and $103.0 million, respectively, which were included in other long-term liabilities in our consolidated balance sheets. As of March 31, 2021, the fair value of the 2019 Offsetting Interest Rate Swap was an asset of $17.5 million, which was recorded in other assets in our consolidated balance sheet, and the fair value of the 2020 Offsetting Interest Rate Swap was a liability of $8.8 million, which was included in other long-term liabilities in our consolidated balance sheet. As of December 31, 2020, the fair values of the Offsetting Interest Rate Swaps were assets of $55.5 million, which were included in other assets in our consolidated balance sheet. For the three months ended March 31, 2021, we recognized a gain of $47.1 million on the change in fair value of the Extended Interest Rate Locks with an offsetting loss of $46.7 million on the change in fair value of the Offsetting Interest Rate Swaps. For the three months ended March 31, 2020, we recognized a loss of $61.3 million on the change in fair value of the Extended Interest Rate Locks with an offsetting gain of $58.7 million on the change in fair value of the Offsetting Interest Rate Swaps. The changes in fair value were recorded directly in earnings as an adjustment to interest expense in our consolidated statements of income.

Tax-Exempt Financings

As of March 31, 2021 and December 31, 2020, we had $1,104.9 million and $1,104.7 million of certain variable rate tax-exempt financings outstanding, respectively, with maturities ranging from 2021 to 2050. During the second quarter of 2020, we issued $60.0 million of tax-exempt financings.

All of our tax-exempt financings are remarketed either quarterly or semiannually by remarketing agents to effectively maintain a variable yield. The holders of the bonds can put them back to the remarketing agents at the end of each interest period. If the remarketing agent is unable to remarket our bonds, the remarketing agent can put the bonds to us. In the event of a failed remarketing, we currently have availability under our $2.25 billion unsecured revolving credit facility to fund these bonds until they are remarketed successfully. Accordingly, we classified these borrowings as long-term in our consolidated balance sheets as of March 31, 2021 and December 31, 2020.

Finance Leases

We had finance lease liabilities of $207.4 million and $206.5 million as of March 31, 2021 and December 31, 2020, respectively, with maturities ranging from 2021 to 2063.

8. INCOME TAXES

Our effective tax rate, exclusive of non-controlling interests, for the three months ended March 31, 2021 and 2020 was 25.9% and 23.5%, respectively.

Cash paid for income taxes was a net refund of $0.4 million and a net payment of $1.4 million, respectively, for the three months ended March 31, 2021 and 2020.

We have deferred tax assets related to state net operating loss carryforwards. We provide a partial valuation allowance due to uncertainty surrounding the future utilization of these carryforwards in the taxing jurisdictions where the loss carryforwards exist. When determining the need for a valuation allowance, we consider all positive and negative evidence, including recent financial results, scheduled reversals of deferred tax liabilities, projected future taxable income and tax planning strategies. The realization of our deferred tax asset for state loss carryforwards ultimately depends upon the existence of sufficient taxable income in the appropriate state taxing jurisdictions in future periods. The weight given to the positive and negative evidence is commensurate with the extent such evidence can be objectively verified. We continue to regularly monitor both positive and negative evidence in determining the ongoing need for a valuation allowance. As of March 31, 2021, the valuation allowance associated with our state loss carryforwards was approximately $43 million.

We are subject to income tax in the United States, as well as in multiple state jurisdictions. Our compliance with income tax rules and regulations is periodically audited by taxing authorities. These authorities may challenge the positions taken in our tax filings. Our federal statute of limitations is closed for all years prior to 2015. We are currently under examination by the Internal

Revenue Service (IRS) for tax years 2015 through 2017 and recently received an informal notification from the IRS of their intent to expand their examination to include our 2018 tax year. In addition, we are currently under state examination or administrative review in various jurisdictions for tax years 2012 through 2019.

We believe our recorded liabilities for uncertain tax positions are adequate. However, a significant assessment against us in excess of the liabilities recorded could have a material adverse effect on our consolidated financial position, results of operations and cash flows. As of March 31, 2021, we are unable to estimate the resolution of our gross unrecognized benefits over the next 12 months.

We recognize interest and penalties as incurred within the provision for income taxes in the consolidated statement of income. As of March 31, 2021, we accrued a liability for penalties of $0.3 million and a liability for interest (including interest on penalties) of $12.9 million related to our uncertain tax positions.

9. STOCK REPURCHASES, DIVIDENDS AND EARNINGS PER SHARE

Available Shares

We currently have approximately 12.3 million shares of common stock reserved for future grants under the Republic Services, Inc. 2021 Stock Incentive Plan.

Stock Repurchases

Stock repurchase activity during the three months ended March 31, 2021 and 2020 follows (in millions, except per share amounts):

	Three Months Ended March 31,	
	2021	2020
Number of shares repurchased	0.1	1.2
Amount paid	$ 12.7	$ 98.8
Weighted average cost per share	$ 89.63	$ 85.06

As of March 31, 2021 and 2020, no repurchased shares were pending settlement.

In October 2020, our Board of Directors approved a $2.0 billion share repurchase authorization effective starting January 1, 2021 and extending through December 31, 2023. Share repurchases under the program may be made through open market purchases or privately negotiated transactions in accordance with applicable federal securities laws. While the Board of Directors has approved the program, the timing of any purchases, the prices and the number of shares of common stock to be purchased will be determined by our management, at its discretion, and will depend upon market conditions and other factors. The share repurchase program may be extended, suspended or discontinued at any time. As of March 31, 2021, the remaining authorized purchase capacity under our October 2020 repurchase program was $2.0 billion. On a quarterly basis, our Board of Directors reviews the intrinsic value of our stock and the parameters around which we repurchase our shares.

Dividends

In February 2021, our Board of Directors approved a quarterly dividend of $0.425 per share. Cash dividends declared were $135.6 million for the three months ended March 31, 2021. As of March 31, 2021, we recorded a quarterly dividend payable of $135.6 million to shareholders of record at the close of business on April 1, 2021.

Earnings per Share

Basic earnings per share is computed by dividing net income attributable to Republic Services, Inc. by the weighted average number of common shares (including vested but unissued RSUs and PSUs) outstanding during the period. Diluted earnings per share is based on the combined weighted average number of common shares and common share equivalents outstanding, which include, where appropriate, the assumed exercise of employee stock options, unvested RSUs and unvested PSUs at the expected attainment levels. We use the treasury stock method in computing diluted earnings per share.

Earnings per share for the three months ended March 31, 2021 and 2020 are calculated as follows (in thousands, except per share amounts):

	Three Months Ended March 31, 2021	Three Months Ended March 31, 2020
Basic earnings per share:		
Net income attributable to Republic Services, Inc.	$ 295,900	$ 246,300
Weighted average common shares outstanding	319,449	319,577
Basic earnings per share	$ 0.93	$ 0.77
Diluted earnings per share:		
Net income attributable to Republic Services, Inc.	$ 295,900	$ 246,300
Weighted average common shares outstanding	319,449	319,577
Effect of dilutive securities:		
Options to purchase common stock	—	92
Unvested RSU awards	141	217
Unvested PSU awards	242	345
Weighted average common and common equivalent shares outstanding	319,832	320,231
Diluted earnings per share	$ 0.93	$ 0.77

During the three months ended March 31, 2021, there were less than 0.1 million antidilutive securities outstanding. During the three months ended March 31, 2020 there were 0.1 million antidilutive securities outstanding.

10. CHANGES IN ACCUMULATED OTHER COMPREHENSIVE LOSS BY COMPONENT

A summary of changes in accumulated other comprehensive loss, net of tax, by component, for the three months ended March 31, 2021 follows:

	Cash Flow Hedges	Defined Benefit Pension Items	Total
Balance as of December 31, 2020	$ (30.4)	$ 18.0	$ (12.4)
Amounts reclassified from accumulated other comprehensive loss	1.1	—	1.1
Net current period other comprehensive income	1.1	—	1.1
Balance as of March 31, 2021	$ (29.3)	$ 18.0	$ (11.3)

A summary of reclassifications out of accumulated other comprehensive loss for the three months ended March 31, 2021 and 2020 follows:

	Three Months Ended March 31,		
	2021	2020	
Details about Accumulated Other Comprehensive Loss Components	Amount Reclassified from Accumulated Other Comprehensive Loss		Affected Line Item in the Statement where Net Income is Presented
Loss on cash flow hedges:			
Terminated interest rate locks	$ (1.5)	$ (1.1)	Interest expense
Total before tax	(1.5)	(1.1)	
Tax benefit	0.4	0.3	
Total loss reclassified into earnings, net of tax	$ (1.1)	$ (0.8)	

11. FINANCIAL INSTRUMENTS

The effect of our hedging relationships and derivative instruments on the consolidated statements of income for the three months ended March 31, 2021 and 2020 follows:

	Classification and amount of gain (loss) recognized in income on hedging relationships and derivative instruments	
	Three Months Ended March 31,	
	2021	2020
	Interest Expense	Interest Expense
Total amount of expense line items presented in the consolidated statements of income in which the effects of hedging relationships and derivative instruments are recorded	$ (78.4)	$ (96.7)
The effects of fair value and cash flow hedging relationships in Subtopic 815-20:		
Gain on fair value hedging relationships:		
Interest rate swaps:		
Net swap settlements	$ 2.0	$ 0.7
Net periodic earnings	$ 0.1	$ 0.6
Loss on cash flow hedging relationships:		
Interest rate swap locks:		
Amount of loss reclassified from accumulated other comprehensive loss into income, net of tax	$ (1.1)	$ (0.8)
The effects of derivative instruments not in Subtopic 815-20:		
(Loss) gain on free-standing derivative instruments:		
Interest rate swaps:		
Loss on change in fair value of free-standing derivative instruments	$ (1.1)	$ —
Interest rate contract:		
Net gain (loss) on change in fair value of free-standing derivative instruments	$ 0.4	$ (2.6)

Fair Value Measurements

In measuring fair values of assets and liabilities, we use valuation techniques that maximize the use of observable inputs (Level 1) and minimize the use of unobservable inputs (Level 3). We also use market data or assumptions that we believe market participants would use in pricing an asset or liability, including assumptions about risk when appropriate.

The carrying value for certain of our financial instruments, including cash, accounts receivable, current investments, accounts payable and certain other accrued liabilities, approximates fair value because of their short-term nature. As of March 31, 2021 and December 31, 2020, our assets and liabilities that are measured at fair value on a recurring basis include the following:

	March 31, 2021				
		Fair Value			
	Carrying Amount	Total	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:					
Money market mutual funds	$ 32.7	$ 32.7	$ 32.7	$ —	$ —
Bonds - restricted cash and marketable securities and other assets	70.2	70.2	—	70.2	—
Interest rate swaps - other assets	8.6	8.6	—	8.6	—
Other derivative assets - other assets	24.7	24.7	—	24.7	—
Total assets	$ 136.2	$ 136.2	$ 32.7	$ 103.5	$ —
Liabilities:					
Other derivative liabilities - other long-term liabilities	$ 60.7	$ 60.7	$ —	$ 60.7	$ —
Contingent consideration - other accrued liabilities and other long-term liabilities	70.3	70.3	—	—	70.3
Total liabilities	$ 131.0	$ 131.0	$ —	$ 60.7	$ 70.3

	December 31, 2020				
		Fair Value			
	Carrying Amount	Total	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:					
Money market mutual funds	$ 32.3	$ 32.3	$ 32.3	$ —	$ —
Bonds - restricted cash and marketable securities and other assets	73.8	73.8	—	73.8	—
Interest rate swaps - other assets	10.0	10.0	—	10.0	—
Other derivative assets - other assets	63.8	63.8	—	63.8	—
Total assets	$ 179.9	$ 179.9	$ 32.3	$ 147.6	$ —
Liabilities:					
Other derivative liabilities - other long-term liabilities	$ 103.0	$ 103.0	$ —	$ 103.0	$ —
Contingent consideration - other accrued liabilities and other long-term liabilities	70.6	70.6	—	—	70.6
Total liabilities	$ 173.6	$ 173.6	$ —	$ 103.0	$ 70.6

Total Debt

As of March 31, 2021 and December 31, 2020, the carrying value of our total debt was $8.8 billion and $8.9 billion, respectively, and the fair value of our total debt was $9.4 billion and $10.0 billion, respectively. The estimated fair value of our fixed rate senior notes and debentures is based on quoted market prices. The fair value of our remaining notes payable, tax-exempt financings and borrowings under our credit facilities approximates the carrying value because the interest rates are variable. The fair value estimates were based on Level 2 inputs of the fair value hierarchy as of March 31, 2021 and December 31, 2020. See Note 7, *Debt*, for further information related to our debt.

Contingent Consideration

In 2015, we entered into a waste management contract with the County of Sonoma, California to operate the county's waste management facilities. As of March 31, 2021, the Sonoma contingent consideration represents the fair value of $63.8 million payable to the County of Sonoma based on the achievement of future annual tonnage targets through the expected remaining capacity of the landfill. The potential undiscounted amount of all future contingent payments that we could be required to make under the waste management contract is estimated to be between approximately $80 million and $100 million. During the three months ended March 31, 2021, the activity in the contingent consideration liability included accretion, which was offset by concession payments made in the ordinary course of business. There were no changes to the estimate of fair value.

12. SEGMENT REPORTING

In December 2020, our senior management began evaluating, overseeing and managing the financial performance of our operations through three operating segments. Group 1 primarily consists of geographic areas located in the western United States, and Group 2 primarily consists of geographic areas located in the southeastern and mid-western United States, and the eastern seaboard of the United States. Our environmental solutions operating segment, which provides environmental solutions for daily operations of industrial, petrochemical and refining facilities, is aggregated with Corporate entities and other as it only represents approximately 1% of our consolidated revenue. Each of our operating segments provides integrated environmental services, including collection, transfer, recycling, and disposal.

Summarized financial information concerning our reportable segments for the three months ended March 31, 2021 and 2020 follows:

	Gross Revenue	Intercompany Revenue	Net Revenue	Depreciation, Amortization, Depletion and Accretion	Operating Income (Loss)	Capital Expenditures	Total Assets
Three Months Ended March 31, 2021							
Group 1	$ 1,548.1	$ (249.0)	$ 1,299.1	$ 132.1	$ 351.5	$ 108.1	$ 11,735.1
Group 2	1,423.8	(201.8)	1,222.0	128.7	261.8	67.7	9,180.7
Corporate entities and other	85.7	(10.4)	75.3	41.8	(120.9)	155.2	2,336.8
Total	$ 3,057.6	$ (461.2)	$ 2,596.4	$ 302.6	$ 492.4	$ 331.0	$ 23,252.6
Three Months Ended March 31, 2020							
Group 1	$ 1,507.5	$ (252.9)	$ 1,254.6	$ 128.5	$ 313.6	$ 122.6	$ 11,376.6
Group 2	1,411.2	(203.1)	1,208.1	125.1	229.3	81.0	8,891.8
Corporate entities and other	102.8	(11.6)	91.2	35.9	(109.8)	169.5	2,640.5
Total	$ 3,021.5	$ (467.6)	$ 2,553.9	$ 289.5	$ 433.1	$ 373.1	$ 22,908.9

Financial information for the three months ended March 31, 2020 reflects the transfer of our environmental solutions operating segment from Group 2 to Corporate entities and other.

Intercompany revenue reflects transactions within and between segments that generally are made on a basis intended to reflect the market value of such services. Capital expenditures for Corporate entities and other primarily include vehicle inventory acquired but not yet assigned to operating locations and facilities. Corporate functions include legal, tax, treasury, information technology, risk management, human resources, closed landfills, environmental solutions, and other administrative functions.

13. REVENUE AND CREDIT LOSSES

Our operations primarily consist of providing environmental services. The following table disaggregates our revenue by service line for the three months ended March 31, 2021 and 2020 (in millions of dollars and as a percentage of revenue):

	Three Months Ended March 31,			
	2021		2020	
Collection:				
Residential	$ 593.1	22.8 %	$ 568.5	22.3 %
Small-container	810.5	31.2	805.7	31.5
Large-container	540.1	20.8	552.4	21.6
Other	14.2	0.5	12.3	0.5
Total collection	1,957.9	75.3	1,938.9	75.9
Transfer	331.3		321.9	
Less: intercompany	(185.1)		(185.6)	
Transfer, net	146.2	5.6	136.3	5.3
Landfill	562.6		558.3	
Less: intercompany	(249.3)		(252.3)	
Landfill, net	313.3	12.1	306.0	12.0
Environmental solutions	30.0	1.2	46.8	1.8
Other:				
Recycling processing and commodity sales	87.6	3.4	67.8	2.7
Other non-core	61.4	2.4	58.1	2.3
Total other	149.0	5.8	125.9	5.0
Total revenue	$ 2,596.4	100.0 %	$ 2,553.9	100.0 %

Other non-core revenue consists primarily of revenue from National Accounts, which represents the portion of revenue generated from nationwide or regional contracts in markets outside our operating areas where the associated waste handling is subcontracted to local operators. Consequently, substantially all of this revenue is offset with related subcontract costs, which are recorded in cost of operations.

