UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2023

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 001-34223

CLEAN HARBORS, INC.

(Exact name of registrant as specified in its charter)

Massachusetts	**04-2997780**
(State or Other Jurisdiction of Incorporation or Organization)	(IRS Employer Identification No.)
42 Longwater Drive Norwell MA	**02061-9149**
(Address of Principal Executive Offices)	(Zip Code)

Registrant's Telephone Number, Including area code: **(781) 792-5000**

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, $0.01 par value	CLH	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 during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer ☒	Accelerated filer ☐
Non-accelerated filer ☐	Smaller reporting company ☐
	Emerging growth company ☐

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

Indicate by check mark whether the registrant is a shell company (as defined by Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The number of shares of Common Stock, $0.01 par value, of the registrant outstanding at October 27, 2023 was 54,086,261.

CLEAN HARBORS, INC.

QUARTERLY REPORT ON FORM 10-Q

TABLE OF CONTENTS

CLEAN HARBORS, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
(in thousands)

	September 30, 2023	December 31, 2022
ASSETS	(unaudited)	
Current assets:		
Cash and cash equivalents	$ 335,965	$ 492,603
Short-term marketable securities	84,007	62,033
Accounts receivable, net of allowances aggregating $42,342 and $45,253, respectively	1,010,335	964,603
Unbilled accounts receivable	130,888	107,010
Inventories and supplies	311,512	324,994
Prepaid expenses and other current assets	78,045	82,518
Total current assets	1,950,752	2,033,761
Property, plant and equipment, net	2,128,508	1,980,302
Other assets:		
Operating lease right-of-use assets	188,695	166,181
Goodwill	1,286,473	1,246,878
Permits and other intangibles, net	613,540	620,782
Other	80,211	81,803
Total other assets	2,168,919	2,115,644
Total assets	$ 6,248,179	$ 6,129,707
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term debt	$ 10,000	$ 10,000
Accounts payable	414,963	446,629
Deferred revenue	102,468	94,094
Accrued expenses and other current liabilities	369,097	396,716
Current portion of closure, post-closure and remedial liabilities	21,759	23,123
Current portion of operating lease liabilities	57,100	49,532
Total current liabilities	975,387	1,020,094
Other liabilities:		
Closure and post-closure liabilities, less current portion of $11,425 and $13,205, respectively	108,466	105,596
Remedial liabilities, less current portion of $10,334 and $9,918, respectively	101,370	106,372
Long-term debt, less current portion	2,292,952	2,414,828
Operating lease liabilities, less current portion	133,163	119,259
Deferred tax liabilities	347,628	350,389
Other long-term liabilities	103,419	90,847
Total other liabilities	3,086,998	3,187,291
Commitments and contingent liabilities (See Note 16)		
Stockholders' equity:		
Common stock, $0.01 par value:		
Authorized 80,000,000 shares; issued and outstanding 54,102,982 and 54,064,797 shares, respectively	541	541
Additional paid-in capital	490,163	504,240
Accumulated other comprehensive loss	(169,139)	(167,181)
Accumulated earnings	1,864,229	1,584,722
Total stockholders' equity	2,185,794	1,922,322
Total liabilities and stockholders' equity	$ 6,248,179	$ 6,129,707

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

CLEAN HARBORS, INC. AND SUBSIDIARIES

UNAUDITED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Revenues:				
Service revenues	$ 1,129,216	$ 1,073,810	$ 3,341,539	$ 3,100,914
Product revenues	236,480	289,276	729,444	787,593
Total revenues	1,365,696	1,363,086	4,070,983	3,888,507
Cost of revenues: (exclusive of items shown separately below)				
Service revenues	765,004	738,041	2,288,199	2,168,025
Product revenues	178,947	172,607	534,778	484,481
Total cost of revenues	943,951	910,648	2,822,977	2,652,506
Selling, general and administrative expenses	171,019	151,711	505,154	458,492
Accretion of environmental liabilities	3,388	3,246	10,281	9,599
Depreciation and amortization	92,970	88,394	267,425	260,560
Income from operations	154,368	209,087	465,146	507,350
Other income (expense), net	334	104	(833)	2,073
Loss on early extinguishment of debt	—	—	(2,362)	—
Gain on sale of business	—	—	—	8,864
Interest expense, net of interest income of $2,877, $1,103, $7,833 and $2,159, respectively	(29,696)	(28,081)	(80,400)	(79,354)
Income before provision for income taxes	125,006	181,110	381,551	438,933
Provision for income taxes	33,666	45,311	102,044	109,663
Net income	$ 91,340	$ 135,799	$ 279,507	$ 329,270
Earnings per share:				
Basic	$ 1.69	$ 2.51	$ 5.17	$ 6.07
Diluted	$ 1.68	$ 2.50	$ 5.14	$ 6.04
Shares used to compute earnings per share - Basic	54,122	54,111	54,097	54,278
Shares used to compute earnings per share - Diluted	54,419	54,381	54,411	54,542

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

CLEAN HARBORS, INC. AND SUBSIDIARIES

UNAUDITED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)

	Three Months Ended September 30, 2023	Three Months Ended September 30, 2022	Nine Months Ended September 30, 2023	Nine Months Ended September 30, 2022
Net income	$ 91,340	$ 135,799	$ 279,507	$ 329,270
Other comprehensive (loss) income, net of tax:				
Unrealized gain (loss) on available-for-sale securities	93	(36)	311	(692)
Unrealized gain on fair value of interest rate hedges	7,801	23,750	15,528	59,674
Reclassification adjustment for interest rate hedge amounts realized in net income	(3,650)	(1,296)	(12,704)	4,062
Reclassification adjustment for settlement of interest rate hedges	—	—	(5,905)	—
Unfunded pension liability	6	40	(1)	50
Foreign currency translation adjustments	(7,423)	(31,323)	813	(38,649)
Other comprehensive (loss) income, net of tax	(3,173)	(8,865)	(1,958)	24,445
Comprehensive income	$ 88,167	$ 126,934	$ 277,549	$ 353,715

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

CLEAN HARBORS, INC. AND SUBSIDIARIES

UNAUDITED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Nine Months Ended September 30, 2023	Nine Months Ended September 30, 2022
Cash flows from operating activities:		
Net income	$ 279,507	$ 329,270
Adjustments to reconcile net income to net cash from operating activities:		
Depreciation and amortization	267,425	260,560
Allowance for doubtful accounts	2,620	6,684
Amortization of deferred financing costs and debt discount	4,036	4,734
Accretion of environmental liabilities	10,281	9,599
Changes in environmental liability estimates	3,258	2,105
Deferred income taxes	(356)	2,226
Other expense (income), net	833	(2,073)
Stock-based compensation	14,809	20,375
Loss on early extinguishment of debt	2,362	—
Gain on sale of business	—	(8,864)
Environmental expenditures	(24,064)	(9,720)
Changes in assets and liabilities, net of acquisitions:		
Accounts receivable and unbilled accounts receivable	(46,445)	(293,562)
Inventories and supplies	12,691	(44,324)
Other current and non-current assets	(18,190)	(12,600)
Accounts payable	(40,013)	52,979
Other current and long-term liabilities	(13,062)	40,153
Net cash from operating activities	455,692	357,542
Cash flows used in investing activities:		
Additions to property, plant and equipment	(311,906)	(244,547)
Proceeds from sale and disposal of fixed assets	5,129	5,118
Acquisitions, net of cash acquired	(119,596)	(73,568)
Proceeds from sale of business, net of transaction costs	750	16,811
Additions to intangible assets including costs to obtain or renew permits	(1,507)	(1,094)
Purchases of available-for-sale securities	(104,329)	(36,418)
Proceeds from sale of available-for-sale securities	84,390	51,736
Net cash used in investing activities	(447,069)	(281,962)
Cash flows used in financing activities:		
Change in uncashed checks	3,004	887
Tax payments related to withholdings on vested restricted stock	(10,886)	(6,214)
Repurchases of common stock	(18,000)	(44,182)
Deferred financing costs paid	(6,371)	(410)
Payments on finance leases	(11,594)	(9,538)
Principal payments on debt	(621,475)	(13,152)
Proceeds from issuance of debt	500,000	—
Borrowing from revolving credit facility	114,000	—
Payment on revolving credit facility	(114,000)	—
Net cash used in financing activities	(165,322)	(72,609)
Effect of exchange rate change on cash	61	(6,523)
Decrease in cash and cash equivalents	(156,638)	(3,552)
Cash and cash equivalents, beginning of period	492,603	452,575
Cash and cash equivalents, end of period	$ 335,965	$ 449,023
Supplemental information:		
Cash payments for interest and income taxes:		
Interest paid	$ 100,813	$ 86,407
Income taxes paid, net of refunds	107,328	53,183
Non-cash investing activities:		
Property, plant and equipment accrued	29,127	23,726
Remedial liability assumed in acquisition of property, plant and equipment	—	8,092
ROU assets obtained in exchange for operating lease liabilities	61,741	39,899
ROU assets obtained in exchange for finance lease liabilities	26,317	11,263

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

CLEAN HARBORS, INC. AND SUBSIDIARIES

UNAUDITED CONSOLIDATED STATEMENTS OF STOCKHOLDERS’ EQUITY
(in thousands)

	Common Stock					
	Number of Shares	$0.01 Par Value	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Earnings	Total Stockholders’ Equity
Balance at January 1, 2023	54,065	$ 541	$ 504,240	$ (167,181)	$ 1,584,722	$ 1,922,322
Net income	—	—	—	—	72,401	72,401
Other comprehensive loss	—	—	—	(14,346)	—	(14,346)
Stock-based compensation	—	—	6,018	—	—	6,018
Issuance of common stock for restricted share vesting, net of employee tax withholdings	49	—	(3,351)	—	—	(3,351)
Repurchases of common stock	(22)	—	(3,000)	—	—	(3,000)
Balance at March 31, 2023	54,092	541	503,907	(181,527)	1,657,123	1,980,044
Net income	—	—	—	—	115,766	115,766
Other comprehensive income	—	—	—	15,561	—	15,561
Stock-based compensation	—	—	4,500	—	—	4,500
Issuance of common stock for restricted share vesting, net of employee tax withholdings	34	—	(984)	—	—	(984)
Repurchases of common stock	(36)	—	(5,001)	—	—	(5,001)
Balance at June 30, 2023	54,090	541	502,422	(165,966)	1,772,889	2,109,886
Net income	—	—	—	—	91,340	91,340
Other comprehensive loss	—	—	—	(3,173)	—	(3,173)
Stock-based compensation	—	—	4,291	—	—	4,291
Issuance of common stock for restricted share vesting, net of employee tax withholdings	71	1	(6,552)	—	—	(6,551)
Repurchases of common stock	(58)	(1)	(9,998)	—	—	(9,999)
Balance at September 30, 2023	54,103	$ 541	$ 490,163	$ (169,139)	$ 1,864,229	$ 2,185,794

CLEAN HARBORS, INC. AND SUBSIDIARIES

UNAUDITED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (CONTINUED)
(in thousands)

	Common Stock					
	Number of Shares	$0.01 Par Value	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Earnings	Total Stockholders' Equity
Balance at January 1, 2022	54,419	$ 544	$ 536,377	$ (196,012)	$ 1,172,978	$ 1,513,887
Net income	—	—	—	—	45,314	45,314
Other comprehensive income	—	—	—	33,849	—	33,849
Stock-based compensation	—	—	5,712	—	—	5,712
Issuance of common stock for restricted share vesting, net of employee tax withholdings	36	—	(1,831)	—	—	(1,831)
Repurchases of common stock	(41)	—	(3,694)	—	—	(3,694)
Balance at March 31, 2022	54,414	544	536,564	(162,163)	1,218,292	1,593,237
Net income	—	—	—	—	148,157	148,157
Other comprehensive loss	—	—	—	(539)	—	(539)
Stock-based compensation	—	—	6,835	—	—	6,835
Issuance of common stock for restricted share vesting, net of employee tax withholdings	31	—	(740)	—	—	(740)
Repurchases of common stock	(335)	(3)	(29,997)	—	—	(30,000)
Balance at June 30, 2022	54,110	541	512,662	(162,702)	1,366,449	1,716,950
Net income	—	—	—	—	135,799	135,799
Other comprehensive loss	—	—	—	(8,865)	—	(8,865)
Stock-based compensation	—	—	7,828	—	—	7,828
Issuance of common stock for restricted share vesting, net of employee tax withholdings	68	1	(3,644)	—	—	(3,643)
Repurchases of common stock	(108)	(1)	(10,487)	—	—	(10,488)
Balance at September 30, 2022	54,070	$ 541	$ 506,359	$ (171,567)	$ 1,502,248	$ 1,837,581

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

CLEAN HARBORS, INC. AND SUBSIDIARIES
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

(1) BASIS OF PRESENTATION

The accompanying consolidated interim financial statements are unaudited and include the accounts of Clean Harbors, Inc. and its subsidiaries (collectively, “Clean Harbors” or the “Company”) and have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission and, in the opinion of management, include all adjustments which are of a normal recurring nature and are necessary for a fair presentation of the financial position, results of operations and cash flows for the periods presented. Management has made estimates and assumptions affecting the amounts reported in the Company's consolidated interim financial statements and accompanying footnotes; actual results could differ from those estimates and judgments. The results for interim periods are not necessarily indicative of results for the entire year or any other interim periods. The financial statements presented herein should be read in conjunction with the financial statements included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2022.