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, we recognize revenue at the time we perform a service. In the event that we bill for services in advance of performance, we recognize deferred revenue for the amount billed and subsequently recognize revenue at the time the service is provided. Substantially all of the deferred revenue recognized as of December 31, 2020 was recognized as revenue during the three months ended March 31, 2021 when the service was performed.

See Note 12, *Segment Reporting*, for additional information regarding revenue by reportable segment.

Revenue Recognition

Our service obligations of a long-term nature, e.g., certain collection service contracts, are satisfied over time, and we recognize revenue based on the value provided to the customer during the period. The amount billed to the customer is based on variable elements such as the number of residential homes or businesses for which collection services are provided, the volume of material collected, transported and disposed, and the nature of the material accepted. We do not disclose the value of unsatisfied performance obligations for these contracts as our right to consideration corresponds directly to the value provided to the customer for services completed to date and all future variable consideration is allocated to wholly unsatisfied performance obligations.

Additionally, certain elements of our long-term customer contracts are unknown upon entering into the contract, including the amount that will be billed in accordance with annual price escalation clauses, our fuel recovery fee program and commodity prices. The amount to be billed is often tied to changes in an underlying base index such as a consumer price index or a fuel or commodity index, and revenue can be recognized once the index is established for the period.

Deferred Contract Costs

We incur certain upfront payments to acquire customer contracts which are recognized as other assets in our consolidated balance sheet, and we amortize the asset over the respective contract life. In addition, we recognize sales commissions that represent an incremental cost of the contract as other assets in our consolidated balance sheets, and we amortize the asset over the average life of the customer relationship. As of March 31, 2021 and December 31, 2020, we recognized $80.8 million and $82.3 million, respectively, of deferred contract costs and capitalized sales commissions. During the three months ended March 31, 2021 and 2020, we amortized $3.1 million and $3.0 million, respectively, of capitalized sales commissions to selling, general and administrative expenses. During each of the three months ended March 31, 2021 and 2020, we amortized $1.6 million of other deferred contract costs as a reduction of revenue.

Credit Losses

Accounts receivable represent receivables from customers for environmental services, including collection and processing of recyclable materials, collection, transfer, and disposal of solid waste, and other environmental solutions. Our receivables are recorded when billed or when the related revenue is earned and represent claims against third parties that will be settled in cash. The carrying value of our receivables, net of the allowance for doubtful accounts and customer credits, represents their estimated net realizable value.

We establish an allowance for doubtful accounts based on various factors including the age of receivables outstanding, historical trends, economic conditions and other information. We also review outstanding balances on an account-specific basis based on the credit risk of the customer. We determined that all of our accounts receivable share similar risk characteristics. We monitor our credit exposure on an ongoing basis and assess whether assets in the pool continue to display similar risk characteristics. We perform ongoing credit evaluations of our customers, but generally do not require collateral to support customer receivables.

The following table reflects the activity in our allowance for doubtful accounts for the three months ended March 31:

	2021	2020
Balance at beginning of year	$ 34.7	$ 34.0
Additions charged to expense	4.3	4.9
Accounts written-off	(3.0)	(6.5)
Balance at end of period	$ 36.0	$ 32.4

14. COMMITMENTS AND CONTINGENCIES

Legal Proceedings

We are subject to extensive and evolving laws and regulations and have implemented safeguards to respond to regulatory requirements. In the normal course of our business, we become involved in legal proceedings. Some may result in fines, penalties or judgments against us, or settlements, which may impact earnings and cash flows for a particular period. Although we cannot predict the ultimate outcome of any legal matter with certainty, we do not believe the outcome of any of our pending legal proceedings will have a material adverse impact on our consolidated financial position, results of operations or cash flows.

As used herein, the term *legal proceedings* refers to litigation and similar claims against us and our subsidiaries, excluding: (1) ordinary course accidents, general commercial liability and workers' compensation claims, which are covered by insurance programs, subject to customary deductibles, and which, together with insured employee health care costs, are discussed in Note 5, *Other Liabilities;* and (2) environmental remediation liabilities, which are discussed in Note 6, *Landfill and Environmental Costs.*

We accrue for legal proceedings when losses become probable and reasonably estimable. We have recorded an aggregate accrual of approximately $28 million relating to our outstanding legal proceedings as of March 31, 2021. As of the end of each applicable reporting period, we review each of our legal proceedings and, where it is probable that a liability has been incurred, we accrue for all probable and reasonably estimable losses. Where we can reasonably estimate a range of losses we may incur regarding such a matter, we record an accrual for the amount within the range that constitutes our best estimate. If we can reasonably estimate a range but no amount within the range appears to be a better estimate than any other, we use the amount that is the low end of such range. If we had used the high ends of such ranges, our aggregate potential liability would be approximately $9 million higher than the amount recorded as of March 31, 2021.

Multiemployer Pension Plans

We participate in multiemployer pension plans that generally provide retirement benefits to participants of contributing employers. We do not administer these plans.

Under current law regarding multiemployer pension plans, our withdrawal (which we consider from time to time) or the mass withdrawal from any under-funded multiemployer pension plan (each, a Withdrawal Event) could require us to make payments to the plan for our proportionate share of the plan's unfunded vested liabilities. During the course of operating our business, we incur Withdrawal Events regarding certain of the multiemployer pension plans in which we participate. We accrue for such events when losses become probable and reasonably estimable.

Cash, Cash Equivalents, Restricted Cash and Restricted Cash Equivalents

Restricted cash and restricted cash equivalents are included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. Beginning-of-period and end-of-period cash, cash equivalents, restricted cash and restricted cash equivalents as presented in the statement of cash flows is reconciled as follows:

	March 31, 2021	December 31, 2020	March 31, 2020	December 31, 2019
Cash and cash equivalents	$ 23.2	$ 38.2	$ 281.6	$ 47.1
Restricted cash and marketable securities	134.6	149.1	117.7	179.4
Less: restricted marketable securities	(69.5)	(73.1)	(55.9)	(49.1)
Cash, cash equivalents, restricted cash and restricted cash equivalents	$ 88.3	$ 114.2	$ 343.4	$ 177.4

Our restricted cash and marketable securities include, among other things, restricted cash and marketable securities pledged to regulatory agencies and governmental entities as financial guarantees of our performance under certain collection, landfill and transfer station contracts and permits, and relating to our final capping, closure and post-closure obligations at our landfills as well as restricted cash and marketable securities related to our insurance obligations.

The following table summarizes our restricted cash and marketable securities:

	March 31, 2021	December 31, 2020
Capping, closure and post-closure obligations	$ 31.6	$ 31.5
Insurance	103.0	117.6
Total restricted cash and marketable securities	$ 134.6	$ 149.1

Off-Balance Sheet Arrangements

We have no off-balance sheet debt or similar obligations, other than short-term operating leases and financial assurances, which are not classified as debt. We have no transactions or obligations with related parties that are not disclosed, consolidated into or reflected in our reported financial position or results of operations. We have not guaranteed any third-party debt.

ITEM 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

You should read the following discussion in conjunction with the unaudited consolidated financial statements and notes thereto included under Part I, Item 1 of this Quarterly Report on Form 10-Q. In addition, you should refer to our audited consolidated financial statements and notes thereto and related *Management’s Discussion and Analysis of Financial Condition and Results of Operations* appearing in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020.

Disclosure Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains certain forward-looking information about us that is intended to be covered by the safe harbor for “forward-looking statements” provided by the Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements that are not historical facts. Words such as “guidance,” “expect,” “will,” “may,” “anticipate,” “plan,” “estimate,” “project,” “intend,” “should,” “can,” “likely,” “could,” “outlook” and similar expressions are intended to identify forward-looking statements. In particular, information appearing in this “Management's Discussion and Analysis of Financial Condition and Results of Operations” includes forward-looking statements. These statements include information about our plans, strategies, expectations of future financial performance and prospects. Forward-looking statements are not guarantees of performance. These statements are based upon the current beliefs and expectations of our management and are subject to significant risk and uncertainties that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot assure you that the expectations will prove to be correct. Among the factors that could cause actual results to differ materially from the expectations expressed in the forward-looking statements are the effects of the COVID-19 pandemic and actions taken in response thereto, as well as acts of war, riots or terrorism, and the impact of these acts on economic, financial and social conditions in the United States as well as our dependence on large, long-term collection, transfer and disposal contracts. More information on factors that could cause actual results or events to differ materially from those anticipated is included from time to time in our reports filed with the Securities and Exchange Commission, including our Annual Report on Form 10-K for the year ended December 31, 2020, particularly under Part I, Item 1A - Risk Factors. Additionally, new risk factors emerge from time to time and it is not possible for us to predict all such risk factors, or to assess the impact such risk factors might have on our business. We undertake no obligation to update publicly any forward-looking statements whether as a result of new information, future events or otherwise, except as required by law.

Impact of the COVID-19 Pandemic

In March 2020, the World Health Organization declared the outbreak of a new strain of coronavirus (COVID-19) pandemic. The COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains and created significant volatility and disruption of financial markets. The full extent of the impact of the COVID-19 pandemic on our operations and financial performance will depend on future developments, including the duration and spread of the pandemic, all of which are uncertain and cannot be predicted at this time.

In mid-March 2020, certain customers in our small- and large-container businesses began adjusting their service levels, which included a decrease in the frequency of pickups or a temporary pause in service. In addition, we experienced a decline in volumes disposed at certain of our landfills and transfer stations. As service levels decreased, we also experienced a decrease in certain costs of our operations which are variable in nature. This decline in service activity peaked in the first half of April 2020 and improved sequentially through March 31, 2021.

In April 2020, we launched our Committed to Serve initiative and committed $20 million to support frontline employees and their families, as well as small business customers in the local communities where we serve. In addition to this initiative, we have experienced an increase in certain costs of doing business as a direct result of the COVID-19 pandemic, including costs for additional safety equipment and hygiene products and increased facility and equipment cleaning. These costs are intended to assist in protecting the safety of our frontline employees as we continue to provide an essential service to our customers. In December 2020, we recognized our frontline employees for their commitment and contributions to their communities during the pandemic with a $500 award that was paid in January 2021. In addition, we incurred incremental costs associated with expanding certain aspects of our existing healthcare programs. We expect to incur similar costs throughout 2021, and potentially into future years, although we expect the amount of such costs annually to be less than those incurred in 2020.

The effects of the COVID-19 pandemic on our business are described in more detail in the *Results of Operations* discussion in this *Management's Discussion and Analysis of Financial Condition and Results of Operations.*

Recent Developments

Updated Full-Year 2021 Adjusted Earnings Per Share Guidance

The following is a summary of anticipated adjusted diluted earnings per share for the year ending December 31, 2021. Adjusted diluted earnings per share is not a measure determined in accordance with U.S. GAAP:

	(Anticipated) Year Ending December 31, 2021
Diluted earnings per share	$ 3.65 to 3.69
Restructuring charges	0.03 to 0.04
Accelerated vesting of compensation expense for CEO transition	0.06
Adjusted diluted earnings per share	$ 3.74 to 3.79

We believe that presenting adjusted diluted earnings per share provides an understanding of operational activities before the financial impact of certain items. We use this measure, and believe investors will find it helpful, in understanding the ongoing performance of our operations separate from items that have a disproportionate impact on our results for a particular period. We have incurred comparable charges, costs and recoveries in prior periods, and similar types of adjustments can reasonably be expected to be recorded in future periods. Our definition of adjusted diluted earnings per share may not be comparable to similarly titled measures presented by other companies.

Overview

Republic is one of the largest providers of environmental services in the United States, as measured by revenue. As of March 31, 2021, we operated facilities in 41 states through 347 collection operations, 222 transfer stations, 186 active landfills, 73 recycling processing centers, 6 treatment, recovery and disposal facilities, 6 salt water disposal wells and 7 deep injection wells. We are engaged in 75 landfill gas to energy and renewable energy projects and had post-closure responsibility for 128 closed landfills as of March 31, 2021.

Revenue for the three months ended March 31, 2021 increased by 1.7% to $2,596.4 million compared to $2,553.9 million for the same period in 2020. This change in revenue is due to increases in average yield of 2.3%, acquisitions, net of divestitures of 1.0%, and recycling processing and commodity sales of 0.8%, partially offset by decreased volumes of 0.8%, environmental solutions revenue of 0.7%, and fuel recovery fees of 0.4%. Additionally, revenue decreased 0.5% due to the impact of one less workday during the three months ended March 31, 2021 as compared to the same period in 2020.

The following table summarizes our revenue, expenses and operating income for the three months ended March 31, 2021 and 2020 (in millions of dollars and as a percentage of revenue):

	Three Months Ended March 31,			
	2021		2020	
Revenue	$ 2,596.4	100.0 %	$ 2,553.9	100.0 %
Expenses:				
Cost of operations	1,534.3	59.1	1,550.0	60.7
Depreciation, amortization and depletion of property and equipment	264.8	10.2	253.8	9.9
Amortization of other intangible assets	7.3	0.3	5.3	0.2
Amortization of other assets	10.0	0.4	9.5	0.4
Accretion	20.5	0.8	20.9	0.8
Selling, general and administrative	265.4	10.2	277.1	10.9
Withdrawal costs - multiemployer pension funds	—	—	4.3	0.2
Gain on business divestitures and impairments, net	(1.1)	—	(3.9)	(0.2)
Restructuring charges	2.8	0.1	3.8	0.1
Operating income	$ 492.4	18.9 %	$ 433.1	17.0 %

Our pre-tax income was $400.1 million for the three months ended March 31, 2021 compared to $322.6 million for the same respective period in 2020. Our net income attributable to Republic Services, Inc. was $295.9 million for the three months ended March 31, 2021, or $0.93 per diluted share, compared to $246.3 million, or $0.77 per diluted share, for the same period in 2020.

During each of the three months ended March 31, 2021 and 2020, we recorded a number of charges, other expenses and benefits that impacted our pre-tax income, net income attributable to Republic Services, Inc. (net income – Republic) and diluted earnings per share as noted in the following table (in millions, except per share data). Additionally, see our *Results of Operations* discussion in this *Management's Discussion and Analysis of Financial Condition and Results of Operations* for a discussion of other items that impacted our earnings during the three months ended March 31, 2021 and 2020.

	Three Months Ended March 31, 2021			Three Months Ended March 31, 2020		
	Pre-tax Income	Net Income - Republic	Diluted Earnings per Share	Pre-tax Income	Net Income - Republic	Diluted Earnings per Share
As reported	$ 400.1	$ 295.9	$ 0.93	$ 322.6	$ 246.3	$ 0.77
Restructuring charges[(1)]	2.8	2.1	—	3.8	2.8	0.01
Gain on business divestitures and impairments, net[(1)]	(1.1)	(0.8)	—	(3.9)	(2.9)	(0.01)
Withdrawal costs - multiemployer pension funds	—	—	—	4.3	3.1	0.01
Bridgeton insurance recovery	—	—	—	(10.8)	(8.2)	(0.03)
Total adjustments	1.7	1.3	—	(6.6)	(5.2)	(0.02)
As adjusted	$ 401.8	$ 297.2	$ 0.93	$ 316.0	$ 241.1	$ 0.75

(1) The aggregate impact to adjusted diluted earnings per share totals to less than $0.01 for the three months ended March 31, 2021.

We believe that presenting adjusted pre-tax income, adjusted net income – Republic, and adjusted diluted earnings per share, which are not measures determined in accordance with U.S. GAAP, provides an understanding of operational activities before the financial impact of certain items. We use these measures, and believe investors will find them helpful, in understanding the ongoing performance of our operations separate from items that have a disproportionate impact on our results for a particular period. We have incurred comparable charges, costs and recoveries in prior periods, and similar types of adjustments can reasonably be expected to be recorded in future periods. Our definitions of adjusted pre-tax income, adjusted net income – Republic, and adjusted diluted earnings per share may not be comparable to similarly titled measures presented by other companies. Further information on each of these adjustments is included below.

Restructuring charges. In 2020, we incurred costs related to the redesign of certain back-office software systems, which continued into 2021. In addition, in July 2020, we eliminated certain back-office support positions in response to a decline in the underlying demand for services resulting from the COVID-19 pandemic. During the three months ended March 31, 2021 and 2020, we incurred restructuring charges of $2.8 million and $3.8 million, respectively. During the same periods, we paid $4.0 million and $3.8 million, respectively, related to these restructuring efforts.

During the remainder of 2021, we expect to incur additional restructuring charges of approximately $10 million to $15 million primarily related to the redesign of certain of our back-office software systems. Substantially all of these restructuring charges will be recorded in our corporate entities and other segment.

Gain on business divestitures and impairments, net. During the three months ended March 31, 2021 and 2020, we recorded a net gain on business divestitures and impairments of $1.1 million and $3.9 million, respectively.

Withdrawal costs - multiemployer pension funds. During the three months ended March 31, 2020, we recorded charges to earnings of $4.3 million for withdrawal events at multiemployer pension funds to which we contribute. As we obtain updated information regarding multiemployer pension funds, the factors used in deriving our estimated withdrawal liabilities will be subject to change, which may adversely impact our reserves for withdrawal costs.

Bridgeton insurance recovery. During the three months ended March 31, 2020, we recognized an insurance recovery of $10.8 million related to our closed Bridgeton Landfill in Missouri as a reduction of remediation expenses in our cost of operations.

Results of Operations

Revenue

We generate revenue by providing environmental services to our customers, including the collection and processing of recyclable materials, collection, transfer and disposal of non-hazardous solid waste, and other environmental solutions. Our residential, small-container and large-container collection operations in some markets are based on long-term contracts with municipalities. Certain of our municipal contracts have annual price escalation clauses that are tied to changes in an underlying base index such as a consumer price index. We generally provide small-container and large-container collection services to customers under contracts with terms up to three years. Our transfer stations and landfills generate revenue from disposal or tipping fees charged to third parties. Our recycling processing centers generate revenue from tipping fees charged to third parties and the sale of recycled commodities. Our revenue from environmental solutions consists mainly of fees we charge for disposal of non-hazardous solid and liquid material and in-plant services, such as transportation and logistics. Environmental solutions waste is generated from the by-product of oil and natural gas exploration and production activity. Additionally, it is generated by the daily operations of industrial, petrochemical and refining facilities, including maintenance, plant turnarounds and capital projects. Other non-core revenue consists primarily of revenue from National Accounts, which represents the portion of revenue generated from nationwide or regional contracts in markets outside our operating areas where the associated material handling is subcontracted to local operators. Consequently, substantially all of this revenue is offset with related subcontract costs, which are recorded in cost of operations.

The following table reflects our revenue by service line for the three months ended March 31, 2021 and 2020 (in millions of dollars and as a percentage of revenue):

	Three Months Ended March 31,			
	2021		2020	
Collection:				
Residential	$ 593.1	22.8 %	$ 568.5	22.3 %
Small-container	810.5	31.2	805.7	31.5
Large-container	540.1	20.8	552.4	21.6
Other	14.2	0.5	12.3	0.5
Total collection	1,957.9	75.3	1,938.9	75.9
Transfer	331.3		321.9	
Less: intercompany	(185.1)		(185.6)	
Transfer, net	146.2	5.6	136.3	5.3
Landfill	562.6		558.3	
Less: intercompany	(249.3)		(252.3)	
Landfill, net	313.3	12.1	306.0	12.0
Environmental solutions	30.0	1.2	46.8	1.8
Other:				
Recycling processing and commodity sales	87.6	3.4	67.8	2.7
Other non-core	61.4	2.4	58.1	2.3
Total other	149.0	5.8	125.9	5.0
Total revenue	$ 2,596.4	100.0 %	$ 2,553.9	100.0 %

The following table reflects changes in components of our revenue, as a percentage of total revenue, for the three months ended March 31, 2021 and 2020:

	Three Months Ended March 31,	
	2021	2020
Average yield	2.3 %	2.9 %
Fuel recovery fees	(0.4)	(0.2)
Total price	1.9	2.7
Volume	(0.8)	(0.1)
Change in workdays	(0.5)	0.5
Recycling processing and commodity sales	0.8	(0.2)
Environmental solutions	(0.7)	(0.5)
Total internal growth	0.7	2.4
Acquisitions / divestitures, net	1.0	1.0
Total	1.7 %	3.4 %
Core price	4.3 %	5.2 %

Average yield is defined as revenue growth from the change in average price per unit of service, expressed as a percentage. Core price is defined as price increases to our customers and fees, excluding fuel recovery fees, net of price decreases to retain customers. We also measure changes in average yield and core price as a percentage of related-business revenue, defined as total revenue excluding recycled commodities and fuel recovery fees, to determine the effectiveness of our pricing strategies. Average yield as a percentage of related-business revenue was 2.5% and 3.0% for the three months ended March 31, 2021 and 2020, respectively. Core price as a percentage of related-business revenue was 4.6% and 5.5% for the three months ended March 31, 2021 and 2020, respectively.

During the three months ended March 31, 2021, we experienced the following changes in our revenue as compared to the same respective periods in 2020:

- Average yield increased revenue by 2.3% during the three months ended March 31, 2021 due to price increases in all lines of business.
- The fuel recovery fee program, which mitigates our exposure to increases in fuel prices, decreased revenue by 0.4% primarily due to lower fuel recovery rates, resulting from the timing of implementing changes to the rates, during the three months ended March 31, 2021 as compared to the same period in 2020.
- Volume decreased revenue by 0.8% during the three months ended March 31, 2021, primarily due to volume declines in our small- and large-container collection lines of business. In mid-March 2020, certain customers in these lines of business began adjusting their service levels as a result of the COVID-19 pandemic. This decline in service activity peaked in the first half of April 2020 and sequentially improved thereafter, but volumes remained below pre-COVID levels during the three months ended March 31, 2021. This volume decline was partially offset by volume growth in our transfer and landfill lines of business. The volume increase in our landfill line of business was primarily attributable to increased solid and special waste volumes, partially offset by a decrease in construction and demolition volumes.
- Revenue decreased by 0.5% due to one less workday during the three months ended March 31, 2021 as compared to the same period in 2020, which drove a decline in volumes in our large-container collection, landfill and transfer lines of business.
- Recycling processing and commodity sales increased revenue by 0.8% during the three months ended March 31, 2021, primarily due to an increase in overall commodity prices as compared to the same period in 2020. The average price for recycled commodities, excluding glass and organics, for the three months ended March 31, 2021 was $133 per ton compared to $76 per ton for the same period in 2020.

  Changing market demand for recycled commodities causes volatility in commodity prices. At current volumes and mix of materials, we believe a $10 per ton change in the price of recycled commodities would change both annual revenue and operating income by approximately $12 million.
- Environmental solutions revenue decreased by 0.7% during the three months ended March 31, 2021 primarily due to a decrease in rig counts, drilling activity, and the delay of in-plant project work as a result of lower demand for crude oil.

- Acquisitions, net of divestitures, increased revenue by 1.0% during the three months ended March 31, 2021 due to our continued growth strategy of acquiring privately held solid waste, recycling, and environmental services companies that complement our existing business platform.

Cost of Operations

Cost of operations includes labor and related benefits, which consists of salaries and wages, health and welfare benefits, incentive compensation and payroll taxes. It also includes transfer and disposal costs representing tipping fees paid to third party disposal facilities and transfer stations; maintenance and repairs relating to our vehicles, equipment and containers, including related labor and benefit costs; transportation and subcontractor costs, which include costs for independent haulers that transport our waste to disposal facilities and costs for local operators who provide waste handling services associated with our National Accounts in markets outside our standard operating areas; fuel, which includes the direct cost of fuel used by our vehicles, net of fuel tax credits; disposal fees and taxes, consisting of landfill taxes, host community fees and royalties; landfill operating costs, which includes financial assurance, leachate disposal, remediation charges and other landfill maintenance costs; risk management costs, which include insurance premiums and claims; cost of goods sold, which includes material costs paid to suppliers; and other, which includes expenses such as facility operating costs, equipment rent and gains or losses on sale of assets used in our operations.

The following table summarizes the major components of our cost of operations for the three months ended March 31, 2021 and 2020 (in millions of dollars and as a percentage of revenue):

	Three Months Ended March 31,			
	2021		2020	
Labor and related benefits	$ 555.7	21.4 %	$ 556.9	21.8 %
Transfer and disposal costs	192.4	7.4	198.5	7.8
Maintenance and repairs	237.4	9.2	247.3	9.7
Transportation and subcontract costs	168.8	6.5	167.3	6.6
Fuel	78.9	3.0	79.6	3.1
Disposal fees and taxes	77.7	3.0	77.3	3.0
Landfill operating costs	57.4	2.2	64.7	2.5
Risk management	59.3	2.3	61.9	2.4
Other	106.7	4.1	107.3	4.2
Subtotal	1,534.3	59.1	1,560.8	61.1
Bridgeton insurance recovery	—	—	(10.8)	(0.4)
Total cost of operations	$ 1,534.3	59.1 %	$ 1,550.0	60.7 %

These cost categories may change from time to time and may not be comparable to similarly titled categories presented by other companies. As such, you should take care when comparing our cost of operations by component to that of other companies and of ours for prior periods.

Our cost of operations decreased for the three months ended March 31, 2021 compared to the same period in 2020 as a result of the following:

- Labor and related benefits decreased due to a decline in service levels attributable to the COVID-19 pandemic and one less workday during the three months ended March 31, 2021 as compared to the same period in 2020. This decrease was partially offset by higher hourly and salaried wages as a result of annual merit increases during the three months ended March 31, 2021 as compared to the same period in 2020.

- Transfer and disposal costs decreased as a result of lower collection volumes, partially offset by an increase in third party disposal rates.

  During the three months ended March 31, 2021 and 2020, approximately 68% and 69%, respectively, of the total solid waste volume we collected was disposed at landfill sites that we own or operate (internalization).

- Maintenance and repairs expense decreased due to a decrease in service levels attributable to the COVID-19 pandemic along with the effective execution of our fleet strategy.

- Transportation and subcontract costs increased in aggregate dollars during the three months ended March 31, 2021 primarily due to acquisition-related activity and increased subcontract work attributable to an increase in non-core revenues, partially offset by a decline in demand for our environmental solutions business and one less workday during the three months ended March 31, 2021 as compared to the same period in 2020.

- Fuel costs remained relatively unchanged due to the fuel cost per gallon remaining relatively consistent. The national average diesel fuel cost per gallon for the three months ended March 31, 2021 was $2.91 as compared to $2.88 for the same period in 2020.

  At current consumption levels, we believe a twenty-cent per gallon change in the price of diesel fuel would change our fuel costs by approximately $25 million per year. Offsetting these changes in fuel expense would be changes in our fuel recovery fee charged to our customers. At current participation rates, a twenty-cent per gallon change in the price of diesel fuel would change our fuel recovery fee by approximately $25 million per year.
- Landfill operating costs decreased due to a decline in leachate treatment, transportation and disposal costs due in part to decreased rainfall in select geographic regions.
- Risk management expenses decreased during the three months ended March 31, 2021 primarily due to favorable actuarial development in our workers' compensation programs, partially offset by unfavorable actuarial development in our auto liability prior year programs.
- During the three months ended March 31, 2020, we recognized a favorable insurance recovery of $10.8 million related to our closed Bridgeton Landfill as a reduction of remediation expenses in our consolidated statement of income for the applicable period.

Depreciation, Amortization and Depletion of Property and Equipment

The following table summarizes depreciation, amortization and depletion of property and equipment for the three months ended March 31, 2021 and 2020 (in millions of dollars and as a percentage of revenue):

	Three Months Ended March 31,			
	2021		2020	
Depreciation and amortization of property and equipment	$ 177.7	6.8 %	$ 170.8	6.7 %
Landfill depletion and amortization	87.1	3.4	83.0	3.2
Depreciation, amortization and depletion expense	$ 264.8	10.2 %	$ 253.8	9.9 %

Depreciation and amortization of property and equipment increased for the three months ended March 31, 2021 primarily due to additional assets acquired with our acquisitions.

Landfill depletion and amortization expense increased primarily due to an unfavorable amortization adjustment related to the asset retirement obligation at one of our closed landfills which was recognized during the three months ended March 31, 2021.

Amortization of Other Intangible Assets

Our other intangible assets primarily relate to customer relationships and, to a lesser extent, non-compete agreements. Expenses for amortization of other intangible assets were $7.3 million, or 0.3% of revenue, for the three months ended March 31, 2021 compared to $5.3 million, or 0.2% of revenue, for the same respective period in 2020. Amortization expense increased due to additional assets acquired with our acquisitions.

Amortization of Other Assets

Our other assets primarily relate to the prepayment of fees and capitalized implementation costs associated with cloud-based hosting arrangements. Expenses for amortization of other assets were $10.0 million, or 0.4% of revenue, for the three months ended March 31, 2021, compared to $9.5 million, or 0.4% of revenue, for the same respective period in 2020.

Accretion Expense

Accretion expense was $20.5 million, or 0.8% of revenue, for the three months ended March 31, 2021, compared to $20.9 million, or 0.8% of revenue, for the same respective period in 2020. Accretion expense has remained relatively unchanged as our asset retirement obligations have remained relatively consistent period over period.

Selling, General and Administrative Expenses

Selling, general and administrative expenses include salaries, health and welfare benefits, and incentive compensation for corporate and field general management, field support functions, sales force, accounting and finance, legal, management information systems, and clerical and administrative departments. Other expenses include rent and office costs, fees for professional services provided by third parties, legal settlements, marketing, investor and community relations services, directors’ and officers’ insurance, general employee relocation, travel, entertainment and bank charges. Restructuring charges are excluded from selling, general and administrative expenses and are discussed separately.

The following table summarizes our selling, general and administrative expenses for the three months ended March 31, 2021 and 2020 (in millions of dollars and as a percentage of revenue):

	Three Months Ended March 31,			
	2021		2020	
Salaries and related benefits	$ 194.3	7.4 %	$ 191.3	7.5 %
Provision for doubtful accounts	4.3	0.2	4.9	0.2
Other	66.8	2.6	80.9	3.2
Total selling, general and administrative expenses	$ 265.4	10.2 %	$ 277.1	10.9 %

These cost categories may change from time to time and may not be comparable to similarly titled categories presented by other companies. As such, you should take care when comparing our selling, general and administrative expenses by cost component to those of other companies and of ours for prior periods.

The most significant items affecting our selling, general and administrative expenses during the three months ended March 31, 2021 and 2020 are summarized below:

- Salaries and related benefits increased in aggregate dollars primarily due to higher incentive pay and wages, benefits, and other payroll related items resulting from annual merit increases.
- Other selling, general and administrative expenses decreased for the three months ended March 31, 2021, primarily due to a decrease in consulting fees as well as travel and advertising costs as a result of the COVID-19 pandemic. These decreases were partially offset by a one-time favorable legal settlement recognized during the three months ended March 31, 2020, which did not recur in 2021.

In March 2021, Donald W. Slager, Chief Executive Officer, announced his retirement from Republic Services, Inc. effective June 25, 2021. As a result of his retirement, we expect to incur a charge of approximately $20 million during the second quarter of 2021 related to the accelerated vesting of his compensation awards.

Withdrawal Costs - Multiemployer Pension Funds

During the three months ended March 31, 2020, we recorded charges to earnings of $4.3 million for withdrawal events at multiemployer pension funds to which we contribute. As we obtain updated information regarding multiemployer pension funds, the factors used in deriving our estimated withdrawal liabilities will be subject to change, which may adversely impact our reserves for withdrawal costs.

Gain on Business Divestitures and Impairments, Net

We strive to have a number one or number two market position in each of the markets we serve, or have a clear path on how we will achieve a leading market position over time. Where we cannot establish a leading market position, or where operations are not generating acceptable returns, we may decide to divest certain assets and reallocate resources to other markets. Business divestitures could result in gains, losses or impairment charges that may be material to our results of operations in a given period.

During the three months ended March 31, 2021 and 2020, we recorded a net gain on business divestitures and impairments of $1.1 million and $3.9 million, respectively.

Restructuring Charges

In 2020, we incurred costs related to the redesign of certain back-office software systems, which continued into 2021. In addition, in July 2020, we eliminated certain back-office support positions in response to a decline in the underlying demand for services resulting from the COVID-19 pandemic. During the three months ended March 31, 2021 and 2020, we incurred restructuring charges of $2.8 million and $3.8 million, respectively. During the same periods, we paid $4.0 million and $3.8 million, respectively, related to these restructuring efforts.

Interest Expense

The following table provides the components of interest expense, including accretion of debt discounts and accretion of discounts primarily associated with environmental and risk insurance liabilities assumed in acquisitions, for the three months ended March 31, 2021 and 2020:

	Three Months Ended March 31,	
	2021	2020
Interest expense on debt	$ 62.9	$ 82.5
Non-cash interest	16.0	15.0
Less: capitalized interest	(0.5)	(0.8)
Total interest expense	$ 78.4	$ 96.7

Total interest expense for the three months ended March 31, 2021 decreased primarily due to lower interest rates on our floating and fixed rate debt. The decrease attributable to our fixed rate debt is primarily due to the issuance of $350.0 million of 0.875% senior notes and $750.0 million of 1.750% senior notes in November 2020, $650.0 million of 1.450% senior notes in August 2020, as well as the issuance of $600.0 million of 2.300% senior notes and $400.0 million of 3.050% senior notes in February 2020, the proceeds of which were used to repay outstanding senior notes with coupons ranging from 3.550% to 5.250%.

Cash paid for interest, excluding net swap settlements for our fixed-to-floating interest rate swaps, was $66.2 million and $78.1 million for the three months ended March 31, 2021 and 2020, respectively.

Income Taxes

Our effective tax rate, exclusive of non-controlling interests, for the three months ended March 31, 2021 and 2020 was 25.9% and 23.5%, respectively.

Cash paid for income taxes was a net refund of $0.4 million and a net payment of $1.4 million, respectively, for the three months ended March 31, 2021 and 2020.