(2) SIGNIFICANT ACCOUNTING POLICIES

The Company's significant accounting policies are described in Note 2, "Significant Accounting Policies," in the Company's Annual Report on Form 10-K for the year ended December 31, 2022. There have been no material changes in these policies or their application except for the change described below.

Segment Reporting and Goodwill

Pursuant to the previous succession announcement, effective March 31, 2023, Michael L. Battles and Eric W. Gerstenberg, former Chief Financial Officer and Chief Operating Officer of the Company, respectively, were appointed Co-CEOs. As a result, the Company’s new Chief Operating Decision Maker (“CODM”) is a committee comprised of both Co-CEOs, who, going forward, will manage the business, make operating decisions and assess performance. The Company does not expect that the new CODM structure will change how the Company is managed and as such will continue to report as two operating segments; (i) the Environmental Services segment and (ii) the Safety-Kleen Sustainability Solutions segment and assess the recoverability of goodwill under three reporting units; (i) Environmental Sales and Service, (ii) Environmental Facilities and (iii) Safety-Kleen Sustainability Solutions.

(3) REVENUES

The Company generates revenues through the following operating segments: Environmental Services and Safety-Kleen Sustainability Solutions. The Company's Environmental Services operating segment generally has four sources of revenue and the Safety-Kleen Sustainability Solutions operating segment has two sources of revenue. The Company disaggregates third-party revenues by geographic location and source of revenue as management believes these categories depict how revenue and cash flows are affected by economic factors. The Company's significant sources of revenue include:

Technical Services—Technical Services contribute to the revenues of the Environmental Services operating segment. Revenues for these services are generated from fees charged for waste material management and disposal services including onsite environmental management services, collection and transportation, packaging, recycling, treatment and disposal of waste and large remediation projects. Revenue is primarily generated by short-term projects, most of which are governed by master service agreements that are long-term in nature. These master service agreements are typically entered into with the Company's larger customers and outline the pricing and legal frameworks for such arrangements. Services are provided based on purchase orders or agreements with the customer and include prices based upon units of volume of waste, material and personnel costs as well as transportation and other fees. Collection and transportation revenues are recognized over time, as the customer receives and consumes the benefits of the services as they are being performed and the Company has a right to payment for performance completed to date. The Company uses the input method to recognize revenue over time, based on time and materials incurred as a basis for measuring the satisfaction of the performance obligation. Revenues for treatment and disposal of waste are recognized upon completion of treatment, final disposition in a landfill or incinerator, or when the waste is shipped to a third-party for processing and disposal. The Company periodically enters into bundled arrangements for the collection and transportation and disposal of waste. For such arrangements, transportation and disposal are considered distinct performance obligations and the Company allocates revenue to each based on the relative standalone selling price (i.e., the estimated price that a customer would pay for the services on a standalone basis). Revenues and the related costs from waste that is not yet completely processed and disposed of are deferred. The deferred revenues and costs are recognized when the services are completed. The period between collection and transportation and the final processing and disposal ranges depending on the location of the customer, but generally is measured in days.

Industrial Services and Other—Industrial Services contribute to the revenues of the Environmental Services operating segment. These revenues are primarily generated from industrial and specialty services provided to refineries, chemical plants, manufacturing facilities, power generation companies, pulp and paper mills, mines and other industrial customers throughout North America. Services include in-plant cleaning and maintenance services, plant outage and turnaround services, specialty cleaning services including chemical cleaning, pigging and high and ultra-high pressure water cleaning, leak detection and repair, daylighting, production services and upstream energy services. Services are provided based on purchase orders or agreements with the customer and include prices based upon daily, hourly or job rates for equipment, materials and personnel. The Company recognizes revenue for these services over time, as the customer receives and consumes the benefits of the services as they are being performed and the Company has a right to payment for performance completed to date. The Company uses the input method to recognize revenue over time, based on time and materials incurred.

Field and Emergency Response Services—Field and Emergency Response Services contribute to the revenues of the Environmental Services operating segment. Field Services revenues are generated from cleanup services at customer sites, including those managed by municipalities and utility providers, or other locations on a scheduled or emergency response basis. Services include confined space entry for tank cleaning, site decontamination, remediation, railcar cleaning, manhole/vault clean outs, product recovery and transfer and vacuum services. Additional services include filtration and water treatment services. Response services for environmental emergencies of any scale range from man-made disasters such as oil spills to natural disasters like hurricanes. Emergency response services also include spill cleanup on land and water, as well as contagion disinfection, decontamination and disposal services. Field and emergency response services are provided based on purchase orders or agreements with customers and include prices generally based upon daily, hourly or job rates for equipment, materials and personnel. The Company recognizes revenue for these services over time, as the customer receives and consumes the benefits of the services as they are being performed and the Company has a right to payment for performance completed to date. The Company uses the input method to recognize revenue over time, based on time and materials incurred. The duration of such services can be over a number of hours, several days or even months for larger scale projects.

Safety-Kleen Environmental Services—Safety-Kleen Environmental Services revenues contribute both to the Environmental Services operating segment and the Safety-Kleen Sustainability Solutions operating segment depending upon the nature of such revenues and operating responsibilities relative to executing the revenue contracts. Revenues from providing containerized waste handling and disposal services, parts washer services and vacuum services, referred to collectively as the Safety-Kleen branches' core service offerings, contribute to the revenues of the Environmental Services operating segment. In addition, sales of packaged blended oil products and other complementary product sales contribute to the revenues of the Environmental Services operating segment. Revenues generated from waste oil, anti-freeze and oil filter collection services, sales of bulk blended oil products and sales of bulk automotive fluids contribute to the Safety-Kleen Sustainability Solutions operating segment.

Generally, the revenue from services is recognized over time, as the customer receives and consumes the benefits of the services as they are being performed and the Company has a right to payment for performance completed to date. The duration of such services can be over a number of hours or several days. The Company uses the input method to recognize revenue over time, based on time and materials incurred. Product revenue is recognized upon the transfer of control whereby control transfers when the products are delivered to the customer. Containerized waste services consist of profiling, collecting, transporting and recycling or disposing of a wide variety of waste. Related collection and transportation revenues are recognized over time, as the customer receives and consumes the benefits of the services as they are being performed and the Company has a right to payment for performance completed to date. Parts washer services include customer use of the Company's parts washer equipment, cleaning and maintenance of the parts washer equipment and removal and replacement of used cleaning fluids. Parts washer services are considered a single performance obligation due to the highly integrated and interdependent nature of the arrangement. Revenue from parts washer services is recognized over the service interval as the customer receives the benefit of the services.

Safety-Kleen Oil—Safety-Kleen Oil related sales contribute to the revenues of the Safety-Kleen Sustainability Solutions segment. These revenues are generated from sales of high-quality base and blended lubricating oils to third-party distributors, government agencies, fleets, railroads and industrial customers. The business also sells recycled fuel oil to asphalt plants, industrial plants and pulp and paper companies. The used oil is also processed into vacuum gas oil which can be further re-refined into lubricant base oils or sold directly into the marine diesel oil fuel market. Revenue for oil products is recognized at a point in time, upon the transfer of control. Control transfers when the products are delivered to the customer.

The following tables present the Company's third-party revenue disaggregated by source of revenue and geography (in thousands):

	For the Three Months Ended September 30, 2023			
	Environmental Services	Safety-Kleen Sustainability Solutions	Corporate	Total
Primary Geographical Markets				
United States	$ 1,017,224	$ 206,860	$ 112	$ 1,224,196
Canada	118,055	23,445	—	141,500
Total third-party revenues	$ 1,135,279	$ 230,305	$ 112	$ 1,365,696
Sources of Revenue				
Technical Services	$ 403,889	$ —	$ —	$ 403,889
Industrial Services and Other	350,251	—	112	350,363
Field and Emergency Response Services	155,046	—	—	155,046
Safety-Kleen Environmental Services	226,093	59,458	—	285,551
Safety-Kleen Oil	—	170,847	—	170,847
Total third-party revenues	$ 1,135,279	$ 230,305	$ 112	$ 1,365,696

	For the Three Months Ended September 30, 2022			
	Environmental Services	Safety-Kleen Sustainability Solutions	Corporate	Total
Primary Geographical Markets				
United States	$ 960,737	$ 249,035	$ 283	$ 1,210,055
Canada	119,295	33,736	—	153,031
Total third-party revenues	$ 1,080,032	$ 282,771	$ 283	$ 1,363,086
Sources of Revenue				
Technical Services	$ 398,664	$ —	$ —	$ 398,664
Industrial Services and Other	332,025	—	283	332,308
Field and Emergency Response Services	150,031	—	—	150,031
Safety-Kleen Environmental Services	199,312	52,072	—	251,384
Safety-Kleen Oil	—	230,699	—	230,699
Total third-party revenues	$ 1,080,032	$ 282,771	$ 283	$ 1,363,086

	For the Nine Months Ended September 30, 2023			
	Environmental Services	Safety-Kleen Sustainability Solutions	Corporate	Total
Primary Geographical Markets				
United States	$ 3,017,547	$ 641,625	$ 335	$ 3,659,507
Canada	340,196	71,280	—	411,476
Total third-party revenues	$ 3,357,743	$ 712,905	$ 335	$ 4,070,983
Sources of Revenue				
Technical Services	$ 1,160,306	$ —	$ —	$ 1,160,306
Industrial Services and Other	1,086,175	—	335	1,086,510
Field and Emergency Response Services	457,491	—	—	457,491
Safety-Kleen Environmental Services	653,771	171,469	—	825,240
Safety-Kleen Oil	—	541,436	—	541,436
Total third-party revenues	$ 3,357,743	$ 712,905	$ 335	$ 4,070,983

	For the Nine Months Ended September 30, 2022			
	Environmental Services	Safety-Kleen Sustainability Solutions	Corporate	Total
Primary Geographical Markets				
United States	$ 2,740,994	$ 688,444	$ 434	$ 3,429,872
Canada	364,342	94,293	—	458,635
Total third-party revenues	$ 3,105,336	$ 782,737	$ 434	$ 3,888,507
Sources of Revenue				
Technical Services	$ 1,109,339	$ —	$ —	$ 1,109,339
Industrial Services and Other	1,001,733	—	434	1,002,167
Field and Emergency Response Services	427,250	—	—	427,250
Safety-Kleen Environmental Services	567,014	145,841	—	712,855
Safety-Kleen Oil	—	636,896	—	636,896
Total third-party revenues	$ 3,105,336	$ 782,737	$ 434	$ 3,888,507

Contract Balances

(in thousands)	September 30, 2023	December 31, 2022
Receivables	$ 1,010,335	$ 964,603
Contract assets (unbilled receivables)	130,888	107,010
Contract liabilities (deferred revenue)	102,468	94,094

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables (contract assets) and customer advances and deposits or deferred revenue (contract liabilities) on the consolidated balance sheet. Generally, billing occurs subsequent to revenue recognition, as a right to payment is not just subject to passage of time, resulting in contract assets, which are generally classified as current. The Company sometimes receives advances or deposits from its customers before revenue is recognized, resulting in contract liabilities. These assets and liabilities are reported on the consolidated balance sheet on a contract-by-contract basis at the end of each reporting period. The contract liability balances at the beginning of each period presented were generally fully recognized in the subsequent three-month period.