For additional discussion and detail regarding our income taxes, see Note 8, *Income Taxes*, to our unaudited consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Reportable Segments

In December 2020, our senior management began evaluating, overseeing and managing the financial performance of our operations through three operating segments. Group 1 primarily consists of geographic areas located in the western United States, and Group 2 primarily consists of geographic areas located in the southeastern and mid-western United States, and the eastern seaboard of the United States. Our environmental solutions operating segment, which provides environmental solutions for daily operations of industrial, petrochemical and refining facilities, is aggregated with Corporate entities and other as it only represents approximately 1% of our consolidated revenue. Each of our operating segments provides integrated environmental services, including collection, transfer, recycling, and disposal.

Summarized financial information concerning our reportable segments for the three months ended March 31, 2021 and 2020 (in millions of dollars and as a percentage of revenue in the case of operating margin) follows:

	Net Revenue	Depreciation, Amortization, Depletion and Accretion Before Adjustments for Asset Retirement Obligations	Adjustments to Amortization Expense for Asset Retirement Obligations	Depreciation, Amortization, Depletion and Accretion	Gain on Business Divestitures and Impairments, Net	Operating Income (Loss)	Operating Margin
Three Months Ended March 31, 2021							
Group 1	$ 1,299.1	$ 133.1	$ (1.0)	$ 132.1	$ —	$ 351.5	27.1 %
Group 2	1,222.0	128.1	0.6	128.7	—	261.8	21.4 %
Corporate entities and other	75.3	37.6	4.2	41.8	(1.1)	(120.9)	—
Total	$ 2,596.4	$ 298.8	$ 3.8	$ 302.6	$ (1.1)	$ 492.4	19.0 %
Three Months Ended March 31, 2020							
Group 1	$ 1,254.6	$ 128.7	$ (0.2)	$ 128.5	$ —	$ 313.6	25.0 %
Group 2	1,208.1	125.3	(0.2)	125.1	—	229.3	19.0 %
Corporate entities and other	91.2	35.9	—	35.9	(3.9)	(109.8)	—
Total	$ 2,553.9	$ 289.9	$ (0.4)	$ 289.5	$ (3.9)	$ 433.1	17.0 %

Financial information for the three months ended March 31, 2020 reflects the transfer of our environmental solutions operating segment from Group 2 to Corporate entities and other. Corporate entities and other include legal, tax, treasury, information technology, risk management, human resources, closed landfills, environmental solutions, and other administrative functions. National Accounts revenue included in Corporate entities and other represents the portion of revenue generated from nationwide and regional contracts in markets outside our operating areas where the associated material handling is subcontracted to local operators. Consequently, substantially all of this revenue is offset with related subcontract costs, which are recorded in cost of operations.

Significant changes in the revenue and operating margins of our reportable segments comparing the three months ended March 31, 2021 and 2020 are discussed below.

Group 1

Revenue for the three months ended March 31, 2021 increased 3.5% due to an increase in average yield in all lines of business and an increase in volume in our transfer station line of business as well as an increase in solid and special waste volumes in our landfill line of business. These increases were partially offset by volume declines in our small- and large-container collection lines of business, a decline in construction and demolition volumes in our landfill line of business, and one less workday for the three months ended March 31, 2021 as compared to the same period in 2020.

Operating income in Group 1 increased from $313.6 million for the three months ended March 31, 2020, or a 25.0% operating income margin, to $351.5 million for the three months ended March 31, 2021, or a 27.1% operating income margin.

The following cost categories impacted operating income margin:

- Cost of operations favorably impacted operating income margin for the three months ended March 31, 2021, primarily due to a decrease in labor and related benefits and maintenance and repairs expenses as a result of decreased service levels attributable to the COVID-19 pandemic, decreased landfill operating costs, and one less workday as compared to the same period in 2020.
- Depreciation unfavorably impacted operating income margin for the three months ended March 31, 2021, primarily due to additional assets acquired with our acquisitions.

Group 2

Revenue for the three months ended March 31, 2021 increased 1.2%, due to an increase in average yield in all lines of business and volume increases in our transfer station line of business as well as an increase in municipal solid waste volumes in our landfill line of business. This increase was partially offset by volume declines in our collection lines of business and one less workday for the three months ended March 31, 2021 as compared to the same period in 2020.

Operating income in Group 2 increased from $229.3 million for the three months ended March 31, 2020, or a 19.0% operating income margin, to $261.8 million for the three months ended March 31, 2021, or a 21.4% operating income margin.

The following cost categories impacted operating income margin:

- Cost of operations favorably impacted operating income margin for the three months ended March 31, 2021, primarily due to a decrease in labor and related benefits, transfer and disposal costs, and maintenance and repairs expenses as a result of decreased service levels attributable to the COVID-19 pandemic, decreased landfill operating costs, and one less workday as compared to the same period in 2020.
- Depreciation unfavorably impacted operating income margin during the three months ended March 31, 2021, primarily due to additional assets acquired with our acquisitions.

Corporate Entities and Other

Operating loss in our Corporate entities and other segment increased from $109.8 million for the three months ended March 31, 2020 to $120.9 million for the three months ended March 31, 2021. The operating loss for the three months ended March 31, 2021 was unfavorably impacted by revenue declines related to our environmental solutions business, an unfavorable amortization adjustment related to the asset retirement obligation at one of our closed landfills, and favorable remediation adjustments recognized during the three months ended March 31, 2020, which did not recur in 2021, partially offset by net favorable actuarial developments recognized during the period.

Landfill and Environmental Matters

Available Airspace

As of March 31, 2021, we owned or operated 186 active solid waste landfills with total available disposal capacity estimated to be 5.0 billion in-place cubic yards. For these landfills, the following table reflects changes in capacity and remaining capacity, as measured in cubic yards of airspace:

	Balance as of December 31, 2020	New Expansions Undertaken	Landfills Acquired, Net of Divestitures	Permits Granted / New Sites, Net of Closures	Airspace Consumed	Changes in Engineering Estimates	Balance as of March 31, 2021
Cubic yards (in millions):							
Permitted airspace	4,792.5	—	—	32.6	(17.9)	1.2	4,808.4
Probable expansion airspace	196.4	15.0	—	(27.3)	—	—	184.1
Total cubic yards (in millions)	4,988.9	15.0	—	5.3	(17.9)	1.2	4,992.5
Number of sites:							
Permitted airspace	186	—	—	—			186
Probable expansion airspace	11	1	—	(1)			11

Total available disposal capacity represents the sum of estimated permitted airspace plus an estimate of probable expansion airspace. Engineers develop these estimates at least annually using information provided by annual aerial surveys. Before airspace included in an expansion area is determined to be probable expansion airspace and, therefore, included in our calculation of total available disposal capacity, it must meet all of our expansion criteria.

As of March 31, 2021, 11 of our landfills met all of our criteria for including their probable expansion airspace in their total available disposal capacity. At projected annual volumes, these landfills have an estimated remaining average site life of 36 years, including probable expansion airspace. The average estimated remaining life of all of our landfills is 63 years. We have other expansion opportunities that are not included in our total available airspace because they do not meet all of our criteria for treatment as probable expansion airspace.

Remediation and Other Charges for Landfill Matters

It is reasonably possible that we will need to adjust our accrued landfill and environmental liabilities to reflect the effects of new or additional information, to the extent that such information impacts the costs, timing or duration of the required actions. Future changes in our estimates of the costs, timing or duration of the required actions could have a material adverse effect on our consolidated financial position, results of operations and cash flows.

For a description of our significant remediation matters, see Note 6, *Landfill and Environmental Costs,* of the notes to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Property and Equipment

The following tables reflect the activity in our property and equipment accounts for the three months ended March 31, 2021:

	Gross Property and Equipment							
	Balance as of December 31, 2020	Capital Additions	Retirements	Acquisitions, Net of Divestitures	Non-cash Additions for Asset Retirement Obligations	Adjustments for Asset Retirement Obligations	Impairments, Transfers and Other Adjustments	Balance as of March 31, 2021
Land	$ 467.1	$ —	$ —	$ 0.3	$ —	$ —	$ 0.1	$ 467.5
Non-depletable landfill land	166.3	0.1	—	—	—	—	—	166.4
Landfill development costs	7,991.7	0.6	—	—	10.4	3.4	125.3	8,131.4
Vehicles and equipment	8,119.0	129.6	(60.1)	2.4	—	—	23.7	8,214.6
Buildings and improvements	1,402.5	2.1	(0.1)	1.2	0.4	—	11.9	1,418.0
Construction-in-progress - landfill	303.8	42.4	—	—	—	—	(126.0)	220.2
Construction-in-progress - other	107.4	27.8	—	—	—	—	(36.2)	99.0
Total	$ 18,557.8	$ 202.6	$ (60.2)	$ 3.9	$ 10.8	$ 3.4	$ (1.2)	$ 18,717.1

	Accumulated Depreciation, Amortization and Depletion						
	Balance as of December 31, 2020	Additions Charged to Expense	Retirements	Acquisitions, Net of Divestitures	Adjustments for Asset Retirement Obligations	Impairments, Transfers and Other Adjustments	Balance as of March 31, 2021
Landfill development costs	$ (4,249.5)	$ (83.2)	$ —	$ —	$ (3.8)	$ —	$ (4,336.5)
Vehicles and equipment	(4,953.4)	(161.5)	58.8	—	—	—	(5,056.1)
Buildings and improvements	(628.7)	(16.7)	0.1	—	—	—	(645.3)
Total	$ (9,831.6)	$ (261.4)	$ 58.9	$ —	$ (3.8)	$ —	$ (10,037.9)

Liquidity and Capital Resources

Cash and Cash Equivalents

The following is a summary of our cash and cash equivalents and restricted cash and marketable securities balances as of:

	March 31, 2021	December 31, 2020
Cash and cash equivalents	$ 23.2	$ 38.2
Restricted cash and marketable securities	134.6	149.1
Less: restricted marketable securities	(69.5)	(73.1)
Cash, cash equivalents, restricted cash and restricted cash equivalents	$ 88.3	$ 114.2

Our restricted cash and marketable securities include, among other things, restricted cash and marketable securities pledged to regulatory agencies and governmental entities as financial guarantees of our performance under certain collection, landfill and transfer station contracts and permits, and relating to our final capping, closure and post-closure obligations at our landfills as well as restricted cash and marketable securities related to our insurance obligations.

The following table summarizes our restricted cash and marketable securities:

	March 31, 2021	December 31, 2020
Capping, closure and post-closure obligations	$ 31.6	$ 31.5
Insurance	103.0	117.6
Total restricted cash and marketable securities	$ 134.6	$ 149.1

Intended Uses of Cash

We intend to use excess cash on hand and cash from operating activities to fund capital expenditures, acquisitions, dividend payments, share repurchases and debt repayments. Debt repayments may include purchases of our outstanding indebtedness in the secondary market or otherwise. We believe that our excess cash, cash from operating activities and our availability to draw on our credit facilities provide us with sufficient financial resources to meet our anticipated capital requirements and maturing obligations as they come due.

We may choose to voluntarily retire certain portions of our outstanding debt before their maturity dates using cash from operations or additional borrowings. We may also explore opportunities in the capital markets to fund redemptions should market conditions be favorable. Early extinguishment of debt will result in an impairment charge in the period in which the debt is repaid. The loss on early extinguishment of debt relates to premiums paid to effectuate the repurchase and the relative portion of unamortized note discounts and debt issue costs.

Summary of Cash Flow Activity

The major components of changes in cash flows are discussed in the following paragraphs. The following table summarizes our cash flow from operating activities, investing activities and financing activities for the three months ended March 31, 2021 and 2020:

	Three Months Ended March 31,	
	2021	2020
Cash provided by operating activities	$ 661.0	$ 595.8
Cash used in investing activities	$ (344.6)	$ (461.7)
Cash (used in) provided by financing activities	$ (342.3)	$ 31.9

Cash Flows Provided by Operating Activities

The most significant items affecting the comparison of our operating cash flows for the three months ended March 31, 2021 and 2020 are summarized below.

Changes in assets and liabilities, net of effects from business acquisitions and divestitures, decreased our cash flow from operations by $0.1 million during the three months ended March 31, 2021, compared to a decrease of $1.3 million during the same period in 2020, primarily as a result of the following:

- Our accounts receivable, exclusive of the change in allowance for doubtful accounts and customer credits, increased $8.9 million during the three months ended March 31, 2021 due to the timing of billings net of collections, compared to a $28.0 million decrease in the same period in 2020. As of March 31, 2021, our days sales outstanding were 38.4, or 25.8 days net of deferred revenue, compared to 38.6, or 26.4 days net of deferred revenue, as of December 31, 2020.
- Our prepaid expenses and other assets decreased $62.5 million during the three months ended March 31, 2021, compared to an $88.2 million decrease in the same period in 2020, primarily due to timing of our estimated tax payments. Cash paid for income taxes was a net refund of $0.4 million and a net payment of $1.4 million for the three months ended March 31, 2021 and 2020, respectively.
- Our accounts payable increased $27.6 million during the three months ended March 31, 2021, compared to a $37.2 million decrease in the same period in 2020, due to the timing of payments.
- Cash paid for capping, closure and post-closure obligations was $11.0 million during the three months ended March 31, 2021, compared to $8.7 million in the same period in 2020. The increase in cash paid for capping, closure, and post-closure obligations is primarily due to the timing of capping and post-closure payments at certain of our landfill sites.
- Cash paid for remediation obligations was $8.3 million lower during the three months ended March 31, 2021, compared to the same period in 2020, primarily due to $3.2 million of payments related to management and monitoring of the remediation area of our closed Bridgeton Landfill in Missouri during the three months ended March 31, 2021 as compared to $12.1 million of payments for the same period in 2020.

In addition, cash paid for interest, excluding net swap settlements for our fixed-to-floating interest rate swaps, was $66.2 million and $78.1 million for the three months ended March 31, 2021 and 2020, respectively.

We use cash flows from operations to fund capital expenditures, acquisitions, dividend payments, share repurchases and debt repayments.

Cash Flows Used in Investing Activities

The most significant items affecting the comparison of our cash flows used in investing activities for the three months ended March 31, 2021 and 2020 are summarized below:

- Capital expenditures during the three months ended March 31, 2021 were $331.0 million, compared with $373.1 million for the same period in 2020.
- During the three months ended March 31, 2021 and 2020, we paid $18.0 million and $61.0 million, respectively, for acquisitions and investments.

We intend to finance capital expenditures and acquisitions through cash on hand, restricted cash held for capital expenditures, cash flows from operations, our revolving credit facilities, and tax-exempt bonds and other financings. We expect to primarily use cash and borrowings under our revolving credit facilities to pay for future business acquisitions.

Cash Flows (Used in) Provided by Financing Activities

The most significant items affecting the comparison of our cash flows (used in) provided by financing activities for the three months ended March 31, 2021 and 2020 are summarized below:

- Net payments from notes payable and long-term debt and senior notes were $180.1 million during the three months ended March 31, 2021, compared to net proceeds of $271.8 million in the same period in 2020.
- During the three months ended March 31, 2021, we repurchased 0.1 million shares of our stock for $12.7 million compared to repurchases of 1.2 million shares for $98.8 million during the same period in 2020.
- Dividends paid were $135.5 million and $129.2 million during the three months ended March 31, 2021 and 2020, respectively.

Financial Condition

Debt Obligations

As of March 31, 2021, we had $168.7 million of principal debt maturing within the next 12 months, which includes certain variable rate tax-exempt financings, finance lease obligations and debentures. All of our tax-exempt financings are remarketed either quarterly or semiannually by remarketing agents to effectively maintain a variable yield. The holders of the bonds can put them back to the remarketing agents at the end of each interest period. If the remarketing agent is unable to remarket our bonds, the remarketing agent can put the bonds to us. In the event of a failed remarketing, we currently have availability under our $2.25 billion unsecured revolving credit facility to fund these bonds until they are remarketed successfully. Accordingly, we have classified these borrowings as long-term in our consolidated balance sheet as of March 31, 2021.

An extended period of economic disruption associated with the COVID-19 pandemic could further disrupt the global supply chain, negatively impact demand for our services, and disrupt financial markets. These effects could materially and adversely affect our business and financial condition, including our access to sources of liquidity. We will continue to monitor the evolving COVID-19 pandemic along with the effect on our business and access to capital markets. Refer to Part I, Item 1A – Risk Factors in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020, for a discussion of certain risk factors related to this pandemic.

For further discussion of the components of our overall debt, see Note 7, *Debt*, of the notes to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Credit Facilities

The 364-Day Credit Facility

In August 2020, we entered into a $1.0 billion 364-day unsecured revolving credit facility (the 364-Day Credit Facility), which matures in August 2021. At our option, borrowings under the 364-Day Credit Facility bear interest at a Base Rate, or a Eurodollar Rate, plus an applicable margin based on our Debt Ratings (all as defined in the 364-Day Credit Facility agreement).

The 364-Day Credit Facility is subject to facility fees based on applicable rates defined in the 364-Day Credit Facility agreement and the aggregate commitment, regardless of usage. Availability under our 364-Day Credit Facility totaled $1.0 billion as of March 31, 2021 and December 31, 2020. The 364-Day Credit Facility can be used for working capital, capital expenditures, acquisitions, and other general corporate purposes. The 364-Day Credit Facility agreement requires us to comply with financial and other covenants, which are consistent with the financial and other covenants included in our Credit Facility. We may pay dividends and repurchase common stock if we are in compliance with these covenants.

As of March 31, 2021 and December 31, 2020, we had no borrowings outstanding under our 364-Day Credit Facility.

The Credit Facility

In 2018, we entered into a $2.25 billion unsecured revolving credit facility (as amended, the Credit Facility), which matures in June 2023. As permitted by the Credit Facility, we have the right to request two one-year extensions of the maturity date, but none of the lenders are committed to participate in such extension. The Credit Facility also includes a feature that allows us to increase availability, at our option, by an aggregate amount of up to $1.0 billion through increased commitments from existing lenders or the addition of new lenders. At our option, borrowings under the Credit Facility bear interest at a Base Rate, or a Eurodollar Rate, plus an applicable margin based on our Debt Ratings (all as defined in the Credit Facility agreement).

The Credit Facility is subject to facility fees based on applicable rates defined in the Credit Facility agreement and the aggregate commitment, regardless of usage. Availability under our Credit Facility totaled $1,873.0 million and $1,671.8 million as of March 31, 2021 and December 31, 2020, respectively. The Credit Facility can be used for working capital, capital expenditures, acquisitions, letters of credit and other general corporate purposes. The Credit Facility agreement requires us to comply with financial and other covenants. We may pay dividends and repurchase common stock if we are in compliance with these covenants.

As of March 31, 2021, we had no borrowings under our Credit Facility, and as of December 31, 2020, we had $186.0 million of borrowings under our Credit Facility. We had $361.3 million and $376.5 million of letters of credit outstanding under our Credit Facility as of March 31, 2021 and December 31, 2020, respectively.

Uncommitted Credit Facility

We also have an Uncommitted Credit Facility, which bears interest at LIBOR or a Cost of Funds rate (both as defined in the Uncommitted Credit Facility agreement), plus an applicable margin. We can use borrowings under the Uncommitted Credit Facility for working capital and other general corporate purposes. The agreement governing our Uncommitted Credit Facility requires us to comply with certain covenants. The Uncommitted Credit Facility may be terminated by either party at any time. As of March 31, 2021, we had $12.6 million outstanding under our Uncommitted Credit Facility. As of December 31, 2020, we had no borrowings outstanding under our Uncommitted Credit Facility.

Financial and Other Covenants

The Credit Facility and 364-Day Credit Facility (collectively, the Credit Facilities) require us to comply with financial and other covenants. To the extent we are not in compliance with these covenants, we cannot pay dividends or repurchase common stock. Compliance with covenants also is a condition for any incremental borrowings under the Credit Facilities, and failure to meet these covenants would enable the lenders to require repayment of any outstanding loans (which would adversely affect our liquidity). The 364-Day Credit Facility and the Credit Facility, as amended, provide that our total debt to EBITDA ratio may not exceed 3.75 to 1.00 as of the last day of any fiscal quarter. In the case of an "elevated ratio period", which may be elected by us if one or more acquisitions during a fiscal quarter involve aggregate consideration in excess of $200.0 million (the Trigger Quarter), the total debt to EBITDA ratio may not exceed 4.25 to 1.00 during the Trigger Quarter and for the three fiscal quarters thereafter. The 364-Day Credit Facility and the Credit Facility, as amended, also provide that there may not be more than two elevated ratio periods during the respective terms of the Credit Facility and 364-Day Credit Facility agreements. As of March 31, 2021, our total debt to EBITDA ratio was 2.94 compared to the 3.75 maximum allowed by the covenants. As of March 31, 2021, we were in compliance with the covenants under our Credit Facilities, and we expect to be in compliance throughout the remainder of 2021.

EBITDA, which is a non-U.S. GAAP measure, is calculated as defined in our Credit Facility and 364-Day Credit Facility agreements. In this context, EBITDA is used solely to provide information regarding the extent to which we are in compliance with debt covenants and is not comparable to EBITDA used by other companies or used by us for other purposes.

Failure to comply with the financial and other covenants under the Credit Facilities, as well as the occurrence of certain material adverse events, would constitute defaults and would allow the lenders under the Credit Facilities to accelerate the maturity of all indebtedness under the Credit Facilities agreements. This could have an adverse effect on the availability of financial assurances. In addition, maturity acceleration on the Credit Facilities constitutes an event of default under our other debt instruments, including our senior notes, and, therefore, our senior notes would also be subject to acceleration of maturity. If such acceleration were to occur, we would not have sufficient liquidity available to repay the indebtedness. We would likely have to seek an amendment under the Credit Facilities for relief from the financial covenant or repay the debt with proceeds from the issuance of new debt or equity, or asset sales, if necessary. We may be unable to amend the Credit Facilities or raise sufficient capital to repay such obligations in the event the maturity is accelerated.

Senior Notes and Debentures

In November 2020, we issued $350.0 million of 0.875% senior notes due November 2025 (the 0.875% Notes) and $750.0 million of 1.750% senior notes due February 2032 (the 1.750% Notes). We used the net proceeds from the 0.875% Notes and 1.750% Notes to redeem all $850.0 million of the outstanding 3.550% senior notes due June 2022 and $250.0 million of the $550.0 million outstanding 4.750% senior notes due May 2023 (the 4.750% Notes).

In August 2020, we issued $650.0 million of 1.450% senior notes due February 2031 (the 1.450% Notes). We used the net proceeds to redeem all $600.0 million of the outstanding 5.250% senior notes due November 2021 plus a make-whole premium of $34.0 million. The remaining proceeds were used for general corporate purposes.

In February 2020, we issued $600.0 million of 2.300% senior notes due March 2030 (the 2.300% Notes) and $400.0 million of 3.050% senior notes due March 2050 (the 3.050% Notes). We used the net proceeds from the 2.300% Notes and 3.050% Notes to repay $850.0 million of 5.000% senior notes that matured in March 2020. The remaining proceeds were used to repay amounts outstanding under our unsecured credit facilities as well as for general corporate purposes.

Our senior notes and debentures are general unsecured obligations. Interest is payable semi-annually.

Derivative Instruments and Hedging Relationships

Our ability to obtain financing through the capital markets is a key component of our financial strategy. Historically, we have managed risk associated with executing this strategy, particularly as it relates to fluctuations in interest rates, by using a combination of fixed and floating rate debt. From time to time, we also have entered into interest rate swap and lock agreements to manage risk associated with interest rates, either to effectively convert specific fixed rate debt to a floating rate (fair value hedges), or to lock interest rates in anticipation of future debt issuances (cash flow hedges).

Additionally, we amended certain interest rate lock agreements, extending the mandatory maturity date and dedesignated them as cash flow hedges (the Extended Interest Rate Locks). In addition, we entered into offsetting interest rate swaps to offset future exposures to fair value fluctuations of the Extended Interest Rate Locks.

For a description of our derivative contracts and hedge accounting, see Note 7, *Debt*, to our unaudited consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Tax-Exempt Financings

As of March 31, 2021 and December 31, 2020, we had $1,104.9 million and $1,104.7 million of certain variable rate tax-exempt financings outstanding, respectively, with maturities ranging from 2021 to 2050. During the second quarter of 2020, we issued $60.0 million of tax-exempt financings.

Finance Leases

We had finance lease liabilities of $207.4 million and $206.5 million as of March 31, 2021 and December 31, 2020, respectively, with maturities ranging from 2021 to 2063.

Credit Ratings

Our continued access to the debt capital markets and to new financing facilities, as well as our borrowing costs, depend on multiple factors, including market conditions, our operating performance and maintaining strong credit ratings. As of March 31, 2021, our credit ratings were BBB+, Baa2 and BBB by Standard & Poor's Ratings Services, Moody's Investors Service and Fitch Ratings, Inc., respectively. If our credit ratings were downgraded, especially any downgrade to below investment grade, our ability to access the debt markets with the same flexibility that we have experienced historically, our cost of funds and other terms for new debt issuances, could be adversely impacted.

Off-Balance Sheet Arrangements

We have no off-balance sheet debt or similar obligations, other than short-term operating leases and financial assurances, which are not classified as debt. We have no transactions or obligations with related parties that are not disclosed, consolidated into or reflected in our reported financial position or results of operations. We have not guaranteed any third-party debt.

Seasonality and Severe Weather

Our operations can be adversely affected by periods of inclement or severe weather, which could increase the volume of waste collected under our existing contracts (without corresponding compensation), delay the collection and disposal of waste, reduce the volume of waste delivered to our disposal sites, or delay the construction or expansion of our landfills and other facilities. Our operations also can be favorably affected by severe weather, which could increase the volume of waste in situations where we are able to charge for our additional services.

Contingencies

For a description of our commitments and contingencies, see Note 6, *Landfill and Environmental Costs*, Note 8, *Income Taxes*, and Note 14, *Commitments and Contingencies*, to our unaudited consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Critical Accounting Judgments and Estimates

We identified and discussed our critical accounting judgments and estimates in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020. Although we believe our estimates and judgments are reasonable, they are based upon information available at the time the judgment or estimate is made. Actual results may differ significantly from estimates under different assumptions or conditions.

New Accounting Pronouncements

For a description of new accounting standards that may affect us, see Note 1, *Basis of Presentation*, to our unaudited consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Fuel Price Risk

Fuel costs represent a significant operating expense. When economically practical, we may enter into new fuel hedges, renew contracts, or engage in other strategies to mitigate market risk. As of March 31, 2021, we had no fuel hedges in place. While we charge fuel recovery fees to a majority of our customers, we are unable to charge such fees to all customers.

At current consumption levels, we believe a twenty-cent per gallon change in the price of diesel fuel would change our fuel costs by approximately $25 million per year. Offsetting these changes in fuel expense would result in changes in our fuel recovery fee charged to our customers. At current participation rates, we believe a twenty-cent per gallon change in the price of diesel fuel would change our fuel recovery fee by approximately $25 million per year.

Our operations also require the use of certain petrochemical-based products (such as liners at our landfills) the cost of which may vary with the price of petrochemicals. An increase in the price of petrochemicals could increase the cost of those products, which would increase our operating and capital costs. We also are susceptible to increases in fuel recovery fees from our vendors.

Our fuel costs were $78.9 million during the three months ended March 31, 2021, or 3.0% of revenue, compared to $79.6 million, or 3.1% of revenue, during the comparable period in 2020.

Commodities Price Risk

We market recovered materials such as old corrugated containers and old newsprint from our recycling processing centers. Changes in market supply and demand for recycled commodities causes volatility in commodity prices. In prior periods, we have entered into derivative instruments such as swaps and costless collars designated as cash flow hedges to manage our exposure to changes in prices of these commodities. As of March 31, 2021, we had no recycling commodity hedges in place.

At current volumes and mix of materials, we believe a $10 per ton change in the price of recycled commodities would change both annual revenue and operating income by approximately $12 million.

Revenue from recycling processing and commodity sales during the three months ended March 31, 2021 and 2020 was $87.6 million and $67.8 million, respectively.

Interest Rate Risk

We are subject to interest rate risk on our variable rate long-term debt. Additionally, we enter into various interest rate swap agreements with the goal of reducing overall borrowing costs and increasing our floating interest rate exposure, as well as interest rate locks to manage exposure to fluctuations in anticipation of future debt issuances. Our interest rate swap and lock contracts have been authorized pursuant to our policies and procedures. We do not use financial instruments for trading purposes and are not a party to any leveraged derivatives.

As of March 31, 2021, we had $1,123.8 million of floating rate debt and $300.0 million of floating interest rate swap contracts. If interest rates increased or decreased by 100 basis points on our variable rate debt, annualized interest expense and net cash payments for interest would increase or decrease by approximately $14 million. This analysis does not reflect the effect that interest rates would have on other items, such as new borrowings and the impact on the economy. See Note 7, *Debt*, of the notes to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q for further information regarding how we manage interest rate risk.

ITEM 4. CONTROLS AND PROCEDURES.

Disclosure Controls and Procedures

We carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e), and 15d-15(e)) as of the end of the period covered by this Form 10-Q. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this Form 10-Q.

Changes in Internal Control Over Financial Reporting

Based on an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, there has been no change in our internal control over financial reporting during the period covered by this Form 10-Q identified in connection with that evaluation, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

In December 2020, we acquired all of the issued and outstanding equity interests of Randy's Sanitation, LLC and Randy's Rentals, LLC. Additionally, we acquired certain assets and assumed certain liabilities from Gallegos Sanitation, Inc. and related entities as well as Eagle Waste & Recycling, Inc. and related entities. As permitted by the SEC Staff interpretive guidance for newly acquired businesses, management's assessment of our internal control over financial reporting as of March 31, 2021 did not include an assessment of internal control over financial reporting as it relates to these acquisitions. We will continue the process of implementing internal control over financial reporting for these acquired businesses. As of March 31, 2021, these businesses contributed approximately 1% of revenue to our unaudited consolidated financial statements for the three months ended March 31, 2021.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

General Legal Proceedings

We are subject to extensive and evolving laws and regulations and have implemented safeguards to respond to regulatory requirements. In the normal course of our business, we become involved in legal proceedings. Some may result in fines, penalties or judgments against us, or settlements, which may impact earnings and cash flows for a particular period. Although we cannot predict the ultimate outcome of any legal matter with certainty, we do not believe the outcome of any of our pending legal proceedings will have a material adverse impact on our consolidated financial position, results of operations or cash flows.

As used herein, the term *legal proceedings* refers to litigation and similar claims against us and our subsidiaries, excluding: (1) ordinary course accidents, general commercial liability and workers' compensation claims, which are covered by insurance programs, subject to customary deductibles, and which, together with self-insured employee health care costs, are discussed in Note 5, *Other Liabilities*, to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q; and (2) environmental remediation liabilities, which are discussed in Note 6, *Landfill and Environmental Costs*, to our unaudited consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

We accrue for legal proceedings when losses become probable and reasonably estimable. We recorded an aggregate accrual of approximately $28 million relating to our outstanding legal proceedings as of March 31, 2021. As of the end of each applicable reporting period, we review each of our legal proceedings and, where it is probable that a liability has been incurred, we accrue for all probable and reasonably estimable losses. Where we are able to reasonably estimate a range of losses we may incur with respect to such a matter, we record an accrual for the amount within the range that constitutes our best estimate. If we are able to reasonably estimate a range but no amount within the range appears to be a better estimate than any other, we use the amount that is the low end of such range. If we had used the high ends of such ranges, our aggregate potential liability would be approximately $9 million higher than the amount recorded as of March 31, 2021.

Legal Proceedings over Certain Environmental Matters Involving Governmental Authorities with Possible Sanctions of $1,000,000 or More

Item 103 of the SEC's Regulation S-K requires disclosure of certain environmental matters when a governmental authority is a party to the proceedings and the proceedings involve potential monetary sanctions unless we reasonably believe the monetary sanctions will not equal or exceed a threshold which we determine is reasonably designed to result in disclosure of any such proceeding that is material to our business or financial condition. We have determined such threshold to be $1,000,000. We are disclosing the following matters in accordance with that requirement:

Pine Avenue Landfill Matter

On December 20, 2016, the EPA issued a Finding of Violation (FOV) to Allied Waste Niagara Falls Landfill, LLC (Allied-Niagara). The FOV alleges violations of the Clean Air Act and associated regulations relating to operation of Allied-Niagara’s Pine Avenue Landfill in Niagara County, New York. On October 16, 2017, Allied-Niagara received a civil penalty demand from the EPA. The demand proposes a penalty of $0.6 million or $2.5 million, depending on the results of requested sampling analysis at the site. Allied-Niagara is negotiating a resolution to the FOV, including the amount of the penalty.

ITEM 1A. RISK FACTORS.

Our material risk factors are disclosed in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2020. There have been no material changes during the three months ended March 31, 2021 from or updates to the risk factors discussed in Part I, Item 1A, Risk Factors, of our 2020 Annual Report on Form 10-K.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

Issuer Purchases of Equity Securities

The following table provides information relating to our purchases of shares of our common stock during the three months ended March 31, 2021:

	Total Number of Shares Purchased (a)	Average Price Paid per Share (a)	Total Number of Shares Purchased as Part of Publicly Announced Program (b)	Dollar Value of Shares that May Yet Be Purchased Under the Program (c)
January 1 - 31	—	$ —	—	$ 2,000,000,000
February 1 - 28	109,337	$ 89.54	109,337	$ 1,990,209,774
March 1 - 31	32,100	$ 89.95	32,100	$ 1,987,322,434
	141,437		141,437	

a. In October 2020, our Board of Directors approved a $2.0 billion share repurchase authorization effective starting January 1, 2021 and extending through December 31, 2023. Share repurchases under the program may be made through open market purchases or privately negotiated transactions in accordance with applicable federal securities laws. While the Board of Directors has approved the program, the timing of any purchases, the prices and the number of shares of common stock to be purchased will be determined by our management, at its discretion, and will depend upon market conditions and other factors. The share repurchase program may be extended, suspended or discontinued at any time. As of March 31, 2021, no repurchased shares were pending settlement.

b. The total number of shares purchased as part of the publicly announced program were all purchased pursuant to the October 2020 authorization.

c. Shares that may be purchased under the program exclude shares of common stock that may be surrendered to satisfy statutory minimum tax withholding obligations in connection with the vesting of restricted stock units and performance stock units issued to employees.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

None.