(4) BUSINESS COMBINATIONS

2023 Acquisition

On March 31, 2023, the Company acquired Thompson Industrial Services, LLC ("Thompson Industrial") for an all-cash purchase price of $110.9 million, net of cash acquired. In the third quarter of 2023, the Company received $1.0 million after finalizing the acquisition date working capital balances, which decreased the overall purchase price. The operations of Thompson Industrial expand the Environmental Services segment's industrial service operations in the southeastern region of the United States.

The preliminary allocation of the purchase price is provisional and was based on estimates of the fair value of assets acquired and liabilities assumed as of the acquisition date. The Company continues to obtain information to complete the valuation of these balances and the associated income tax accounting. Measurement period adjustments will reflect new information obtained about facts and circumstances that existed as of the acquisition date. The following table summarizes the preliminary determination and recognition of assets acquired and liabilities assumed (in thousands):

	At Acquisition Date As Reported March 31, 2023	Measurement Period Adjustments	At Acquisition Date As Reported September 30, 2023
Accounts receivable	$ 25,793	$ (450)	$ 25,343
Inventories and supplies	233	—	233
Prepaid expenses and other current assets	1,150	155	1,305
Property, plant and equipment	28,030	(1,311)	26,719
Permits and other intangibles	28,100	800	28,900
Operating lease right-of-use assets	4,716	—	4,716
Other non-current assets	36	36	72
Current liabilities	(11,514)	1,269	(10,245)
Current portion of operating lease liabilities	(1,653)	—	(1,653)
Operating lease liabilities, less current portion	(3,063)	—	(3,063)
Other long-term liabilities	—	(560)	(560)
Total identifiable net assets	71,828	(61)	71,767
Goodwill	40,092	(1,004)	39,088
Total purchase price	$ 111,920	$ (1,065)	$ 110,855

Permits and other intangible assets acquired include customer relationships, trademarks/tradenames and non-compete agreements and are anticipated to have estimated useful lives of between five and 15 years with a weighted average useful life of approximately 13 years. The excess of the total purchase price, which includes the aggregate cash consideration paid in excess of the fair value of the tangible and intangible assets acquired and liabilities assumed, was recorded as goodwill. The goodwill recognized is attributable to the expected operating synergies, assembled workforce and growth potential that the Company expects to realize from the acquisition. Goodwill generated from the acquisition is deductible for tax purposes.

The operations included in the Company's financial statements for the three and nine months ended September 30, 2023, and pro forma revenue and earnings amounts on a combined basis as if this acquisition had been completed on January 1, 2022 are immaterial to the consolidated financial statements of the Company.

2022 Acquisitions

On June 17, 2022, the Company acquired a privately-owned company for an all-cash purchase price of approximately $78.9 million, net of cash acquired. The operations of the newly acquired company expand the Safety-Kleen Sustainability Solutions segment's waste oil collection capabilities and re-refining business throughout the southeastern region of the United States, including the addition of a re-refinery in Georgia.

The Company finalized the purchase accounting for this acquisition. The allocation of the purchase price was based on estimates of the fair value and assets acquired and liabilities assumed as of June 17, 2022. The following table summarizes the final determination and recognition of assets acquired and liabilities assumed (in thousands):

	At Acquisition Date As Reported December 31, 2022	Measurement Period Adjustments	Final Allocation At Acquisition Date As Reported September 30, 2023
Accounts receivable	$ 1,111	$ (22)	$ 1,089
Inventories and supplies	5,816	(71)	5,745
Prepaid expenses and other current assets	144	—	144
Property, plant and equipment	19,605	2,626	22,231
Permits and other intangibles	23,500	—	23,500
Operating lease right-of-use assets	585	—	585
Other non-current assets	13	—	13
Current liabilities	(3,271)	(104)	(3,375)
Current portion of operating lease liabilities	(186)	—	(186)
Operating lease liabilities, less current portion	(399)	—	(399)
Other long-term liabilities	(55)	(2,626)	(2,681)
Total identifiable net assets	46,863	(197)	46,666
Goodwill	32,015	197	32,212
Total purchase price	$ 78,878	$ —	$ 78,878

Permits and other intangible assets acquired include supplier relationships, permits, customer relationships and trademarks/tradenames and are anticipated to have estimated useful lives of between five and 20 years with a weighted average useful life of approximately 18 years. The excess of the total purchase price, which includes the aggregate cash consideration paid in excess of the fair value of the tangible and intangible assets acquired, was recorded as goodwill. The goodwill recognized is attributable to the expected operating synergies, assembled workforce and growth potential that the Company expects to realize from the acquisition. Goodwill generated from the acquisition is deductible for tax purposes.

On December 9, 2022, the Company acquired a privately-owned business for $12.6 million cash consideration. The acquired company expands the Safety-Kleen Sustainability Solutions segment's oil collection operations in the southeastern region of the United States. In connection with this acquisition, goodwill of $2.6 million was recognized. The results of operations for the acquired business were not material in 2022.

(5) DISPOSITION OF BUSINESS

On June 30, 2022, the Company completed the sale of a line of business as part of its continuous focus on divesting certain non-core operations. The divested line of business was previously included within the Environmental Sales & Service reporting unit of the Environmental Services segment. The Company determined that the disposition did not constitute a strategic shift and that the impact on the Company's overall operations and financial results is not be material. Accordingly, the operations associated with the disposal were not reported in discontinued operations. The final purchase price for the line of business was $18.8 million, after settling working capital. The gain on sale of $8.9 million, after accounting for the assets sold, liabilities transferred upon sale and transaction costs, was included in gain on sale of business in the Company's consolidated statement of operations for the nine months ended September 30, 2022.

(6) INVENTORIES AND SUPPLIES

Inventories and supplies consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Oil and oil related products	$ 109,345	$ 151,519
Supplies	170,512	143,743
Solvent and solutions	11,519	11,994
Other	20,136	17,738
Total inventories and supplies	$ 311,512	$ 324,994

Supplies inventories consist primarily of critical spare parts to support the Company's incinerator and re-refinery operations and other general supplies used in our normal day-to-day operations. Other inventories consist primarily of parts washer components, cleaning fluids, absorbents and automotive fluids, such as windshield washer fluid and antifreeze.

(7) PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Land	$ 174,598	$ 172,579
Asset retirement costs (non-landfill)	27,100	22,001
Landfill assets	247,822	232,872
Buildings and improvements (1)	622,059	591,397
Vehicles (2)	1,214,945	1,112,188
Equipment (3)	2,343,272	2,195,064
Construction in progress	191,311	140,328
	4,821,107	4,466,429
Less - accumulated depreciation and amortization	2,692,599	2,486,127
Total property, plant and equipment, net	$ 2,128,508	$ 1,980,302

(1) Balances inclusive of gross right-of-use ("ROU") assets classified as finance leases of $8.0 million in both periods.
(2) Balances inclusive of gross ROU assets classified as finance leases of $132.5 million and $106.7 million, respectively.
(3) Balances inclusive of gross ROU assets classified as finance leases of $9.2 million in both periods.

Depreciation expense, inclusive of landfill and finance lease amortization, was $80.4 million and $229.7 million for the three and nine months ended September 30, 2023, respectively. Depreciation expense, inclusive of landfill and finance lease amortization, was $75.3 million and $223.0 million for the three and nine months ended September 30, 2022, respectively. The Company recorded $1.7 million and $4.4 million of capitalized interest during the three and nine months ended September 30, 2023, respectively. The Company recorded $0.9 million and $2.0 million of capitalized interest during the three and nine months ended September 30, 2022, respectively. The capitalized interest in all periods is mainly due to the construction of a new incinerator in Kimball, Nebraska.

(8) GOODWILL AND OTHER INTANGIBLE ASSETS

The changes in goodwill by segment for the nine months ended September 30, 2023 were as follows (in thousands):

	Environmental Services	Safety-Kleen Sustainability Solutions	Totals
Balance at January 1, 2023	$ 1,071,846	$ 175,032	$ 1,246,878
Increase from current period acquisition	39,088	—	39,088
Measurement period adjustments from prior period acquisitions	—	342	342
Foreign currency translation	118	47	165
Balance at September 30, 2023	$ 1,111,052	$ 175,421	$ 1,286,473

The Company assesses goodwill on an annual basis as of December 31 or at an interim date when events or changes in the business environment ("triggering events") would more likely than not reduce the fair value of a reporting unit below its carrying value. During the period ended September 30, 2023, no such triggering events were identified.

As of September 30, 2023 and December 31, 2022, the Company's intangible assets consisted of the following (in thousands):

	September 30, 2023			December 31, 2022		
	Cost	Accumulated Amortization	Net	Cost	Accumulated Amortization	Net
Permits	$ 189,982	$ 115,122	$ 74,860	$ 188,373	$ 109,036	$ 79,337
Customer and supplier relationships	604,493	251,378	353,115	583,709	229,368	354,341
Other intangible assets	100,012	34,547	65,465	89,388	24,818	64,570
Total amortizable permits and other intangible assets	894,487	401,047	493,440	861,470	363,222	498,248
Trademarks and trade names	120,100	—	120,100	122,534	—	122,534
Total permits and other intangible assets	$ 1,014,587	$ 401,047	$ 613,540	$ 984,004	$ 363,222	$ 620,782

Amortization expense of permits, customer and supplier relationships and other intangible assets was $12.5 million and $37.8 million in the three and nine months ended September 30, 2023, respectively. Amortization expense of permits, customer and supplier relationships and other intangible assets was $13.1 million and $37.6 million in the three and nine months ended September 30, 2022, respectively.

The expected amortization of the net carrying amount of finite-lived intangible assets at September 30, 2023 was as follows (in thousands):

Years Ending December 31,	Expected Amortization
2023 (three months)	$ 12,420
2024	46,437
2025	43,042
2026	41,143
2027	39,067
Thereafter	311,331
	$ 493,440

(9) ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Accrued insurance	$ 98,803	$ 92,909
Accrued interest	14,791	20,033
Accrued compensation and benefits	98,108	123,226
Accrued income, real estate, sales and other taxes	59,035	61,442
Accrued other	98,360	99,106
	$ 369,097	$ 396,716

(10) CLOSURE AND POST-CLOSURE LIABILITIES

The changes to closure and post-closure liabilities (also referred to as “asset retirement obligations”) from January 1, 2023 through September 30, 2023 were as follows (in thousands):

	Landfill Retirement Liability	Non-Landfill Retirement Liability	Total
Balance at January 1, 2023	$ 62,251	$ 56,550	$ 118,801
Liabilities assumed in acquisitions	—	574	574
Measurement period adjustments from prior period acquisitions	—	3,015	3,015
New asset retirement obligations	2,221	—	2,221
Accretion	3,765	3,351	7,116
Changes in estimates recorded to consolidated statement of operations	—	47	47
Changes in estimates recorded to consolidated balance sheet	(327)	1,461	1,134
Expenditures	(7,205)	(5,852)	(13,057)
Currency translation and other	20	20	40
Balance at September 30, 2023	$ 60,725	$ 59,166	$ 119,891

During the first quarter of 2023, the Company's non-commercial landfill at the Deer Park, Texas incineration facility reached its permitted capacity, as expected. The Company has commenced closure activities; however, there have been no changes to the liabilities related to this location. In the nine months ended September 30, 2023, there were no significant benefits or charges resulting from changes in estimates for closure and post-closure liabilities.

(11) REMEDIAL LIABILITIES

The changes to remedial liabilities from January 1, 2023 through September 30, 2023 were as follows (in thousands):

	Remedial Liabilities for Landfill Sites	Remedial Liabilities for Inactive Sites	Remedial Liabilities (Including Superfund) for Non-Landfill Operations	Total
Balance at January 1, 2023	$ 1,824	$ 59,749	$ 54,717	$ 116,290
Accretion	66	1,918	1,181	3,165
Changes in estimates recorded to consolidated statement of operations	13	1,318	1,880	3,211
Expenditures	(39)	(2,896)	(8,072)	(11,007)
Currency translation and other	—	1	44	45
Balance at September 30, 2023	$ 1,864	$ 60,090	$ 49,750	$ 111,704

In the nine months ended September 30, 2023, the Company increased its remedial liabilities for an inactive site and an active site by $1.1 million each due to changes in the estimates of the related liabilities to account for new information obtained regarding the ultimate remediation of these sites.