ITEM 4. MINE SAFETY DISCLOSURES.

None.

ITEM 5. OTHER INFORMATION.

None.

ITEM 6. EXHIBITS.

Exhibit Number	Description of Exhibit
10.1+*	Offer letter, dated March 26, 2021, by and between Jon Vander Ark and Republic Services, Inc.
10.2+*	Non-Competition, Non-Solicitation, Confidentiality, and Arbitration Agreement, effective June 25, 2021, by and between Jon Vander Ark and Republic Services, Inc.
10.3+*	Transition Agreement, effective March 26, 2021, by and between Donald W. Slager and Republic Services, Inc.
31.1*	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer.
31.2*	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer.
32.1**	Section 1350 Certification of Chief Executive Officer.
32.2**	Section 1350 Certification of Chief Financial Officer.
101.INS*	XBRL Instance Document. - 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.
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* Filed herewith.
** This exhibit is being furnished rather than filed, and shall not be deemed incorporated by reference into any filing, in accordance with Item 601 of Regulation S-K.
\+ Indicates a management or compensatory plan or arrangement

SIGNATURES

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

		REPUBLIC SERVICES, INC.
Date: May 5, 2021	By:	/s/ BRIAN DELGHIACCIO
		Brian DelGhiaccio
		Executive Vice President, Chief Financial Officer (Principal Financial Officer)
Date: May 5, 2021	By:	/s/ BRIAN A. GOEBEL
		Brian A. Goebel
		Vice President and Chief Accounting Officer (Principal Accounting Officer)

March 26, 2021

Mr. Jon Vander Ark
Republic Services, Inc.
18500 N. Allied Way
Phoenix, AZ 85054

Dear Jon,

Congratulations! We are very pleased to inform you of your election to the position of Chief Executive Officer of Republic Services, Inc. (“Republic” or “Company”). Your election will be effective June 25, 2021 (“Effective Date”), at which point your employment will be subject to the terms and conditions set forth in this offer letter and governed by Republic’s Code of Business Ethics and Conduct and the policies of the Company, as may be amended from time to time.

You will retain the title of President, though the Board may, in its discretion, designate someone other than you to serve as President, reporting to you. In addition, as of the Effective Date, you will be elected as a member of the Board.

As Chief Executive Officer and President, you will work full time and perform your duties honestly, diligently, in good faith, and in the best interests of Republic. You also will use your best efforts to promote the interests of Republic.

This letter highlights the basic components of your compensation and benefits. It is not intended to be a comprehensive description of all benefits available to you or to provide the details of the plans that govern the administration of compensation, equity, and benefits, as our offerings change periodically. Your compensation and benefits will be established by the Management Development & Compensation Committee (“MD&C Committee”) and are typically reviewed annually. Compensation will be established based on a number of factors including but not limited to: 1) Republic’s financial and operating performance and the Company’s overall performance against its strategy and agreed priorities; 2) your individual performance as CEO; 3) good compensation governance practices for a large public company; 4) CEO compensation market factors impacting compensation for CEOs in similar scoped positions and with similar tenure; 5) the applicable terms of the Republic benefit and compensation plans you participate in unless explicitly agreed and formally approved by MD&C Committee; and 6) other factors as the Board or the MD&C Committee feel appropriate.

Beginning on the Effective Date, your annualized run rate compensation as CEO will be $7,015,000 at target, comprised of the following:

Base Salary: As of the Effective Date, your annual rate of Base Salary will be $1,000,000 for 2021, less applicable deductions and withholdings. Thereafter, the MD&C Committee will determine and set your annual compensation as described here and below.

Annual Cash Incentive: You will continue to be eligible to participate in the Annual Cash Incentive award provisions of Republic’s Executive Incentive Plan (“EIP”), or any successor or similar plan maintained by Republic for the benefit of executive officers, subject to the terms and conditions of such plans and at the discretion of and subject to approval by the MD&C Committee. Your award target for the 2021 Annual Cash Incentive has been set by the MD&C Committee to be 135% of your post-Effective Date Base Salary. The calculation of your 2021 Annual Cash Incentive will be prorated so that your annual target in effect before the Effective Date will be applied to your base salary before the Effective Date, and your annual target determined as of the Effective Date will be applied to your Base Salary (as set forth above) on and after the Effective Date.

Equity-Based Awards: You will continue to be eligible to participate in Republic’s 2021 Stock Incentive Plan (“Stock Plan”), or any successor or similar plan maintained by Republic for the benefit of executive officers, subject to the terms and conditions of such plans and the applicable award agreements. All awards under the Stock Plan are at the discretion of and subject to approval by the M&DC Committee or any authorized designee of the MD&C Committee.

The MD&C Committee has approved, under the Long-Term Incentive award provisions of the EIP, (1) a Restricted Stock Unit (“RSU”) award with a grant date fair value of approximately $400,000 and (2) a Performance Unit award for the three-year period performance cycle (2021-2023) with a grant date fair market value of approximately $850,000. This is in addition to the $3,415,000 award you already received in your role as President for 2021. Thereafter, the MD&C Committee will determine and approve your future Long-Term incentive as a component of your overall compensation.

All RSU grants in 2021 will vest in 25% increments on each of the first four (4) anniversaries of the grant date and are governed by the provisions of the Stock Plan and applicable award agreement.

Stock Ownership Guidelines: As Chief Executive Officer and President, you are expected to obtain within five (5) years from the Effective Date and thereafter maintain ownership of Republic common stock having the minimum value equal to five (5) times Base Salary or such other amount as set from time to time by the Board. As a courtesy, you should notify the Board Chairman and MD&C Committee Chair any time you sell Republic equity.

Deferred Compensation Plan: You will continue to be eligible to participate in Republic's Deferred Compensation Plan ("DCP"), including, without limitation, eligibility to receive any discretionary contribution that Republic elects to make to the DCP on your behalf. For 2022, it is anticipated that the Committee will approve a discretionary contribution to the DCP on your behalf in the amount of $100,000.

Paid Time Off: Paid Time Off will continue to be accrued and used in accordance with Republic's PTO policy applicable to similarly-situated employees. You will not be entitled to a payout of accrued but unused PTO when your employment ends for any reason (unless required by law).

Benefits: You will continue to be eligible to participate in all of Republic's benefit plans for similarly-situated employees. Unless otherwise specified in this letter, your eligibility for any benefits will be in accordance with Republic's then-current plans, policies, and programs for similarly-situated employees.

Non-Business Use of Corporate Aircraft: It is the intention of the Board that you will have access and use of the Corporate Aircraft as set forth in Republic's Corporate Aircraft Policy AIR-101, as may be amended from time to time, subject to a limit on your non-business use of the Corporate Aircraft of 125 hours per year. Any non-business use above the limit would require advanced approval by the Chair of the MD&C Committee or the Chair of the Board.

Executive Separation Policy: While we hope that you will continue to have a long, successful and rewarding career with Republic, this offer is for "at will" employment, meaning that either you or Republic may terminate your employment at any time and for any reason. Should your employment with Republic terminate at any time while you are employed in the position of Chief Executive Officer and President, your eligibility for separation benefits will be governed by Republic's then applicable Executive Separation Policy, except as provided below upon a termination of your employment by Republic without cause. For termination without cause, Republic will provide you with an amount equal to two (2) years of your then-current base salary, plus two (2) times your target annual bonus, paid in equal bi-weekly installments over a twenty-four (24) month period (and not the salary and pro-rated annual bonus referenced in the Executive Separation Policy).

Indemnification: You will be indemnified during your employment and after the end of your employment in accordance with the provisions of Republic's Certificate of Incorporation and Bylaws and the Delaware General Corporation Law.

<u>Other Terms and Conditions</u>

As a condition of your employment as Chief Executive Officer and President, you are required to sign a **Non-Competition, Non-Solicitation, Confidentiality and Arbitration Agreement**, which is enclosed with this letter.

Jon, we are excited to have you assume the position of Chief Executive Officer and look forward to working with you in your new role. Please indicate your acceptance of this offer by countersigning this letter and returning the original to Catharine Ellingsen. As always, please contact me if you have questions.

Sincerely,

/s/ Mauel Kadre	/s/ Michael Larson	/s/ Thomas W. Handley
Manuel Kadre	Michael Larson	Thomas W. Handley
Chairman of the Board	Chairman, Nominating & Governance Committee	Chairman, Management Development & Compensation Committee

/s/ Jon Vander Ark	March 26, 2021
Jon Vander Ark	Date

NON-COMPETITION, NON-SOLICITATION, CONFIDENTIALITY, AND ARBITRATION AGREEMENT

Republic Services, Inc. ("Company"), for the benefit of the Company and its Affiliates (defined below), and Jon Vander Ark, Employee ID No. 719051583 ("Executive") enter into this Non-Competition, Non-Solicitation, and Confidentiality Agreement ("Agreement"), effective June 25, 2021 ("Effective Date"). The Company and Executive are collectively referred to as the "Parties" in this Agreement. The use of the term "Executive" herein is a general reference only and shall not be construed to provide Executive any rights or status as an employee that the individual would not otherwise have absent this Agreement. The Parties agree as follows:

1. **Position of Trust and Confidence.** In reliance upon Executive's promises in this Agreement, the Company agrees that Executive shall be provided employment with the Company in a position of special trust and confidence that involves access to the Company's Confidential Information (defined below) and relationships that would give Executive an unfair competitive advantage if it were not for Executive's agreement to comply with the terms of this Agreement. Executive accepts all of the terms and conditions contained in this Agreement in exchange for the Company's agreement to provide Executive with: the above-described employment, access to the Company's Confidential Information, eligibility to participate in the Company's Executive Separation Policy (or any successor or similar policy maintained by the Company for the benefit of similarly situated employees), and/or the Company's remaining covenants in this Agreement. Executive stipulates that each of the foregoing items is independently sufficient consideration to support this Agreement standing alone.

2. **General Duties.** Executive acknowledges that, due to the nature of Executive's job responsibilities, Executive will be entrusted with significant responsibility for managing, using and otherwise handling Confidential Information and with significant responsibility for managing aspects of the business of the Company and its Affiliates. Accordingly, Executive owes a fiduciary duty of loyalty, fidelity and allegiance to always act in the best interests of the Company and its Affiliates, and to refrain from doing or saying anything to a third party or subordinate that Executive knows, or through the exercise of reasonable care should know, would cause injury to the Company or its Affiliates; provided, however, that the foregoing does not prohibit any conduct that is protected under Section 17 (Protected Conduct). As used in this Agreement, the property and interests of the Company referred to in this Agreement are understood to include the property and interests of the Company's Affiliates that Executive has involvement with or access to Confidential Information about, in all possible respects (such as, but not limited to, the Affiliates' Confidential Information, Intellectual Property, customer relationships, employee relationships, and Facilities), irrespective of whether the Affiliates are expressly referred to in the definition, restriction or other provision at issue.

3. **Confidentiality, Intellectual Property Assignment, and Company Property Obligations.**

    a. For purposes of this Agreement, "Confidential Information" means information and compilations of information, in any form (tangible or intangible), related to the Company or an Affiliate that Executive acquires or gains access to as a result of Executive's employment, if: (a) the Company has not authorized public disclosure of the item, and (b) it is not readily available through proper means to the public or others who are not obligated to keep it confidential and may lawfully use it to the Company's disadvantage; provided, however, that items of information acquired by Executive prior to and separate from Executive's association with the Company are not included. The Company's Confidential Information includes, but is not limited to, non-public records and information maintained internally by the Company or its Affiliates of the following nature: customer lists and private agreements; customer service information; names of customer contacts and the identities of decision-makers; lists, names, analysis and other identifying information regarding specific customer prospects and opportunities; marketing plans and techniques; market planning; development plans; formulas; price data; cost data; price and fee amounts; pricing and billing policies; quoting procedures; forecasts, forecast assumptions and volumes; information regarding the Company's actual or potential customers, suppliers or other vendors; information about the Company's routes, territories or target markets; the Company's internal financial information, including purchasing, internal cost information, information regarding revenue and growth, and information about the profitability of particular operations; internal sales, service and operational manuals, policies and procedures; information regarding the manner and methods of conducting the Company's business; information about the Company's future plans, potential acquisition, divestiture and other strategies; information about the Company's landfill development plans, landfill capacities, special projects and the status of any permitting process or investigation; information the Company is obligated to keep as confidential; and information that would qualify as a trade secret. Private disclosure of Confidential Information to another party by the Company or its Affiliates for business purposes will not cause it to lose its protected status under this Agreement, and Confidential Information in the form of a confidential compilation created or customized by the Company or its Affiliates will remain protected because of the compilation's unique and special value as a compilation even though individual items of information in it may not otherwise qualify as confidential.

b. As a direct consequence of Executive's access to Confidential Information, Executive agrees to the following restrictions and further agrees that such restrictions are reasonable:

i. For the period of time that the information qualifies as Confidential Information under this Agreement, Executive will take reasonable measures to preserve the confidentiality of the information and comply with Company policies regarding confidentiality, and shall not engage in any use, copying, transfer, sale or disclosure of Confidential Information that is not authorized as part of Executive's job duties for the Company, without first obtaining the written consent of a duly authorized officer of the Company. The purpose of the foregoing restriction is the protection of the Company's Confidential Information, and it shall not be construed or applied broadly as a general restraint of trade or covenant not to compete. The foregoing supplements, and shall not be construed to reduce or eliminate, any rights and remedies the Company would have absent this Agreement with respect to the protection of its trade secrets under applicable law.

ii. During Executive's employment with the Company, Executive agrees not to use or disclose any previously obtained trade secret, proprietary or confidential information that Executive received from a prior employer or another third party, if Executive has any such information.

iii. If Executive is served with a subpoena, court order, or similar legal document requiring the disclosure of Confidential Information, Executive will provide the Company as much notice as is possible (presumably seven (7) business days or more) through written notification to the Chief Legal Officer, Republic Services, Inc., at the then-current Corporate address, so that the Company may take permissible steps to protect the Confidential Information. This notice must be provided unless such notice is prohibited by law or court order; provided, however, that nothing herein prohibits conduct that is protected under Section 17 (Protected Conduct).

c. Executive will provide the Company with prompt written notice of Intellectual Property conceived, created or developed during employment with the Company. "Intellectual Property" refers to any and all inventions, patents, business methods or processes, designs, discoveries, innovations, ideas, know-how, improvements, trademarks, works of authorship, source code, computer programs, mask works, domain names, writings, drawings, and designs, and all other forms of intellectual property (or proprietary works) that can be owned or subject to legal control, whether subject to copyright registration or not, whether patentable or not, whether reduced to tangible form or not, and whether made by Executive alone or jointly with others. Executive agrees to and does hereby fully and finally grant and assign to the Company (or its designee) all of Executive's rights, title and interest, present and future, in and to Intellectual Property conceived, created, discovered, or developed by Executive during employment or any other relationship (e.g., independent contractor or otherwise) with the Company or its Affiliates, whether conceived, created, discovered, developed or improved upon, alone or with others, during regular working hours or outside of them. However, nothing in this Agreement shall create or require the assignment of an invention for which no equipment, supplies, facility or trade secret information of the Company or its Affiliates were used and which was developed entirely on Executive's own time, unless: (a) the invention relates directly to the business of the Company or its Affiliates or to either of their actual or demonstrably anticipated research or development; or (b) the invention results from any work performed by Executive for the Company or its Affiliates. All of Executive's work product related to the Company's business shall to the fullest extent permitted by law be considered the property of the Company as "works made for hire" under the U.S. Copyright Act and comparable laws of other countries, and nothing herein shall be construed to limit or diminish any rights or interests the Company would have in such works made for hire absent this Agreement. Nothing in this Agreement shall be construed to grant Executive any rights in or to the Intellectual Property of the Company or an Affiliate. Executive will keep and maintain adequate and current written records of all Intellectual Property developed by Executive (solely or jointly with others) during Executive's employment with the Company. The records may be in the form of notes, sketches, drawings, flow charts, electronic data or recordings, and any other format. The records will be available to and remain the sole property of the Company at all times. Executive agrees not to remove such records from the Company except as expressly permitted by Company policy which may, from time to time, be revised at the sole discretion of the Company. Any Intellectual Property related to the Company's business (existing or under demonstrably anticipated research or development) that Executive claims to retain rights in because it was conceived, created or discovered prior to employment with the Company ("Prior Works") have been identified below, and if there are no such Prior Works identified it is because Executive agrees there are none.

Intellectual Property related to the Company's business (existing or under demonstrably anticipated research or development) that Executive claims to retain rights in because it was conceived, created or discovered by Executive prior to employment with the Company ("**Prior Works**") is listed below. ***Leave the section below blank if no Prior Works are claimed***.

Prior Works list:
____.
____.
____.
____.