(12) FINANCING ARRANGEMENTS

Long-term Debt

The following table is a summary of the Company's long-term debt (in thousands):

Current Portion of Long-Term Debt:	September 30, 2023	December 31, 2022
Secured senior term loans	$ 10,000	$ 10,000
Long-Term Debt:		
Secured senior term loans due June 30, 2024 ("2024 Term Loans")	$ —	$ 613,975
Secured senior term loans due October 8, 2028 ("2028 Term Loans")	972,500	980,000
Unsecured senior notes, at 4.875%, due July 15, 2027 ("2027 Notes")	545,000	545,000
Unsecured senior notes, at 5.125%, due July 15, 2029 ("2029 Notes")	300,000	300,000
Unsecured senior notes, at 6.375%, due February 1, 2031 ("2031 Notes")	500,000	—
Long-term debt, at par	$ 2,317,500	$ 2,438,975
Unamortized debt issuance costs and discount, net	(24,548)	(24,147)
Long-term debt, at carrying value	$ 2,292,952	$ 2,414,828

Financing Activities

The Company's significant financing arrangements are described in Note 12, "Financing Arrangements," in the Company's Annual Report on Form 10-K for the year ended December 31, 2022 and, other than as noted below, there have been no material changes to the arrangements described therein. As previously disclosed, on January 24, 2023, the Company completed a private placement of $500.0 million aggregate principal amount of unsecured senior notes which mature on February 1, 2031 (collectively referred to with the 2027 and 2029 Notes as the "Notes"). The proceeds from the 2031 Notes, along with a $114.0 million borrowing on the Company's revolving credit facility and available cash, were used to repay the $614.0 million outstanding principal amount of the 2024 Term Loans. In connection with the repayment, the Company recognized a loss on early extinguishment of debt of $2.4 million in the first quarter of 2023.

The Company maintains a $400.0 million revolving credit facility under which the Company had no outstanding loan balance as of September 30, 2023 and December 31, 2022. During the three months ended March 31, 2023, the Company borrowed $114.0 million on the revolving credit facility to repay the outstanding principal amount of the 2024 Term Loans. The Company repaid the full amount of this borrowing on the revolving credit facility. As of September 30, 2023, the Company had $277.6 million available to borrow under the revolving credit facility and outstanding letters of credit were $122.4 million. Subject to certain conditions, this credit facility will expire in October 2025.

As of September 30, 2023 and December 31, 2022, the estimated fair value of the Company's outstanding long-term debt, including the current portion, was $2.2 billion and $2.4 billion, respectively. The Company's estimates of fair value of its long-term debt, including the current portion, are based on quoted market prices or other available market data which are considered Level 2 measures according to the fair value hierarchy. Level 2 utilizes quoted market prices in markets that are not active, broker or dealer quotation or alternative pricing sources with reasonable levels of price transparency for similar assets and liabilities.

Upon the phase-out of LIBOR as a referenced rate, the Company has transitioned all of its variable rate debt to a successor rate, namely Term SOFR. As of September 30, 2023, after taking into account the interest rate swaps discussed under the "Cash Flow Hedges" header below, the Company's variable rate debt consists of $382.5 million of the 2028 Term Loans and any borrowings under the revolving credit facility.

In accordance with the October 8, 2021 amendment to the credit agreement, the 2028 Term Loan will generally bear interest at a rate of Term SOFR plus an adjustment of 0.11448%, based upon one-month Term SOFR. The Term Loan Agreement also provides for Term SOFR adjustments for other interest periods; however, the Company expects to elect the one-month Term SOFR for interest payments on that debt. The 2.00% margin applicable to the 2028 Term Loans prior to the phase-out of LIBOR also remains applicable to the interest payments under Term SOFR, so in total, the 2028 Term Loan will bear interest at Term SOFR plus 2.11448%. The Company expects these changes will not be material to future financial results.

On April 28, 2023, the Company entered into an amendment to the credit agreement for the revolving credit facility. As amended, the terms of the agreement are substantially the same as prior to the amendment except for certain updates required to transition the agreement to include a defined LIBOR successor rate. Under the amended agreement, borrowings under the revolving credit facility will bear interest at a rate, at the Company's option, of either (i) "Term SOFR" (as defined in the amended agreement) plus an applicable margin ranging from 1.50% to 1.75% per annum based primarily on the level of the Company’s average liquidity for the most recent 30 day period or (ii) Bank of America's base rate plus an applicable margin ranging from 0.50% to 0.75% per annum based primarily on such average liquidity. The amended agreement also continues to provide (i) for an unused line fee payable to the lenders, calculated on the then unused portion of the lenders’ $400.0 million maximum commitments, ranging from 0.25% to 0.375% per annum of the unused commitment, and (ii) for outstanding letters of credit, a fee payable to the lenders equal to the then applicable margin for Term SOFR borrowings described above, and to the issuing banks a standard fronting fee and customary fees and charges in connection with all amendments, extensions, draws and other actions with respect to letters of credit. The Company expects these changes will not be material to future financial results.

Cash Flow Hedges

The Company's strategy to hedge against fluctuations in variable interest rates involves entering into interest rate derivative agreements.

The Company effectively fixed the interest rate on $350.0 million principal of the previously outstanding 2024 Term Loans by entering into interest rate swap agreements in 2018 with a notional amount of $350.0 million ("2018 Swaps"). On January 24, 2023, concurrently with the repayment of the 2024 Term Loans, the Company received a settlement payment of $8.3 million from the counterparties. As a result of the settlement, the Company also reclassified the amounts previously deferred in accumulated other comprehensive loss and recognized a settlement gain of $8.3 million in interest expense during the three months ended March 31, 2023.

In 2022, the Company entered into interest rate swap agreements with a notional amount of $600.0 million ("2022 Swaps") to effectively fix the interest rate on $600.0 million principal of the outstanding 2028 Term Loans. Under the terms of the 2022 Swaps' agreements, the Company receives interest based upon the variable rates on the 2028 Term Loans and pays a fixed amount of interest. The fixed rate on these instruments was 0.931% through June 30, 2023 which, together with the 2.00% interest rate margin for borrowings on the 2028 Term Loans, resulted in an effective annual interest rate of approximately 2.931% through June 30, 2023. The fixed rate on these instruments increased to 1.9645% on July 1, 2023 and the variable rate became linked to Term SOFR to mirror the variable interest payments for the 2028 Term Loans. Including the 2.00% interest rate margin for borrowings on the 2028 Term Loans and the 0.11448% SOFR adjustment per the 2028 Term Loans, beginning July 1, 2023, the effective annual interest rate of this $600.0 million is now 4.07898%. The 2022 Swaps expire September 30, 2027.

At the inception of these instruments, the Company designated both the 2018 Swaps and the 2022 Swaps (collectively referred to as the “Swaps”) as cash flow hedges. As of September 30, 2023, the Company recorded a derivative asset with a fair value of $54.8 million comprised only of the 2022 Swaps as the 2018 Swaps were settled in early 2023, as noted above. The balance of the derivative asset as of December 31, 2022 was $60.6 million, which included both of the Swaps.

No ineffectiveness has been identified on the Swaps and, therefore the change in fair value is recorded in stockholders' equity as a component of accumulated other comprehensive loss. Amounts are reclassified from accumulated other comprehensive loss into interest expense on the consolidated statement of operations in the same period or periods during which the hedged transactions affect earnings.

(13) EARNINGS PER SHARE

The following are computations of basic and diluted earnings per share (in thousands, except per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Numerator for basic and diluted earnings per share:				
Net income	$ 91,340	$ 135,799	$ 279,507	$ 329,270
Denominator:				
Weighted-average basic shares outstanding	54,122	54,111	54,097	54,278
Dilutive effect of outstanding stock awards	297	270	314	264
Dilutive shares outstanding	54,419	54,381	54,411	54,542
Basic earnings per share:	$ 1.69	$ 2.51	$ 5.17	$ 6.07
Diluted earnings per share:	$ 1.68	$ 2.50	$ 5.14	$ 6.04

For the three months ended September 30, 2023 and 2022, all outstanding performance awards and restricted stock awards were included in the calculation of diluted earnings per share except for 103,454 and 81,341, respectively, of performance stock awards for which the performance criteria were not attained at the reporting dates and 6,550 and 10,043, respectively, of restricted stock awards which were excluded as their inclusion would have an antidilutive effect.

For the nine months ended September 30, 2023 and 2022, all outstanding performance awards and restricted stock awards were included in the calculation of diluted earnings per share except for 103,454 and 81,341, respectively, of performance stock awards for which the performance criteria were not attained at the reporting dates and 14,050 and 13,500, respectively, of restricted stock awards which were excluded as their inclusion would have an antidilutive effect.

(14) ACCUMULATED OTHER COMPREHENSIVE LOSS

The changes in accumulated other comprehensive loss by component and related tax impacts for the nine months ended September 30, 2023 were as follows (in thousands):

	Foreign Currency Translation Adjustments	Unrealized Loss on Available-For-Sale Securities	Unrealized Gain on Fair Value of Interest Rate Hedges	Unrealized Loss on Unfunded Pension Liability	Total
Balance at January 1, 2023	$ (209,339)	$ (563)	$ 43,058	$ (337)	$ (167,181)
Other comprehensive income (loss) before reclassifications	813	394	19,293	(1)	20,499
Amounts reclassified out of accumulated other comprehensive loss	—	—	(25,175)	—	(25,175)
Tax (provision) benefit	—	(83)	2,801	—	2,718
Other comprehensive income (loss)	813	311	(3,081)	(1)	(1,958)
Balance at September 30, 2023	$ (208,526)	$ (252)	$ 39,977	$ (338)	$ (169,139)

The amount realized in the consolidated statement of operations during the three and nine months ended September 30, 2023 which was reclassified out of accumulated other comprehensive loss was as follows (in thousands):

Component of Accumulated Other Comprehensive Loss	For the Three Months Ended September 30, 2023	For the Nine Months Ended September 30, 2023	Location
Unrealized Gain on Fair Value of Interest Rate Hedges (1)	$ 5,000	$ 25,175	Interest expense, net of interest income

(1) For the nine months ended September 30, 2023, the balance is inclusive of an $8.3 million gain realized in connection with the settlement of the 2018 Swaps. For more information on this transaction, see Note 12, "Financing Arrangements."

(15) STOCK-BASED COMPENSATION

Total stock-based compensation cost charged to selling, general and administrative expenses for the three and nine months ended September 30, 2023 was $4.3 million and $14.8 million, respectively. Total stock-based compensation cost charged to selling, general and administrative expenses for the three and nine months ended September 30, 2022 was $7.8 million and $20.4 million, respectively. The total income tax benefit recognized in the consolidated statements of operations from stock-based compensation expense for the three and nine months ended September 30, 2023 was $0.7 million and $2.4 million, respectively. The total income tax benefit recognized in the consolidated statements of operations from stock-based compensation expense for the three and nine months ended September 30, 2022 was $1.5 million and $3.8 million, respectively.

Restricted Stock Awards

The following table summarizes information about restricted stock awards for the nine months ended September 30, 2023:

Restricted Stock	Number of Shares	Weighted Average Grant-Date Fair Value
Balance at January 1, 2023	427,142	$ 84.64
Granted	165,368	137.06
Vested	(157,806)	74.74
Forfeited	(44,056)	102.42
Balance at September 30, 2023	390,648	$ 108.83

As of September 30, 2023, there was $32.5 million of total unrecognized compensation cost arising from restricted stock awards. This cost is expected to be recognized over a weighted average period of 3.0 years. The total fair value of restricted stock vested during the three and nine months ended September 30, 2023 was $16.6 million and $24.6 million, respectively. The total fair value of restricted stock vested during the three and nine months ended September 30, 2022 was $9.1 million and $14.7 million, respectively.

Performance Stock Awards

Performance stock awards are subject to performance criteria established by the Compensation Committee of the Company's Board of Directors prior to or at the date of grant. The vesting of the performance stock awards is based on achieving targets currently based on revenue, Adjusted EBITDA Margin, Return on Invested Capital and Total Recordable Incident Rate. In addition, performance stock awards include continued service conditions.

The following table summarizes information about performance stock awards for the nine months ended September 30, 2023:

Performance Stock	Number of Shares	Weighted Average Grant-Date Fair Value
Balance at January 1, 2023	213,679	$ 91.62
Granted	119,382	130.77
Vested	(69,268)	92.60
Forfeited	(35,874)	111.03
Balance at September 30, 2023	227,919	$ 108.77

As of September 30, 2023, there was $3.7 million of total unrecognized compensation cost arising from unvested performance stock awards deemed probable of vesting. The total fair value of performance awards vested during the three and nine months ended September 30, 2023 was $1.7 million and $9.6 million, respectively. The total fair value of performance awards vested during the three and nine months ended September 30, 2022 was $1.0 million and $4.7 million, respectively.

(16) COMMITMENTS AND CONTINGENCIES

The Company and its subsidiaries are subject to legal proceedings and claims arising in the ordinary course of business. Actions filed against the Company arise from commercial and employment-related claims including alleged class actions related to sales practices and wage and hour claims. The plaintiffs in these actions may be seeking damages or injunctive relief or both. These actions are in various jurisdictions and stages of proceedings, and some are covered in part by insurance. In addition, the Company’s waste management services operations are regulated by federal, state, provincial and local laws enacted to regulate discharge of materials into the environment, remediation of contaminated soil and groundwater or otherwise protect the environment. This ongoing regulation results in the Company frequently becoming a party to legal or administrative proceedings involving all levels of government authorities and other interested parties. The issues involved in such proceedings generally relate to alleged violations of existing permits and licenses or alleged responsibility under federal or state Superfund laws to remediate contamination at properties owned either by the Company or by other parties (“third-party sites”) to which either the Company or the prior owners of certain of the Company’s facilities shipped waste.

At September 30, 2023 and December 31, 2022, the Company had recorded reserves of $31.0 million and $37.1 million, respectively, for actual or probable liabilities related to the legal and administrative proceedings in which the Company was then involved, the principal of which are described below. As of September 30, 2023 and December 31, 2022, the $31.0 million and $37.1 million, respectively, of reserves consisted of (i) $24.2 million and $24.1 million, respectively, related to pending legal or administrative proceedings, including Superfund liabilities, which were included in remedial liabilities on the consolidated balance sheets, and (ii) $6.8 million and $13.0 million, respectively, primarily related to federal, state and provincial enforcement actions, which were included in accrued expenses on the consolidated balance sheets.

In management's opinion, it is not reasonably possible that the potential liability beyond what has been recorded, if any, that may result from these actions, either individually or collectively, will have a material effect on the Company's financial position, results of operations or cash flows. The Company periodically adjusts the aggregate amount of these reserves when actual or probable liabilities are paid or otherwise discharged, new claims arise, or additional relevant information about existing or probable claims becomes available.

Legal or Administrative Proceedings

As of September 30, 2023, the principal legal and administrative proceedings in which the Company was involved, or which had been terminated during 2023, relate to Safety-Kleen product liability cases and Superfund proceedings.

Safety-Kleen Product Liability Cases: Safety-Kleen, Inc. ("Safety-Kleen"), which is a legal entity acquired by the Company in 2012, has been named as a defendant in certain product liability cases that are currently pending in various courts and jurisdictions throughout the United States. As of September 30, 2023, there were approximately 65 proceedings (excluding cases which have been settled but not formally dismissed) wherein persons claim personal injury resulting from the use of Safety-Kleen's parts cleaning equipment or cleaning products. These proceedings typically involve allegations that the solvent used in Safety-Kleen's parts cleaning equipment contains contaminants and/or that Safety-Kleen's recycling process does not effectively remove the contaminants that become entrained in the solvent during their use. In addition, certain claimants assert that Safety-Kleen failed to warn adequately the product user of potential risks, including a historic failure to warn that solvent contains trace amounts of toxic or hazardous substances such as benzene.

The Company maintains insurance that it believes will provide coverage for these product liability claims (over amounts accrued for self-insured retentions and deductibles in certain limited cases), except for punitive damages to the extent not insurable under state law or excluded from insurance coverage. The Company also believes that these claims lack merit and historically has vigorously defended, and intends to continue to vigorously defend itself and the safety of its products against all of these claims. Such matters are subject to many uncertainties and outcomes are not predictable with assurance. Consequently, the Company is unable to ascertain the ultimate aggregate amount of monetary liability or financial impact with respect to these matters as of September 30, 2023. From January 1, 2023 to September 30, 2023, 15 product liability claims were settled or dismissed. Due to the nature of these claims and the related insurance, the Company did not incur any expense as insurance provided coverage in full for all such claims. Safety-Kleen may be named in similar, additional lawsuits in the future, including claims for which insurance coverage may not be available.

Superfund Proceedings: The Company has been notified that either the Company (which, since December 28, 2012, has included Safety-Kleen) or the prior owners of certain of the Company's facilities for which the Company may have certain indemnification obligations have been identified as potentially responsible parties ("PRPs") or potential PRPs in connection with 131 sites which are subject to or are proposed to become subject to proceedings under federal or state Superfund laws. Of the 131 Superfund related sites, six involve facilities that are now owned or leased by the Company and 125 involve third-party sites to which either the Company or the prior owners of certain of the Company’s facilities shipped waste. Of the 125 third-party sites, 30 are now settled, 14 are currently requiring expenditures on remediation and 81 are not currently requiring expenditures on remediation.

In connection with each site, the Company has estimated the extent, if any, to which it may be subject, either directly or as a result of any indemnification obligations, for cleanup and remediation costs, related legal and consulting costs associated with PRP investigations, settlements and related legal and administrative proceedings. The amount of such actual and potential liability is inherently difficult to estimate because of, among other relevant factors, uncertainties as to the legal liability (if any) of the Company or the prior owners of certain of the Company's facilities to contribute a portion of the cleanup costs, the assumptions that must be made in calculating the estimated cost and timing of remediation, the identification of other PRPs and their respective capability and obligation to contribute to remediation efforts and the existence and legal standing of indemnification agreements (if any) with prior owners, which may either benefit the Company or subject the Company to potential indemnification obligations. The Company believes its potential monetary liability could exceed $1.0 million at three of the 131 Superfund related sites.

Of the 125 third-party sites at which the Company has been notified it is a PRP or potential PRP or may have indemnification obligations, the Company has indemnification agreements at a total of 17 sites. These agreements indemnify the Company (which now includes Safety-Kleen) with respect to any liability at the 17 sites for waste disposed prior to the Company's (or Safety-Kleen's) acquisition of the former subsidiaries of Waste Management and McKesson which had shipped waste to those sites. Accordingly, the indemnifying parties are paying all costs of defending those subsidiaries in those 17 cases, including legal fees and settlement costs. However, there can be no guarantee that the Company's ultimate liabilities for those sites will not exceed the amount recorded or that indemnities applicable to any of these sites will be available to pay all or a portion of related costs. Except for those indemnification agreements discussed, the Company does not have an indemnity agreement with respect to any of the 125 third-party sites discussed above.

Federal, State and Provincial Enforcement Actions

From time to time, the Company pays fines or penalties in regulatory proceedings relating primarily to waste treatment, storage or disposal facilities. As of September 30, 2023 there were no proceedings for which the Company believes it is possible that the sanctions could equal or exceed $1.0 million. As of December 31, 2022, there was one proceeding for which the Company believed it was possible that the sanctions could equal or exceed $1.0 million. The Company believes that the fines or other penalties in this or any of the other regulatory proceedings will, individually or in the aggregate, not have a material effect on its financial condition, results of operations or cash flows.

(17) SEGMENT REPORTING

Segment reporting is prepared on the same basis that the Company's chief operating decision maker, which is a committee comprised of the Company's co-Chief Executive Officers, manages the business, makes operating decisions and assesses performance. The Company is managed and reports as two operating segments; (i) the Environmental Services segment and (ii) the Safety-Kleen Sustainability Solutions segment.

Third-party revenue is revenue billed to outside customers by a particular segment. Direct revenues is revenue allocated to the segment providing the product or service. Intersegment revenues represent the sharing of third-party revenues among the segments based on products and services provided by each segment as if the products and services were sold directly to the third-party. The intersegment revenues are shown net. The operations not managed through the Company’s operating segments described above are recorded as “Corporate Items.”

The following tables reconcile third-party revenues to direct revenues for the three and nine months ended September 30, 2023 and 2022 (in thousands):

	For the Three Months Ended September 30, 2023			For the Three Months Ended September 30, 2022		
	Third-Party Revenues	Intersegment Revenues (Expenses), net	Direct Revenues	Third-Party Revenues	Intersegment Revenues (Expenses), net	Direct Revenues
Environmental Services	$ 1,135,279	$ 11,084	$ 1,146,363	$ 1,080,032	$ 6,452	$ 1,086,484
Safety-Kleen Sustainability Solutions	230,305	(11,084)	219,221	282,771	(6,452)	276,319
Corporate Items	112	—	112	283	—	283
Total	$ 1,365,696	$ —	$ 1,365,696	$ 1,363,086	$ —	$ 1,363,086

	For the Nine Months Ended September 30, 2023			For the Nine Months Ended September 30, 2022		
	Third-Party Revenues	Intersegment Revenues (Expenses), net	Direct Revenues	Third-Party Revenues	Intersegment Revenues (Expenses), net	Direct Revenues
Environmental Services	$ 3,357,743	$ 31,397	$ 3,389,140	$ 3,105,336	$ 19,336	$ 3,124,672
Safety-Kleen Sustainability Solutions	712,905	(31,397)	681,508	782,737	(19,336)	763,401
Corporate Items	335	—	335	434	—	434
Total	$ 4,070,983	$ —	$ 4,070,983	$ 3,888,507	$ —	$ 3,888,507

The primary financial measure by which the Company evaluates the performance of its segments is Adjusted EBITDA, which consists of net income plus accretion of environmental liabilities, stock-based compensation, depreciation and amortization, net interest expense, loss on early extinguishment of debt and provision for income taxes and excludes other gains, losses and non-cash charges not deemed representative of fundamental segment results and other income (expense), net. Transactions between the segments are accounted for at the Company's best estimate based on similar transactions with outside customers.

The following table presents Adjusted EBITDA information used by management by reported segment (in thousands):

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Adjusted EBITDA:				
Environmental Services	$ 288,982	$ 260,687	$ 822,949	$ 713,630
Safety-Kleen Sustainability Solutions	31,146	103,156	126,024	252,043
Corporate Items	(65,111)	(55,288)	(191,312)	(167,789)
Total	255,017	308,555	757,661	797,884
Reconciliation to Consolidated Statements of Operations:				
Accretion of environmental liabilities	3,388	3,246	10,281	9,599
Stock-based compensation	4,291	7,828	14,809	20,375
Depreciation and amortization	92,970	88,394	267,425	260,560
Income from operations	154,368	209,087	465,146	507,350
Other (income) expense, net	(334)	(104)	833	(2,073)
Loss on early extinguishment of debt	—	—	2,362	—
Gain on sale of business	—	—	—	(8,864)
Interest expense, net of interest income	29,696	28,081	80,400	79,354
Income before provision for income taxes	$ 125,006	$ 181,110	$ 381,551	$ 438,933

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

Forward-Looking Statements

In addition to historical information, this Quarterly Report on Form 10-Q contains forward-looking statements, which are generally identifiable by use of the words "believes," "expects," "intends," "anticipates," "plans to," "seeks," "should," "estimates," "projects," "may," "likely" or similar expressions. Such statements may include, but are not limited to, statements about future financial and operating results, the Company's plans, objectives, expectations and intentions and other statements that are not historical facts. Forward-looking statements are neither historical facts nor assurances of future performance. Such statements are based upon the beliefs and expectations of Clean Harbors' management as of this date only and are subject to certain risks and uncertainties that could cause actual results to differ materially, including, without limitation, those items identified as "Risk Factors,” in this report under Item 1A and in our Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on March 1, 2023, and in other documents we file from time to time with the SEC. Therefore, readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management’s opinions only as of the date hereof. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements. Clean Harbors undertakes no obligation to revise or publicly release the results of any revision to these forward-looking statements other than through its filings with the SEC, which may be viewed in the "Investors" section of the Clean Harbors website.