If additional pages are needed, attach them and identify the number of pages attached here: ________.

d. Executive agrees to handle all the Company's property in accordance with Company policy. Executive's authorization to access the Company's computer systems is limited and use of such systems to compete or prepare to compete is unauthorized access that is strictly prohibited. All documents and records received or created by Executive in the course of employment related to the Company's business are the property of the Company. When Executive's employment with the Company ends, or at the earlier request of the Company, Executive agrees to immediately return to the Company all Company property in Executive's possession, custody or control, including anything containing Confidential Information, such as: documents, emails, contact lists, papers, files, records, reports, binders, notebooks, books, notes, calendars, plans, drawings, maps, specifications, blueprints, studies, photographs, video recordings, audio recordings, computers, tablets, smartphones, mobile telephones, drives, discs, and any other devices used to store electronic data whether made by Executive or which came into Executive's possession concerning the business or affairs of the Company, including any and all electronic copies and/or hard-copies. Nothing herein prohibits Executive's retention of paystubs and other records provided to Executive by the Company regarding his or her compensation and benefits. Upon the Company's request, Executive agrees to immediately provide the Company with a written affidavit confirming that Executive has returned all Company property (including Confidential Information); provide all passcodes and passwords for Company devices or accounts used by Executive; provide for inspection any electronic storage devices Executive used to conduct business for the Company; and cooperate in providing the Company a means through which it can promptly and independently verify (including by forensic analysis, if necessary) that all Company property has been removed from electronic storage devices, cloud-based storage, and accounts in Executive's possession or control. If Executive stored Company information in any third-party cloud, email or internet service provider, Executive consents to the provider's disclosure of such information to the Company.

4. **Non-Competition and Non-Solicitation Obligations.** Executive agrees that the restrictions provided for in this Section 4 are reasonable and necessary for the protection of the Company's trade secrets and other protectable interests, and that Executive's obligations in Sections 1 – 3 are inadequate by themselves to protect the Company's interests and prevent irreparable harm. The obligations created by this Section of the Agreement shall be referred to as the "Protective Covenants."

a. Definitions.

i. "Competitor" means any person or entity, whether public or private and whether operating alone or as part of a larger organization, that: (i) is doing business in one or more cities or counties (or county-equivalents) where the Company or its Affiliates do business; and (ii) engages in a business, or is actively planning to engage in a business, that involves products or services that compete with any products or services of the Company or its Affiliates, existing or under demonstrable development during the Look-Back Period, and which remain a part of the Company's or its Affiliate's business (existing or under development) at the relevant time of enforcement. For purposes of the foregoing, the covered products and services are understood to include, at the time this contract is made, the following: collection, hauling, transfer, processing, disposal and/or recycling of refuse (hazardous or non-hazardous), and any other services or products offered, conducted, authorized or provided by the Company or its Affiliates during the last two years of Executive's employment. The Parties acknowledge that the foregoing list is illustrative only. Executive understands and accepts that the list may be expanded upon or reduced depending upon future developments in the Company's or its Affiliate's business, and Executive acknowledges that his or her employment with the Company will provide adequate notice of changes in the list of Company and Affiliate products and services applicable to him or her.

ii. "Conflicting Services" refers to offering, providing, selling, managing or supervising services or activities on behalf of a Competitor that: (i) are the same as, or are substantially similar in function or purpose to those Executive offered, performed, supervised or managed for the Company or its Affiliates during the Look-Back Period; (ii) relate to products or services of a Competitor that compete with those products or services of the Company or its Affiliates (existing or under development) that Executive had involvement with or was provided Confidential Information about during the Look-Back Period; (iii) involve pursuing business with or accepting business from a customer of the Company or its Affiliate on behalf of a Competitor and to the detriment of the Company or its Affiliate; or (iv) otherwise involve the likely use or disclosure of Confidential Information by Executive. The foregoing applies to the intentional actions of Executive, whether done directly or through direction or control of others; in person or through telephonic, electronic, or other means of communication; or as a principal, owner, director, officer, agent, employee, partner, member, contractor or consultant.

iii. "Covered Customer" is a customer of the Company or its Affiliates that Executive had material contact or dealings with on behalf of the Company or its Affiliates during the Look-Back Period.

A "customer of the Company" will be presumed to include any person or entity who is: (i) a purchaser of the Company's or its Affiliate's goods or services in the Look-Back Period with whom the Company or its Affiliates has a reasonable expectation of continued business activity; (ii) an active prospective purchaser of the Company's or its Affiliate's goods or services with whom the Company or its Affiliates has an ongoing business relationship or reasonable expectation of doing business based on communications with the person or entity during the Look-Back Period; or (iii) a buyer, broker, or comparable representative of a purchaser or prospective purchaser that qualifies as a customer under (i) or (ii) above.

"Material contact or dealings" will be presumed to exist with the customer of the Company if, during the Look-Back Period, the Executive: (i) had contact or dealings with the customer on behalf of the Company or its Affiliates; (ii) supervised or coordinated other Company or Affiliate employees in their dealings with the customer on behalf of the Company or its Affiliate; (iii) was provided Confidential Information related to the customer; or (iv) received credit or compensation (such as bonus, commission, or earnings) from the Company for business conducted with the customer.

iv. "Covered Employee or Individual" shall mean, for purposes of this Agreement only, an individual that Executive works with or gains knowledge of as a result of Executive's employment with the Company, provided such individual is either an: (i) employee of the Company or an Affiliate; or (ii) individual providing his or her personal services to the Company or an Affiliate in an individual capacity as an independent contractor.

v. "Facility" means the physical location of: (i) an office, workplace or other location where the Company or its Affiliates conduct business; (ii) a hauling/collection operation; or (iii) a post-collection operation (including, but not limited to, landfills, transfer stations, material recovery facilities, recycling facilities and compost facilities), owned, leased or operated at the relevant time of enforcement by the Company or its Affiliates; provided, however, that it was a facility owned, leased, operated, planned, or under development by the Company or its Affiliates, or is in geographic area that Executive had access to Confidential Information about, during the Look-Back Period.

vi. "Look-Back Period" means the last two (2) years of Executive's employment with the Company, or whatever lesser period of time Executive has been employed at the Company if not employed for two (2) years or more, including any period of employment with a predecessor or Affiliate of the Company; or, if the foregoing is not enforceable, then such lesser period as the applicable court or arbitrator deems enforceable to protect the Company's legitimate business interests.

vii. “Restricted Area” means the geographic areas (by state, county, parish, or other means of identification used in the ordinary course of the Company’s business) that involve a protectable interest on behalf of the Company or its Affiliate that is related to Executive. Due to the nature of Executive’s position and the extensive Confidential Information Executive will have access to regarding the operations of the Company and its Affiliates nationally, it shall be presumed that the Restricted Area is Executive’s county and state of residence, and the remainder of the counties and states (or their equivalents) within the United States where the Company or its Affiliates do business and were doing business (or had demonstrable plans to do business) during the Look Back Period. If, and only if, the foregoing is deemed unenforceable by a court or arbitrator, then (for purposes of that court or arbitrator’s jurisdiction only) the “Restricted Area” shall mean: the geographic areas that fall within a 50-mile radius of each Company or Affiliate Facility; or, if not enforceable, then such lesser area within the foregoing geography as the applicable court or arbitrator deems reasonable and enforceable under the circumstances. Executive stipulates that he or she will be exposed to Confidential Information and trade secrets related to all of the Company’s or its Affiliates’ Facilities as a result of Executive’s high-level position with the Company which makes the foregoing area reasonable.

viii. “Restricted Period” means the period during Executive’s employment with the Company and a period of twenty-four (24) months after Executive’s employment with the Company ends; or, if the foregoing is not enforceable, then such lesser period as the applicable court or arbitrator deems enforceable to protect the Company’s legitimate business interests.

ix. “Solicit” or “Soliciting” means to engage in acts or communications that are intended to, or can reasonably be expected to, induce or encourage a particular responsive action (such as buying a good or service or terminating a relationship), regardless of which party first initiates contact.

b. Prohibition Against Competition.

During the Restricted Period, Executive will not compete with the Company by providing Conflicting Services to a Competitor within the Restricted Area. This obligation shall be referred to as the “Noncompete.”

c. Prohibition Against Solicitation of Customers

During the Restricted Period, Executive will not, directly or through the direction or supervision of others: (i) Solicit or assist in Soliciting a Covered Customer on behalf of, or for the benefit of a Competitor; or (ii) otherwise knowingly encourage or cause (in whole or in part) a Covered Customer to stop or reduce business conducted with the Company or its Affiliates (except where such activity is authorized by the Company in the ordinary course of Executive’s employment with the Company and undertaken for the benefit of the Company or its Affiliate). If, and only if, required for enforcement under applicable law, the restriction in this paragraph shall be limited to business activities in or related to the Restricted Area. This obligation shall be referred to as the “Customer Nonsolicit.”

d. Prohibition Against Solicitation of Employees and Individuals.

During the Restricted Period, Executive will not Solicit a Covered Employee or Individual: (a) to go to work for a Competitor; or (b) to end his or her relationship with the Company or its Affiliate unless such activity is authorized and undertaken in the ordinary course of Executive’s employment for the benefit of the Company or its Affiliate. This obligation shall be referred to as the “Employee Nonsolicit.”

5. **Obligation to Avoid Conflicts of Interest.** During Executive’s employment with the Company, Executive agrees: (a) not to compete with the Company; (b) to notify the Company in writing of any business opportunities related to the business of the Company that are not already regularly identified in the ordinary course of Executive’s duties for the Company; and (c) to abide by the Company’s Conflicts of Interests policy, which includes not becoming involved, directly or indirectly, in a situation that a reasonable person would recognize to be a conflict of interest with the Company. If Executive discovers, or is informed by the Company, that Executive has become involved in a situation that is an actual conflict, likely conflict, or appears to be a conflict of interest, Executive will take immediate action to eliminate the conflict, including providing full and immediate disclosure to the Company in writing and complying with the Conflicts of Interests Policy. The Company’s determination as to whether a conflict of interest exists will be conclusive.

6. **Notice to New Employers.** During the Restricted Period: (a) Executive agrees to provide a copy of this Agreement to any person or entity that proposes to employ or utilize the services of Executive (as an employee, consultant, independent contractor or otherwise) before accepting the proposed employment or work; and (b) if Executive accepts an offer of employment with any Competitor, Executive agrees to provide Company with notice of Executive's acceptance before beginning active employment or work with the Competitor or within seven (7) days after Executive accepts the offer of employment, whichever is sooner. Executive agrees that the Company may notify third parties (such as a prospective employer of Executive) of this Agreement and provide an opinion regarding its application and enforcement without such action being the basis of any legal claim or complaint by Executive.

7. **Severability.** Each of Executive's obligations under this Agreement shall be construed as a separate and severable obligation except where this Agreement provides otherwise by expressly designating a provision non-severable. If a court or arbitrator determines that a restriction in this Agreement cannot be enforced as written due to an overbroad characteristic (such as time, geography, or scope of activity covered), the Parties agree that the court or arbitrator shall nonetheless engage in partial enforcement of the restriction and/or reform any overbroad part of the restriction so that it may be enforced to the greatest extent legally enforceable. Executive must present clear and convincing evidence to overcome a presumption provided for in this Agreement. And, if a presumption used in this Agreement would make a restriction against Executive unenforceable, then it will be severed from the Agreement and shall not apply. If, despite the foregoing, any provision contained in this Agreement is determined to be void or unenforceable, in whole or in part, then the offending provision shall be stricken from this Agreement and other provisions of this Agreement will remain in full force and effect.

8. **Affiliates & Beneficiaries.** As used herein, an "Affiliate" is any legal entity that, directly or indirectly, through one or more intermediaries, is owned or controlled by, or is under the common ownership and/or control of Republic Services, Inc., including but not limited to the Company's subsidiaries and successors (if applicable). As used herein, references to Executive's employment with the Company shall be understood to include any employment with an Affiliate that may occur. The Parties expect that some or all of the duties or responsibilities of the Company under this Agreement may be satisfied by an Affiliate. Accordingly, Executive acknowledges that the discharge of any duty or responsibility of the Company under this Agreement by one or more of its Affiliates discharges the Company's duty or responsibility in that regard. Executive's obligations under this Agreement will be owed to, and fully enforceable by the Company and any Affiliate with a material interest warranting protection.

9. **Injunctive Relief.** If Executive violates or threatens to violate any of the restrictions placed on Executive by this Agreement, the Company shall be entitled to specific performance and temporary and permanent injunctive relief to enforce this Agreement in addition to any and all other legal and equitable relief available to the Company under applicable law. No bond will be required for the issuance of the injunctive relief provided for in this Agreement unless it is required by law to make the injunctive relief enforceable, and if required then an agreed upon reasonable bond shall be $1,000.00. The Parties agree that the foregoing injunctive relief to enforce this Agreement is a reasonable and necessary remedy to prevent the irreparable harm that would result from Executive's failure to comply with the restrictions in this Agreement.

10. **Survival.** The restrictions applicable to Executive under this Agreement and the agreement to arbitrate in Section 19 below shall survive the termination of Executive's employment in accordance with their terms, and shall remain in effect despite any change in position, title, duties, compensation, or other terms and conditions of Executive's employment. The existence of a claim by Executive against the Company, whether predicated on this Agreement or otherwise, shall not relieve Executive of his or her obligations under this Agreement or make them unenforceable.

11. **Tolling.** If a post-employment restriction with a time limit in this Agreement is violated by Executive, the time period applicable to the violated restriction will be extended by one day for each day Executive remains in violation of the restriction. This paragraph providing for an extension of post-employment time limits shall be referred to as the "Tolling Clause."

12. **Successors and Assigns.** This Agreement shall automatically inure to the benefit of the Company's successors and assigns and may be enforced by the same without the need for any further agreement by Executive. Executive expressly consents to the assignment of this Agreement by the Company as part of any sale, merger, or other transaction related to the assets of the Company at the Company's discretion. Executive's rights and obligations under this Agreement are personal to Executive and may not be assigned by Executive.

13. **Waiver.** The waiver by any party of a breach of any provision of this Agreement will neither operate nor be construed as a waiver of any subsequent breach. The Company's decision not to pursue a breach of this Agreement by Executive (or the breach of any other Agreement by any other party), shall not relieve Executive of his or her obligations under this Agreement or create a waiver of the Company's rights as to Executive or any other party. In order for a waiver to be effective against the Company, it must be in writing and signed by a duly authorized officer of the Company.

14. **Attorneys' Fees and Costs.** The Parties agree that, if Executive breaches or threatens to breach any term of this Agreement, the Company will be entitled to recover the attorneys' fees, costs and expenses incurred in enforcing this Agreement if it is the prevailing party. The Company shall be deemed the "prevailing party" if it secures any relief enforcing the Agreement irrespective of whether some of the relief requested is also denied.

15. **Governing Law, Jurisdiction and Venue.** This Agreement shall be governed, interpreted, and enforced in accordance with the laws of the State of Arizona; provided, however, that any agreement between the Parties to arbitrate claims shall be governed by the Federal Arbitration Act, 9 U.S.C. § 1 et seq. Additionally, the Parties agree that the courts situated in Maricopa County, Arizona will have personal jurisdiction over them to hear all disputes arising under or related to this Agreement that are not otherwise subject to arbitration and that venue for any court proceeding arising from or related to this Agreement will be proper only in Maricopa County, Arizona.

16. **Entire Agreement, No Oral Amendments.** Except as otherwise provided for in this Agreement, the terms contained in this document are the entire agreement between the Parties regarding the matters covered in it. The Parties are not relying upon any representations, understandings or agreements outside of this Agreement in making the decision to enter into it. This Agreement supersedes prior agreements between the Parties regarding the subject matter covered in it, and shall be considered the controlling agreement with respect to all such matters; provided, however, that this Agreement shall be interpreted to supplement and not replace or eliminate any restrictions placed on Executive as a condition of the receipt of benefits under a deferred or long term incentive compensation plan, equity participation plan, stock or stock option award agreements, or intellectual property transfer agreements, to the extent they apply.

17. **Protected Conduct.** Nothing in this Agreement prohibits Executive from opposing, or reporting to the applicable law-enforcement agency (such as the Securities and Exchange Commission), an event that Executive reasonably and in good faith believes is a violation of law, requires notice or approval from the Company before doing so, or prohibits cooperating in an investigation conducted by such a government agency. Executive is hereby provided notice that pursuant to the 2016 Defend Trade Secrets Act (DTSA): (a) no individual (consultant, contractor or employee) will be held criminally or civilly liable under federal or state trade secret law for the disclosure of a trade secret that: (i) is made in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney; and made solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal so that it is not made public; and (b) an individual who pursues a lawsuit for retaliation by an employer for reporting a suspected violation of the law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual files any document containing the trade secret under seal, and does not disclose the trade secret, except as permitted by court order.

18. **At-Will Status.** Unless Executive has a written employment agreement signed by a duly authorized officer of the Company that clearly and unequivocally provides otherwise, Executive's employment with the Company is at-will, meaning that either the Company or Executive may terminate the employment relationship at any time, with or without cause or notice. Nothing in this Agreement shall be construed to create a contract of employment for a fixed or guaranteed term or to eliminate or create a limitation on any right that either one of the Parties would have to terminate the employment relationship between them absent this Agreement.