Overview

We are North America’s leading provider of environmental and industrial services supporting our customers in finding environmentally responsible solutions to further their sustainability goals in today's world. Everywhere industry meets the environment, we strive to provide eco-friendly products and services that protect and restore North America's natural environment. We believe we operate, in the aggregate, the largest number of hazardous waste incinerators, landfills and treatment, storage and disposal facilities ("TSDFs") in North America. We serve over 300,000 customers, including the majority of Fortune 500 companies, across various markets including chemical and manufacturing, as well as numerous government agencies. These customers rely on us to deliver a broad range of services including but not limited to end-to-end hazardous waste management, emergency response, industrial cleaning and maintenance and recycling services. We are also the largest re-refiner and recycler of used oil in North America and the largest provider of parts cleaning and related environmental services to commercial, industrial and automotive customers in North America.

Performance of our segments is evaluated on several factors of which the primary financial measure is Adjusted EBITDA, as reconciled to our net income and described more fully below. The following is a discussion of how management evaluates its segments in regards to other factors including key performance indicators that management uses to assess the segments’ results, as well as certain macroeconomic trends and influences that impact each reportable segment:

- **Environmental Services -** Environmental Services segment results are predicated upon the demand by our customers for our wide variety of services, waste volumes managed by delivering such services and project work for which responsible waste handling and/or disposal is required. Environmental Services results are also impacted by the demand for planned and unplanned industrial related cleaning and maintenance services at customer sites, environmental cleanup services on a scheduled or emergency basis, including response to large scale events such as major chemical spills, natural disasters, or other instances where immediate and specialized services are required. The Environmental Services segment results include the Safety-Kleen branches' core environmental service offerings of containerized waste disposal, parts washer and vacuum services. These results are driven by the volumes of waste collected from these customers, the overall number of parts washers placed at customer sites and the demand for and frequency of other offered services. In managing the business and evaluating performance, management tracks the volumes and mix of waste handled and disposed of or recycled, generally through our incinerators, TSDFs and landfills, the utilization rates of our incinerators, equipment and workforce, including billable hours, and the number of parts washer services performed, and pricing realized by our business and peer companies as well as other key metrics. Levels of activity and ultimate performance associated with this segment can be impacted by several factors including overall U.S. GDP, U.S. industrial production, economic conditions in the chemical, manufacturing and automotive markets including efforts and economic incentives to reshore operations to the U.S., available capacity at waste disposal outlets, weather conditions, efficiency of our operations, technology, changing regulations, competition, market pricing of our services, costs incurred to deliver our services and the management of our related operating costs.

- **Safety-Kleen Sustainability Solutions -** Safety-Kleen Sustainability Solutions segment results are impacted by our customers' demand for high-quality, environmentally responsible recycled oil products and their demand for our related service and product offerings. Safety-Kleen Sustainability Solutions offers high quality recycled base and blended oil products, including our KLEEN+ brand of Group II+ base oils, to end users including fleet customers, distributors and manufacturers of oil products. Segment results are impacted by market pricing, overall demand and the mix of our oil products sales. Segment results are also predicated on the demand for Safety-Kleen Sustainability Solutions' other product and service offerings including collection services for used oil, used oil filters and other automotive fluids. These fluid collections are used as feedstock in our oil re-refining to produce our base and blended oil products and our recycled automotive related fluid products or are integrated into the Clean Harbors' recycling and disposal network. In operating the business and evaluating performance, management tracks the volumes and relative percentages of base and blended oil sales along with various pricing metrics associated with the commodity driven margin between product pricing and the overall costs associated with the collection of used oil. Levels of activity and ultimate performance associated with this segment can be impacted by economic conditions in the automotive services and manufacturing markets, efficiency of our operations, technology, weather conditions, changing regulations, competition and the management of our related operating costs. Costs incurred in connection with the collection of used oil and other raw materials associated with the segment’s oil related products can also be volatile and can be impacted by global events and their relative impact on commodity products and pricing. The overall market price of oil and regulations that change the possible usage of used oil or burning of used oil as a fuel, impact the premium the segment can charge for used oil collections.

Highlights

Total direct revenues for the three and nine months ended September 30, 2023 were $1,365.7 million and $4,071.0 million, compared with $1,363.1 million and $3,888.5 million for the three and nine months ended September 30, 2022. Our Environmental Services segment direct revenues increased $59.9 million and $264.5 million or 5.5% and 8.5% from the comparable periods in 2022 driven by growth across our service offerings. In the three and nine months ended September 30, 2023, our Safety-Kleen Sustainability Solutions segment direct revenues decreased $57.1 million and $81.9 million or 20.7% and 10.7% from the comparable periods in 2022, due to lower market-based pricing on our base oil product sales. The segment has increased the pricing on our collection of used oil services, which partially offset the impact of lower base oil pricing on direct revenue. Foreign currency translation of our Canadian operations negatively impacted our consolidated direct revenues by $4.4 million and $22.9 million in the three and nine months ended September 30, 2023.

Income from operations for the three and nine months ended September 30, 2023 was $154.4 million and $465.1 million, compared with $209.1 million and $507.4 million in the three and nine months ended September 30, 2022, representing decreases of 26.2% and 8.3%, respectively. Net income for the three and nine months ended September 30, 2023 was $91.3 million and $279.5 million, compared with net income of $135.8 million and $329.3 million in the three and nine months ended September 30, 2022, representing decreases of 32.7% and 15.1%, respectively.

Adjusted EBITDA, which is the primary financial measure by which we evaluate our segments, decreased 17.4% to $255.0 million in the three months ended September 30, 2023 from $308.6 million in the three months ended September 30, 2022. For the nine months ended September 30, 2023, Adjusted EBITDA decreased 5.0% from $797.9 million in the nine months ended September 30, 2022 to $757.7 million in the nine months ended September 30, 2023. These decreases were driven the Safety-Kleen Sustainability Solutions segment. Additional information regarding Adjusted EBITDA, which is a non-GAAP measure, including a reconciliation of Adjusted EBITDA to net income, appears below under *"Adjusted EBITDA."*

Net cash from operating activities for the nine months ended September 30, 2023 increased $98.2 million from $357.5 million in 2022 to $455.7 million in 2023. Adjusted free cash flow, which management uses to measure our financial strength and ability to generate cash, was $148.9 million in the nine months ended September 30, 2023 as compared to $118.1 million in the comparable period of 2022. This increase is due to incremental net cash generated by operating activities, partially offset by higher spend on property, plant and equipment net of proceeds from sale and disposal of fixed assets. Additional information regarding adjusted free cash flow, which is a non-GAAP measure, including a reconciliation of adjusted free cash flow to net cash from operating activities, appears below under "*Adjusted Free Cash Flow*."

Segment Performance

The primary financial measure by which we evaluate the performance of our segments is Adjusted EBITDA. The following table sets forth certain financial information associated with our results of operations for the three and nine months ended September 30, 2023 and September 30, 2022 (in thousands, except percentages):

	Summary of Operations							
	For the Three Months Ended				For the Nine Months Ended			
	September 30, 2023	September 30, 2022	Change	% Change	September 30, 2023	September 30, 2022	Change	% Change
Direct Revenues [(1)]:								
Environmental Services	$ 1,146,363	$ 1,086,484	$ 59,879	5.5%	$ 3,389,140	$ 3,124,672	$ 264,468	8.5%
Safety-Kleen Sustainability Solutions	219,221	276,319	(57,098)	(20.7)	681,508	763,401	(81,893)	(10.7)
Corporate Items	112	283	(171)	N/M	335	434	(99)	N/M
Total	1,365,696	1,363,086	2,610	0.2	4,070,983	3,888,507	182,476	4.7
Cost of Revenues [(2)]:								
Environmental Services	766,242	746,869	19,373	2.6	2,300,853	2,175,864	124,989	5.7
Safety-Kleen Sustainability Solutions	169,207	154,753	14,454	9.3	498,965	457,790	41,175	9.0
Corporate Items	8,502	9,026	(524)	N/M	23,159	18,852	4,307	N/M
Total	943,951	910,648	33,303	3.7	2,822,977	2,652,506	170,471	6.4
Selling, General & Administrative Expenses:								
Environmental Services	91,139	78,928	12,211	15.5	265,338	235,178	30,160	12.8
Safety-Kleen Sustainability Solutions	18,868	18,410	458	2.5	56,519	53,568	2,951	5.5
Corporate Items	61,012	54,373	6,639	12.2	183,297	169,746	13,551	8.0
Total	171,019	151,711	19,308	12.7	505,154	458,492	46,662	10.2
Adjusted EBITDA:								
Environmental Services	288,982	260,687	28,295	10.9	822,949	713,630	109,319	15.3
Safety-Kleen Sustainability Solutions	31,146	103,156	(72,010)	(69.8)	126,024	252,043	(126,019)	(50.0)
Corporate Items	(65,111)	(55,288)	(9,823)	(17.8)	(191,312)	(167,789)	(23,523)	(14.0)
Total	$ 255,017	$ 308,555	$ (53,538)	(17.4)%	$ 757,661	$ 797,884	$ (40,223)	(5.0)%
Adjusted EBITDA as a % of Direct Revenues:								
Environmental Services [(3)]	25.2 %	24.0 %	1.2%		24.3 %	22.8 %	1.5 %	
Safety-Kleen Sustainability Solutions[(3)]	14.2 %	37.3 %	(23.1)%		18.5 %	33.0 %	(14.5)%	
Corporate Items [(4)]	(4.8)%	(4.1)%	(0.7)%		(4.7)%	(4.3)%	(0.4)%	
Total	18.7 %	22.6 %	(3.9)%		18.6 %	20.5 %	(1.9)%	

N/M = not meaningful

(1) Direct revenues are revenues allocated to the segment performing the provided service.

(2) Cost of revenues are shown exclusive of items presented separately on the consolidated statements of operations which consist of (i) accretion of environmental liabilities and (ii) depreciation and amortization.

(3) Calculated as a percentage of individual segment direct revenue.

(4) Calculated as a percentage of total Company revenue.

Direct Revenues

There are many factors which can impact our revenues including, but not limited to: overall levels of industrial activity and economic growth in North America, existence or non-existence of large scale environmental waste and remediation projects, competitive industry pricing, overall market incineration capacity including captive incinerator closures, miles driven and related lubricant demand, impacts of acquisitions and divestitures, the level of emergency response services, government infrastructure investment, weather related events, the number of parts washers placed at customer sites, base and blended oil pricing, market supply for base oil products, market changes relative to the collection of used oil, our ability to manage the spread between oil product prices and prices for the collection of used oil and foreign currency translation. In addition, customer efforts to minimize hazardous waste and changes in regulation can impact our revenues.

Environmental Services

	For the Three Months Ended				For the Nine Months Ended			
	September 30,		2023 over 2022		September 30,		2023 over 2022	
(in thousands, except percentages)	2023	2022	Change	% Change	2023	2022	Change	% Change
Direct revenues	$ 1,146,363	$ 1,086,484	$ 59,879	5.5 %	$ 3,389,140	$ 3,124,672	$ 264,468	8.5 %

Environmental Services direct revenues for the three months ended September 30, 2023 increased $59.9 million from the comparable period in 2022 with growth across our service offerings. Revenues from our Safety-Kleen core service offerings increased $26.8 million from the comparable period in 2022 due to greater demand and improved pricing for our containerized waste, vacuum and parts washer services. Industrial services revenue increased $18.2 million from the comparable period in 2022 due to contributions from the acquisition of Thompson Industrial on March 31, 2023. Technical services revenues increased $5.2 million as overall pricing increases and increased landfill volumes more than offset revenue loss from unplanned plant maintenance and a reduction in fuel surcharges. Utilization at our incinerators was flat at 86% for the three months ended September 30, 2023 and 2022. The Canadian operations of the Environmental Services segment were negatively impacted by $3.6 million due to foreign currency translation.

Environmental Services direct revenues for the nine months ended September 30, 2023 increased $264.5 million from the comparable period in 2022 due to growth across our service offerings. Safety-Kleen core service offerings revenues grew by $86.8 million driven by both greater demand and improved pricing of these services. Revenue from our industrial services operations grew $84.4 million due to contributions from the acquisition of Thompson Industrial coupled with organic growth of the industrial service offerings. Technical services revenue increased $51.0 million with contributions across our portfolio of waste disposal services more than offsetting lower utilization at our incinerators. Utilization at our incinerators for the nine months ended September 30, 2023 was 83% as compared to 87% in the prior year due to unplanned outages for required maintenance and significant weather events earlier in 2023. Field and emergency response service revenues increased $30.2 million from the comparable period in 2022. The Canadian operations of the Environmental Services segment were negatively impacted by $18.2 million due to foreign currency translation.