19. Arbitration.

   a. Except as otherwise provided herein, any claim or dispute (whether past, present, or future), that could otherwise be asserted in a court of law by either party arising from or related to this Agreement or Executive's application and selection for employment, employment, and/or separation of employment with the Company (including without limitation, claims based upon or related to discrimination, harassment, retaliation, defamation (including post-employment defamation or retaliation), breach of a contract or covenant, fraud, negligence, breach of fiduciary duty, trade secrets, unfair competition, compensation or any monies claimed to be owed, whistleblowing, tort claims, common law claims, statutory claims, equitable claims, and federal, state, or local legal claims) shall be resolved through an individualized, final and binding arbitration proceeding. Except as otherwise provided for herein, the arbitration shall be conducted in accordance with the Employment Arbitration and Mediation Rules of the American Arbitration Association ("AAA Rules"). The AAA Rules are available via the internet at www.adr.org/employment or by using a search engine such as Google to search for "AAA Employment Arbitration Rules"). To the extent that the AAA Rules conflict with the Federal Arbitration Act ("FAA") or this Agreement, the FAA and this Agreement shall control.

b. This Agreement has a "Class Action Waiver" that prohibits the Parties or any arbitrator from resolving any claim or dispute between them in a group, class, collective, or representative action involving parties other than the Company and Executive (as an individual), except by the mutual. written consent of the Parties, and the arbitrator shall not have authority to preside over a group, class, collective or representative proceeding. In the event a final judicial determination is made that the Class Action Waiver is unenforceable and that a class, collective, and/or representative action may proceed notwithstanding the existence of this Agreement, the arbitrator is without authority to preside over a class, collective, or representative action and any such action must be brought in a court of competent jurisdiction—not in arbitration. Regardless of anything else in this Agreement and/or any rules or procedures that might otherwise be applicable by virtue of this Agreement, disputes over the interpretation, applicability, enforceability or formation of the Class Action Waiver, including, but not limited to any claim that all or part of the Class Action Waiver is void or voidable, must be determined only by a court and not by an arbitrator.

c. The following claims are not covered by this Section: (i) claims for workers' compensation benefits, state disability insurance benefits and unemployment compensation benefits, or benefits under any plan governed by ERISA (however, it applies to discrimination or retaliation claims based upon seeking such benefits); (ii) disputes that may not be subject to pre-dispute arbitration agreement as provided by the Dodd-Frank Wall Street Reform and Consumer Protection Act (Public Law 111-203) or disputes that an applicable federal statute expressly states cannot be arbitrated or subject to a pre-dispute arbitration agreement; or (iii) representative actions for civil penalties filed under the California Private Attorneys General Act ("PAGA"), which may only be maintained in a court of competent jurisdiction (but to the extent permitted by applicable law, any claim by Executive on Executive's own behalf under PAGA to recover Executive's unpaid wages must be arbitrated and is covered by this Agreement).

Nothing in this Agreement prevents Executive from making a report to or filing a claim or charge with a governmental agency, including without limitation, the Equal Employment Opportunity Commission, U.S. Department of Labor, Securities Exchange Commission, National Labor Relations Board, Occupational Safety and Health Administration, or applicable law enforcement agencies. And nothing in this Agreement prevents the investigation by a government agency of any report, claim or charge otherwise covered by this Agreement. This Agreement also does not prevent federal administrative agencies from adjudicating claims and awarding remedies, even if the claims would otherwise be covered by this Agreement. The Company will not retaliate against Executive for filing a claim with an administrative agency. Nothing in this Agreement prevents or excuses a party from satisfying any conditions precedent and/or exhausting administrative remedies under applicable law before bringing a claim in Arbitration. This Agreement also does not prevent or prohibit Executive in any way from reporting, communicating about, or disclosing claims for discrimination, harassment, retaliation, or sexual abuse.

Either party may pursue and receive a temporary restraining order or and/or preliminary injunctive relief in a court of competent jurisdiction because the award to which the party may be entitled in arbitration may be rendered ineffectual without such relief. This includes but is not limited to preliminary injunctive relief to enforce the covenants applicable to Executive under Sections 3 – 6 of this Agreement (provided, however, that all issues of final relief shall continue to be decided through arbitration, and the pursuit of temporary injunctive relief shall not constitute a waiver of the Parties' agreement to arbitrate). The Parties stipulate that issuance of temporary or preliminary injunctive relief by a court does not require any final decisions of fact or law and is consistent with the subsequent referral of the matter to arbitration for final resolution on the merits. Nothing herein shall be construed to deprive the arbitrator of the power to issue temporary, preliminary and permanent injunctive relief to enforce this Agreement.

d. The Parties understand that they are agreeing to substitute one legitimate dispute resolution forum (arbitration) for another (litigation) because of the mutual advantages the arbitration forum offers and that their mutual promises to arbitrate provide consideration for this agreement to arbitrate.

The arbitration proceeding will comply with the following:

i. A party wishing to arbitrate a legal claim must make a written request for arbitration to the other party and deliver it before the expiration of the statute of limitations applicable to the claim. The arbitrator shall resolve all disputes regarding the timeliness or propriety of the request for arbitration. Either party may file a motion to dismiss and/or a motion for summary judgment consistent with the standards for such motions under the Federal Rules of Civil Procedure. The arbitration award may only provide for damages or relief that a court of law could award. The award shall be issued in writing and state the essential findings and conclusions on which such award is based. Unless arbitration is prohibited by applicable law (in which case the arbitration will be held in the county and state where Executive works or last worked), the arbitration proceeding will be conducted in Maricopa County, Arizona, or another mutually agreed upon location. Unless the Parties jointly agree otherwise, the arbitrator shall be either an attorney who is experienced in employment law and licensed to practice law in the state in which the arbitration is convened or a retired state or federal judge from any jurisdiction. Unless the Parties mutually select an arbitrator, the arbitrator shall be chosen by the AAA through a process of alternate strikes by the Parties. The AAA will give each party a list of eleven (11) arbitrators (subject to the qualifications listed above) drawn from its panel of arbitrators. The Parties will strike names alternately from the list of common names, with the party initiating the claim to strike first, until only one remains. The remaining person will be designated as the arbitrator. If for any reason, the individual selected cannot serve, AAA will issue another list of eleven (11) arbitrators and repeat the alternate striking selection process.

ii. The decision and award shall be exclusive, final, and binding on the Parties, their heirs, executors, administrators, successors, and assigns. Except as otherwise expressly provided for herein, any legal dispute relating to the interpretation, applicability, or enforceability of this arbitration agreement that would otherwise be subject to resolution in a court of law will be resolved by the arbitrator. The Company will pay all costs and expenses associated with the arbitration, except for the filing fees and costs that would have been required of Executive in a court proceeding if the claim is one initiated by Executive. Each party agrees to pay their own respective attorneys' fees, costs and expenses throughout the arbitration proceeding. The arbitrator may award attorneys' fees, costs and expenses at the conclusion of the arbitration and any other relief provided by law. Judgment on the arbitration award may be entered in any court having jurisdiction over the Parties.

20. **Notice.** Executive acknowledges that Executive has been provided advance notice of the Agreement (the "Notice Period"); and, if Executive is signing/executing the Agreement before the expiration of any applicable Notice Period, Executive is doing so voluntarily and waiving Executive's right to take the full notice period to consider the Agreement before doing so.

Executive, intending to be legally bound, executes this Agreement as of the Effective Date.

EXECUTIVE

/s/ Jon Vander Ark

Jon Vander Ark

TRANSITION AGREEMENT

To: Donald W. Slager

Re: Transition and Retirement

This Transition Agreement ("Agreement") is entered into, effective the latest date signed below, between Republic Services, Inc. (the "Company")[1] and you, and sets forth the terms of your retirement from the Company. Reference is made to your October 29, 2013 Employment Agreement and December 23, 2014 First Amendment to the Employment Agreement (in each case, in particular, Section 24) (collectively, your "Employment Agreement").

Retirement

The parties have been engaged in planning for the orderly succession of your duties and responsibilities to a successor Chief Executive Officer. In connection with such succession planning, on June 25, 2021 you will retire as Chief Executive Officer and your employment with the Company will end (your "Retirement Date"). On your Retirement Date, you will resign as officer and director of Republic Services, Inc. and subsidiaries and affiliates for which you are then serving as officer or director. In addition, you will not stand for re-election as a director at Republic's May 21, 2021 annual meeting of shareholders.

Impact on Employment Agreement at Retirement

(1) All of the terms and conditions of your Employment Agreement remain in full force and effect until your Retirement Date at which time your Employment Agreement will expire and your rights and obligations will be determined solely under this Agreement, except as set forth otherwise in this Agreement.

(2) The following provisions of your Employment Agreement shall survive and remain in full force and effect after your Retirement Date: Section 5 (Reduction in Payments), Section 7 (Restrictive Covenants), Section 8 (Confidentiality), Section 9 (Specific Performance; Injunction), Section 10 (Nondisparagement), Section 11 (Future Cooperation), Section 13 (Notices), Section 15 (Assignment; Third Party Beneficiary), Section 16 (Severability; Survival), Section 17 (Indemnification), Section 23 (Withholding), Section 24 (Retirement Eligibility), Section 25 (Supplemental Retirement Benefit), Section 26 (Code Section 409A), Section 27 (Beneficiary) and Section 28 (Arbitration).

(3) For purposes of clarity, your 2021 annual incentive award will fully vest upon your retirement at your Retirement Date, and will be paid, without proration, in an amount equal to the payment that the Compensation Committee determines is due pursuant to the terms of the Company's Executive Incentive Plan (applying any positive or negative discretion consistent with other Company executives' annual incentive awards). Such payment will be made at the same time as the 2021 annual incentive awards are paid to other eligible Company employees. You will also be entitled to (i) all accrued and vested benefits under applicable employee benefit plans in which you are a participant, in accordance with the respective terms of such plans, and (ii) reimbursement of any unreimbursed business expenses incurred through the Retirement Date and substantiated in accordance with Section 2(h) of your Employment Agreement. The Company will also pay your reasonable legal fees incurred in connection with the preparation of this Agreement.

The Company acknowledges receipt of your notice of retirement and hereby waives the twelve (12)-month advance notice requirement set forth in Section 24 of your Employment Agreement provided that you remain employed by the Company through your Retirement Date. As the result of the waiver and as set forth in Section 24 of your Employment Agreement (a) your "Prospective Awards" shall vest and be paid in accordance with the "Original Retirement Policy" (each such term having the meaning defined in Section 24 of your Employment Agreement), and (b) the following compensation payments due under your Employment Agreement, which otherwise would have been paid to you in 2022 or later absent your retirement, will be paid to you no later than December 31, 2021 (to the extent consistent with Section 409A of the Internal Revenue Code of 1986, as amended, ("Section 409A")): (1) your unvested restricted stock units (RSUs) that will vest upon your retirement, (2) the supplemental retirement payment described in Section 25 of your Employment Agreement, and (3) your account balance in the Republic Services, Inc. Deferred Compensation Plan.

(1) In this Agreement, the "Company" means Republic Services, Inc., its subsidiary, affiliated predecessor and successor corporations and entities, and its and their past and present officers, directors, agents, and employees

Transition Services, Consulting, and Future Cooperation

In addition to your obligations under Section 24 of your Employment Agreement, you agree to assist your successor and the Board in a transition of your duties and responsibilities to your successor Chief Executive Officer through December 31, 2021 by responding promptly to inquiries from the Company and providing historical background and your insights as requested from time to time. You also agree to provide consulting services through December 31, 2021 on such other matters as may be requested by the Company from time to time.

In addition, consistent with Section 11 of your Employment Agreement, you agree to assist and cooperate with the Company concerning matters about which you possess relevant knowledge or information (including testifying in depositions, hearings, and/or trials). Nothing in this Section or the Agreement should be construed as suggesting that you testify or communicate information other than in a truthful manner. Unless prohibited from doing so by law or court order, you agree to promptly notify the Company (by telephonic or written communication to the Company's Chief Legal Officer, Republic Services, 18500 N. Allied Way, Phoenix, AZ 85054, phone number 480-627-2700) if any person or entity contacts you, including via a subpoena, in an effort to obtain information, documents or testimony about the Company, your work experience with the Company prior to disclosing any such information, and to disclose to the Company the name of the person or entity contacting you and the information, documents or testimony requested. This does not include, however, information you provide to a future employer as part of your application for employment.

Notwithstanding the foregoing, in no event shall your time commitment during this period following the Retirement Date exceed an amount that would cause your retirement to not constitute a separation from service within the meaning of Section 409A.

As further consideration for your consulting, transition services and future cooperation, you will receive a payment equal to the base salary you would have received from the Company had you continued to be employed by the Company after the Retirement Date through December 31, 2021. Such payment shall be made in equal monthly installments through December 2021. During the period beginning on your Retirement Date and ending on December 31, 2021, you will be an independent contractor, responsible for all taxes (and no Company tax withholding) incurred on the payments described in this paragraph, and shall not have any power or authority to act as an agent for the Company or otherwise bind the Company. In addition to the consulting payments described in this paragraph, the Company will pay you an amount on or before December 31, 2021 to make you whole for the additional self-employment (1.45%) Medicare tax, net of any allowable income tax deduction for such tax, incurred on such independent contractor payments that you otherwise would not pay if you had not retired and had remained an employee. All compensation payments due to you not described in this paragraph will be treated by the Company as employee compensation and reported on a Form W-2 for the tax year in which they are includable in income.

Information Provided to Future Employers

You agree that before accepting employment or a director or consulting position, you will advise the potential new employer that you are subject to the Restrictive Covenants (Section 7) and Confidentiality (Section 8) obligations in your Employment Agreement, and that you will abide by those covenants and obligations. You also agree that the Company may advise any new employer who hires you of those covenants and obligations.

Severability; Entire Agreement; Governing Law; No Oral Modifications; No Waivers; Counterparts

If a court of competent jurisdiction determines that any of the provisions of this Agreement are invalid or legally unenforceable, all other provisions of this Agreement shall not be affected and are still enforceable. This Agreement expresses our entire understanding regarding the subjects it addresses. As such, it supersedes all oral and written agreements and discussions that occurred before the time you sign it except as to any obligations you may owe to the Company or the Company may owe you, as described in this Agreement. This Agreement may be amended or modified only by an agreement in writing signed by an executive officer of the Company. The failure by the Company to declare a breach, or to otherwise assert its rights under this Agreement, shall not be construed as a waiver of any of its rights under this Agreement. The laws of the State of Arizona shall govern the interpretation, validity, and effect of this Agreement. This Agreement may be signed in any number of counterparts, each of which shall be an original but all of which together shall constitute one and the same instrument.

Acknowledgments and Certifications

You acknowledge and certify that:

- you have read and you understand all of the terms of this Agreement and are not relying on any representation or statement, written or oral, not set forth in this Agreement;
- you are signing this Agreement knowingly and voluntarily;
- you have consulted with an attorney before signing this Agreement; and

- you and the Company agree that there is good and sufficient mutual consideration for each of the terms and conditions in this Agreement.

IF YOU SIGN THIS DOCUMENT BELOW, IT BECOMES A LEGALLY ENFORCEABLE AGREEMENT EFFECTIVE ON THE DATE SIGNED BY THE COMPANY.

March 26, 2021
Date

/s/ Donald W. Slager
Donald W. Slager

March 26, 2021
Date

REPUBLIC SERVICES, INC.

By: /s/ Catharine D. Ellingsen
Its: Chief Legal Officer

EXHIBIT 31.1

CERTIFICATION PURSUANT TO RULES 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Donald W. Slager, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Republic Services, 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(s) 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 (the registrant's fourth fiscal quarter in the case of an annual report) 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(s) 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.

/S/ DONALD W. SLAGER

Donald W. Slager
Chief Executive Officer
(Principal Executive Officer)

Date: May 5, 2021

EXHIBIT 31.2

**CERTIFICATION PURSUANT TO RULES 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Brian DelGhiaccio, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Republic Services, 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(s) 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 (the registrant's fourth fiscal quarter in the case of an annual report) 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(s) 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.

/s/ BRIAN DELGHIACCIO

Brian DelGhiaccio
Executive Vice President,
Chief Financial Officer
(Principal Financial Officer)

Date: May 5, 2021

EXHIBIT 32.1

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of Republic Services, Inc. (the Company) for the period ended March 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Donald W. Slager, Chief Executive Officer of 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 the best of my knowledge:

1. 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.

/S/ DONALD W. SLAGER

Donald W. Slager
Chief Executive Officer
(Principal Executive Officer)

Date: May 5, 2021

EXHIBIT 32.2

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of Republic Services, Inc. (the Company) for the period ended March 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Brian DelGhiaccio, Chief Financial Officer of 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 the best of my knowledge:

1. 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.

/s/ BRIAN DELGHIACCIO

Brian DelGhiaccio
Executive Vice President,
Chief Financial Officer
(Principal Financial Officer)

Date: May 5, 2021