Safety-Kleen Sustainability Solutions

	For the Three Months Ended				For the Nine Months Ended			
	September 30,		2023 over 2022		September 30,		2023 over 2022	
(in thousands, except percentages)	2023	2022	Change	% Change	2023	2022	Change	% Change
Direct revenues	$ 219,221	$ 276,319	$ (57,098)	(20.7)%	$ 681,508	$ 763,401	$ (81,893)	(10.7)%

In the three months ended September 30, 2023, Safety-Kleen Sustainability Solutions direct revenue decreased $57.1 million from the comparable period in 2022. This decrease was driven by a $54.1 million decrease in base oil sales due to lower pricing despite increased volumes sold. Revenues from our recycled fuel oil and refinery byproducts also decreased $10.3 million. Partially offsetting these reductions were incremental revenues from our sales of blended oil products and used oil collection services. The $6.9 million increase in blended oil sales was driven by higher volumes which more than offset the lower price for these products. Higher pricing drove the $6.3 million increase in revenues from the collection of used oil.

In the nine months ended September 30, 2023, Safety-Kleen Sustainability Solutions direct revenues decreased $81.9 million from the comparable period in 2022 largely due to an $85.8 million reduction in revenues from base oil sales due to lower pricing despite increased volumes sold. Revenues from contract packaging and blending also decreased $10.1 million. Higher pricing drove a $9.0 million increase in revenues from the collection of used oil, and overall used oil gallons collected continues to outpace the same period in 2022. Additionally, revenues from blended oil sales increased by $3.7 million driven by higher volumes. The Canadian operations of the Safety-Kleen Sustainability Solutions segment were negatively impacted by $4.7 million in the nine months ended September 30, 2023 due to foreign currency translation.

Cost of Revenues

We believe that operating cost management is vital to our ability to remain price competitive. As we experience cost increases, including those driven by macroeconomic inflationary pressures such as internal and external labor, transportation, general supplies and energy related costs, we manage these costs through diligent cost monitoring, executing on cost reduction projects and overall customer pricing strategies designed to offset the negative inflationary impacts on our margins.

We continue to upgrade the quality and efficiency of our services through the development of new technology and continued modifications and expansion at our facilities, invest in new business opportunities and aggressively implement strategic sourcing and logistics solutions in the face of these inflationary pressures, while also continuing to optimize our management and operating structure in an effort to manage our operating margins.

Environmental Services

	For the Three Months Ended				For the Nine Months Ended			
	September 30,		2023 over 2022		September 30,		2023 over 2022	
(in thousands, except percentages)	2023	2022	Change	% Change	2023	2022	Change	% Change
Cost of revenues	$ 766,242	$ 746,869	$ 19,373	2.6 %	$ 2,300,853	$ 2,175,864	$ 124,989	5.7 %
As a % of Direct revenues	66.8 %	68.7 %	(1.9)%		67.9 %	69.6 %	(1.7)%	

Environmental Services cost of revenues for the three months ended September 30, 2023 increased $19.4 million from the comparable period in 2022, however as a percentage of revenue these costs decreased 1.9%. Overall, labor and benefit related costs increased $22.0 million and equipment and supply costs increased $4.8 million, commensurate with the revenue growth in the business. External transportation, vehicle and fuel related costs decreased $12.3 million which helped drive the overall improvement in these total costs as a percentage of revenues.

Environmental Services cost of revenues for the nine months ended September 30, 2023 increased $125.0 million from the comparable period in 2022, however as a percentage of revenue these costs decreased 1.7%. Commensurate with the revenue growth in the business, labor and benefit related costs increased $90.3 million and equipment and supply costs increased $32.1 million. External transportation, vehicle and fuel related costs, remained relatively flat for the nine months ended September 30, 2023 when compared to the nine months ended September 30, 2022, which helped drive the overall improvement of cost of revenues as a percentage of direct revenues.

Safety-Kleen Sustainability Solutions

	For the Three Months Ended				For the Nine Months Ended			
	September 30,		2023 over 2022		September 30,		2023 over 2022	
(in thousands, except percentages)	2023	2022	Change	% Change	2023	2022	Change	% Change
Cost of revenues	$ 169,207	$ 154,753	$ 14,454	9.3 %	$ 498,965	$ 457,790	$ 41,175	9.0 %
As a % of Direct revenues	77.2 %	56.0 %	21.2 %		73.2 %	60.0 %	13.2 %	

Safety-Kleen Sustainability Solutions cost of revenues for the three months ended September 30, 2023 increased $14.5 million from the comparable period in 2022, and as a percentage of revenues, these costs increased by 21.2%. Production costs, including additives and raw materials, increased $5.1 million. Transportation, rail, vehicle and fuel costs also increased $3.6 million and supply costs increased $1.0 million. These cost increases were driven mainly by higher re-refinery operating costs in the period and sale of higher cost inventory from production earlier in 2023.

Safety-Kleen Sustainability Solutions cost of revenues for the nine months ended September 30, 2023 increased $41.2 million from the comparable period in 2022 and as a percentage of revenues, these costs increased by 13.2%. Overall, external transportation, rail, vehicle and fuel costs increased $19.3 million, labor and benefit related expense increased $11.6 million and production costs, including additives and raw materials, increased $4.8 million.

Selling, General and Administrative Expenses

We strive to manage our selling, general and administrative ("SG&A") expenses commensurate with the overall performance of our segments and corresponding revenue levels. We believe our ability to properly align these costs with business performance is reflective of our strong management of the businesses and further promotes our ability to remain competitive in the marketplace.

Environmental Services

	For the Three Months Ended				For the Nine Months Ended			
	September 30,		2023 over 2022		September 30,		2023 over 2022	
(in thousands, except percentages)	2023	2022	Change	% Change	2023	2022	Change	% Change
SG&A expenses	$ 91,139	$ 78,928	$ 12,211	15.5 %	$ 265,338	$ 235,178	$ 30,160	12.8 %
As a % of Direct revenues	8.0 %	7.3 %	0.7 %		7.8 %	7.5 %	0.3 %	

Environmental Services SG&A expenses for the three and nine months ended September 30, 2023 increased $12.2 million and $30.2 million, respectively, from the comparable periods in 2022 however, as a percentage of revenues, these costs remained relatively consistent as a result of pricing and cost control initiatives. Overall, investments in our employees led to higher labor and benefits related costs of $12.1 million in the three months ended September 30, 2023 and $29.1 million in the nine months ended September 30, 2023. Higher incentive compensation resulting from revenue growth and profitability also drove these increases.

Safety-Kleen Sustainability Solutions

	For the Three Months Ended				For the Nine Months Ended			
	September 30,		2023 over 2022		September 30,		2023 over 2022	
(in thousands, except percentages)	2023	2022	Change	% Change	2023	2022	Change	% Change
SG&A expenses	$ 18,868	$ 18,410	$ 458	2.5 %	$ 56,519	$ 53,568	$ 2,951	5.5 %
As a % of Direct revenues	8.6 %	6.7 %	1.9 %		8.3 %	7.0 %	1.3 %	

Safety-Kleen Sustainability Solutions SG&A expenses for the three and nine months ended September 30, 2023 increased $0.5 million and $3.0 million from the comparable periods in 2022 and as a percentage of revenues, these costs increased from the prior period, mainly due to the revenue reductions discussed above. A $1.1 million increase in a remedial liability estimate recorded during the third quarter of 2023 drove the increase in the three and nine months ended September 30, 2023. Higher labor and benefit costs in the first half of 2023 drove the remaining increase in the nine months ended September 30, 2023 when compared to the nine months ended September 30, 2022.

Corporate Items

	For the Three Months Ended				For the Nine Months Ended			
	September 30,		2023 over 2022		September 30,		2023 over 2022	
(in thousands, except percentages)	2023	2022	Change	% Change	2023	2022	Change	% Change
SG&A expenses	$ 61,012	$ 54,373	$ 6,639	12.2 %	$ 183,297	$ 169,746	$ 13,551	8.0 %
As a % of Total Company Direct revenues	4.5 %	4.0 %	0.5 %		4.5 %	4.4 %	0.1 %	

We manage our Corporate SG&A expenses commensurate with the overall total Company performance and direct revenue levels. Generally, as revenues increase, we would expect some increase in these costs. Corporate SG&A expenses for the three and nine months ended September 30, 2023 remained consistent as a percentage of total Clean Harbors' direct revenues when compared to the same periods in the prior year. In general, these cost increases in 2023 as compared to 2022 were driven by higher labor and benefits related expenses, professional fees and informational technology costs partially offset by lower stock-based compensation expense. A benefit of $3.0 million recognized in early 2022 for the amount received from Vertex Energy, Inc. upon termination of the proposed asset acquisition also contributed to the increase in expense in the nine months ended September 30, 2023 when compared to the nine months ended September 30, 2022.

Adjusted EBITDA

Management considers Adjusted EBITDA to be a measurement of performance which provides useful information to both management and investors. Adjusted EBITDA should not be considered an alternative to net income or other measurements under generally accepted accounting principles ("GAAP"). Adjusted EBITDA is not calculated identically by all companies and therefore our measurements of Adjusted EBITDA, while defined consistently and in accordance with our existing credit agreement, may not be comparable to similarly titled measures reported by other companies.

	For the Three Months Ended September 30,		2023 over 2022		For the Nine Months Ended September 30,		2023 over 2022	
(in thousands, except percentages)	2023	2022	Change	% Change	2023	2022	Change	% Change
Adjusted EBITDA:								
Environmental Services	$ 288,982	$ 260,687	$ 28,295	10.9 %	$ 822,949	$ 713,630	$ 109,319	15.3 %
Safety-Kleen Sustainability Solutions	31,146	103,156	(72,010)	(69.8)	126,024	252,043	(126,019)	(50.0)
Corporate Items	(65,111)	(55,288)	(9,823)	(17.8)	(191,312)	(167,789)	(23,523)	(14.0)
Total	$ 255,017	$ 308,555	$ (53,538)	(17.4)%	$ 757,661	$ 797,884	$ (40,223)	(5.0)%
Adjusted EBITDA as a % of Direct Revenues [(1)]:								
Environmental Services	25.2 %	24.0 %	1.2 %		24.3 %	22.8 %	1.5 %	
Safety-Kleen Sustainability Solutions	14.2 %	37.3 %	(23.1)%		18.5 %	33.0 %	(14.5)%	
Corporate Items	(4.8)%	(4.1)%	(0.7)%		(4.7)%	(4.3)%	(0.4)%	
Total	18.7 %	22.6 %	(3.9)%		18.6 %	20.5 %	(1.9)%	

(1) Environmental Services and Safety-Kleen Sustainability Solutions calculated as a percentage of individual segment revenues. Corporate Items calculated as a percentage of total Company revenues.

We use Adjusted EBITDA to enhance our understanding of our operating performance, which represents our views concerning our performance in the ordinary, ongoing and customary course of our operations. We historically have found it helpful, and believe that investors have found it helpful, to consider an operating measure that excludes certain expenses relating to transactions not reflective of our core operations. Adjusted EBITDA margin for the Environmental Services segment improved due to the impact of pricing increases on revenue and cost management in both cost of revenues and SG&A expenses. Adjusted EBITDA margin in the Safety-Kleen Sustainability Solutions segment decreased mainly due to reduced revenue. Corporate Items Adjusted EBITDA margin remained relatively consistent as a percentage of total Company revenues.

The information about our operating performance provided by Adjusted EBITDA is used by our management for a variety of purposes. We regularly communicate Adjusted EBITDA results to our lenders since our loan covenants are based upon levels of Adjusted EBITDA achieved and to our board of directors, and we discuss with the board our interpretation of such results. We also compare our Adjusted EBITDA performance against internal targets as a key factor in determining cash and equity bonus compensation for executives and other employees, largely because we believe that this measure is indicative of how the fundamental business is performing and is being managed.

We provide information relating to our Adjusted EBITDA so that analysts, investors and other interested persons have the same data that we use to assess our core operating performance. Adjusted EBITDA should be viewed only as a supplement to the GAAP financial information. We believe, however, that providing this information in addition to, and together with, GAAP financial information provides a better understanding of our core operating performance and how management evaluates and measures our performance.

The following is a reconciliation of net income to Adjusted EBITDA for the following periods (in thousands, except percentages):

	For the Three Months Ended September 30, 2023	For the Three Months Ended September 30, 2022	For the Nine Months Ended September 30, 2023	For the Nine Months Ended September 30, 2022
Net income	$ 91,340	$ 135,799	$ 279,507	$ 329,270
Accretion of environmental liabilities	3,388	3,246	10,281	9,599
Stock-based compensation	4,291	7,828	14,809	20,375
Depreciation and amortization	92,970	88,394	267,425	260,560
Other (income) expense, net	(334)	(104)	833	(2,073)
Loss on early extinguishment of debt	—	—	2,362	—
Gain on sale of business	—	—	—	(8,864)
Interest expense, net of interest income	29,696	28,081	80,400	79,354
Provision for income taxes	33,666	45,311	102,044	109,663
Adjusted EBITDA	$ 255,017	$ 308,555	$ 757,661	$ 797,884
As a % of Direct revenues	18.7 %	22.6 %	18.6 %	20.5 %

Depreciation and Amortization

	For the Three Months Ended September 30,		2023 over 2022		For the Nine Months Ended September 30,		2023 over 2022	
(in thousands, except percentages)	2023	2022	Change	% Change	2023	2022	Change	% Change
Depreciation of fixed assets and amortization of landfills and finance leases	$ 80,432	$ 75,327	$ 5,105	6.8 %	$ 229,658	$ 223,001	$ 6,657	3.0 %
Permits and other intangibles amortization	12,538	13,067	(529)	(4.0)	37,767	37,559	208	0.6
Total depreciation and amortization	$ 92,970	$ 88,394	$ 4,576	5.2 %	$ 267,425	$ 260,560	$ 6,865	2.6 %

Depreciation and amortization for the three and nine months ended September 30, 2023 increased by $4.6 million and $6.9 million from the comparable periods in 2022 due to the Thompson Industrial tangible and intangible assets acquired on March 31, 2023 and increased amortization from new finance leases in the period.

Loss on Early Extinguishment of Debt

	For the Three Months Ended September 30,		2023 over 2022		For the Nine Months Ended September 30,		2023 over 2022	
(in thousands, except percentages)	2023	2022	Change	% Change	2023	2022	Change	% Change
Loss on early extinguishment of debt	$ —	$ —	$ —	— %	$ 2,362	$ —	$ 2,362	100.0 %

During the nine months ended September 30, 2023, we recorded a $2.4 million loss on early extinguishment of debt in connection with the repayment of the remaining $614.0 million principal amount of the 2024 Term Loans. For additional information regarding this repayment, see Note 12, "Financing Arrangements," to the accompanying financial statements.

Gain on Sale of Business

	For the Three Months Ended September 30,		2023 over 2022		For the Nine Months Ended September 30,		2023 over 2022	
(in thousands, except percentages)	2023	2022	Change	% Change	2023	2022	Change	% Change
Gain on sale of business	$ —	$ —	$ —	— %	$ —	$ 8,864	$ (8,864)	(100.0)%

During the nine months ended September 30, 2022, we recorded an $8.9 million gain on the sale of a non-core line of business within our Environmental Services segment. For additional information regarding this gain on sale of business, see Note 5, "Disposition of Business," to the accompanying financial statements.

Interest Expense, Net of Interest Income

	For the Three Months Ended September 30,		2023 over 2022		For the Nine Months Ended September 30,		2023 over 2022	
(in thousands, except percentages)	2023	2022	Change	% Change	2023	2022	Change	% Change
Interest expense, net of interest income	$ 29,696	$ 28,081	$ 1,615	5.8 %	$ 80,400	$ 79,354	$ 1,046	1.3 %

Interest expense, net of interest income for the three and nine months ended September 30, 2023 increased $1.6 million and $1.0 million, respectfully, from the comparable periods in 2022 due to higher interest rates on our portfolio of debt obligations partially offset by higher interest income, generally on our cash investments. For the nine months ended September 30, 2023, the increase in interest expense, net of interest income was further offset by the $8.3 million benefit recognized from settling interest rate swaps in connection with repaying certain of our variable rate debt in January 2023. The effective interest rates on our long-term debt for the three and nine months ended September 30, 2023 were 5.44% and 5.19%, respectively. The comparable rates for the three and nine months ended September 30, 2022 were 4.18% and 3.83% respectively.

For the remainder of 2023, we anticipate the effective rate will be approximately 5.45% given the current interest rate environment and our portfolio of long-term debt. For additional information regarding the financing events during 2023 and our current portfolio of long-term debt, see Note 12, "Financing Arrangements," to the accompanying financial statements.

Provision for Income Taxes

	For the Three Months Ended September 30,		2023 over 2022		For the Nine Months Ended September 30,		2023 over 2022	
(in thousands, except percentages)	2023	2022	Change	% Change	2023	2022	Change	% Change
Provision for income taxes	$ 33,666	$ 45,311	$ (11,645)	(25.7)%	$ 102,044	$ 109,663	$ (7,619)	(6.9)%
Effective tax rate	26.9 %	25.0 %	1.9 %		26.7 %	25.0 %	1.7 %	

For the three and nine months ended September 30, 2023, the provision for income taxes decreased $11.6 million and $7.6 million from the comparable periods in 2022 due to lower income before provision for income taxes in 2023. Our effective tax rate for the three and nine months ended September 30, 2023 increased 1.9% and 1.7% when compared to the three and nine months ended September 30, 2022 primarily due to the utilization of the unbenefited losses in 2022 which reduced the rate in those periods.

Liquidity and Capital Resources

We assess our liquidity in terms of our ability to generate cash to fund our operating, investing, and financing activities. Our primary ongoing cash requirements will be to fund operations, capital expenditures, interest payments and investments in line with our business strategy. We believe our future operating cash flows will be sufficient to meet our future operating and internal investing cash needs. We monitor our actual needs and forecasted cash flows, our liquidity and our capital resources, enabling us to plan our present needs and fund items that may arise during the year as a result of changing business conditions or opportunities. Furthermore, our existing cash balance and the availability of additional borrowings under our revolving credit facility provide additional potential sources of liquidity should they be required.

Summary of Cash Flow Activity

(in thousands)	Nine Months Ended September 30, 2023	2022
Net cash from operating activities	$ 455,692	$ 357,542
Net cash used in investing activities	(447,069)	(281,962)
Net cash used in financing activities	(165,322)	(72,609)

Net cash from operating activities

Net cash from operating activities for the nine months ended September 30, 2023 was $455.7 million as compared to $357.5 million in the comparable period of 2022. This $98.2 million increase in operating cash flows was attributable to significantly improved working capital balances, partially offset by higher cash paid for income taxes, interest and environmental expenditures.

Net cash used in investing activities

Net cash used in investing activities for the nine months ended September 30, 2023 was $447.1 million, an increase of $165.1 million from the comparable period in 2022. Additions to property, plant and equipment, net of proceeds from the sale and disposal of fixed assets increased $67.3 million, largely driven by incremental capital spending for our new incinerator construction in Kimball, Nebraska. Cash used for acquisitions increased $46.0 million, while cash paid relative to the timing of investment transactions within our wholly owned captive insurance company increased $35.3 million. Additionally, during the nine months ended September 30, 2022 we received $16.8 million in proceeds from the disposition of a line of business.

Net cash used in financing activities

Net cash used in financing activities for the nine months ended September 30, 2023 increased $92.7 million from $72.6 million in 2022 to $165.3 million in 2023. During the nine months ended September 30, 2023, the Company repaid $614.0 million of secured senior term loans with the proceeds from issuing $500.0 million of unsecured senior notes. Associated with this refinancing the Company also paid $6.3 million of financing costs in the first nine months of 2023. Partially offsetting this, the Company spent $26.2 million less for repurchases of common stock.

Adjusted Free Cash Flow

Management considers adjusted free cash flow to be a measure of liquidity which provides useful information to management, creditors and investors about our financial strength and ability to generate cash. Additionally, adjusted free cash flow is a metric on which a portion of management incentive compensation is based. We define adjusted free cash flow as net cash from operating activities excluding cash impacts of items derived from non-operating activities, less additions to property, plant and equipment plus proceeds from sales or disposals of fixed assets. Adjusted free cash flow should not be considered an alternative to net cash from operating activities or other measurements under GAAP. Adjusted free cash flow is not calculated identically by all companies, and therefore our measurements of adjusted free cash flow may not be comparable to similarly titled measures reported by other companies.

The following is a reconciliation from net cash from operating activities to adjusted free cash flow for the following periods (in thousands):

	Nine Months Ended September 30, 2023	2022
Net cash from operating activities	$ 455,692	$ 357,542
Additions to property, plant and equipment	(311,906)	(244,547)
Proceeds from sale and disposal of fixed assets	5,129	5,118
Adjusted free cash flow	$ 148,915	$ 118,113

Summary of Capital Resources

At September 30, 2023, cash and cash equivalents and marketable securities totaled $420.0 million, compared to $554.6 million at December 31, 2022. This decrease was primarily attributable to the net reduction of $114.0 million in long-term debt obligations and the payment of $110.9 million for the acquisition of Thompson Industrial in 2023, partially offset by greater amounts of cash from operating activities. At September 30, 2023, cash and cash equivalents held by our Canadian subsidiaries totaled $43.2 million. The cash and cash equivalents and marketable securities balance for our U.S. operations was $376.8 million at September 30, 2023. Our U.S. operations had net operating cash inflows of $419.5 million for the nine months ended September 30, 2023.

We also maintain a $400.0 million revolving credit facility of which, as of September 30, 2023, approximately $277.6 million was available to borrow under the facility, with letters of credit of $122.4 million outstanding.

Material Capital Requirements

Capital Expenditures

Capital expenditures during the first nine months of 2023 was $311.9 million as compared to $244.5 million during the first nine months of 2022. We anticipate that 2023 capital spending, net of disposals, will be in the range of $400.0 million to $420.0 million, including approximately $85.0 million of capital spending for our new incinerator construction in Kimball, Nebraska.

We anticipate that the capital spending will be funded by cash from our operations. Unanticipated changes in environmental regulations could require us to make significant capital expenditures for our facilities and adversely affect our results of operations and cash flow.

During the first nine months of 2023, capital spending on the construction of our new incinerator at our Kimball, Nebraska facility was approximately $57.1 million. Total spend on the project as of September 30, 2023 was $109.3 million. The current capital expenditure estimate for this project is approximately $180.0 million and we anticipate the project to be complete in late 2024.

Financing Arrangements

In January 2023, we issued $500.0 million principal amount of 6.375% unsecured senior notes due 2031. The net proceeds of the issuance, along with a $114.0 million borrowing under our existing revolving credit facility and cash on hand, were used to repay the aggregate principal balance of our 2024 Term Loans. During the second quarter of 2023, we repaid the $114.0 million borrowing on the revolving credit facility.

As of September 30, 2023, our financing arrangements include (i) $545.0 million of 4.875% senior unsecured notes due 2027, (ii) $982.5 million of senior secured term loans due 2028, (iii) $300.0 million of 5.125% senior unsecured notes due 2029 and (iv) $500.0 million of 6.375% senior unsecured notes due 2031. As noted above, we also maintain our $400.0 million revolving credit facility with no amounts owed as of September 30, 2023.

The material terms of these arrangements are discussed further in Note 12, “Financing Arrangements,” to the accompanying financial statements.

As of September 30, 2023, we were in compliance with the covenants of all of our debt agreements, and we believe we will continue to meet such covenants.

Common Stock Repurchases Pursuant to Publicly Announced Plan

The Company's common stock repurchases are made pursuant to the previously authorized board approved plan to repurchase up to $600.0 million of the Company's common stock. During the three and nine months ended September 30, 2023, the Company repurchased and retired a total of approximately 58.3 thousand and 117.1 thousand shares of the Company's common stock, respectively, for total expenditures of approximately $10.0 million and $18.0 million, respectively. During the three and nine months ended September 30, 2022, the Company repurchased and retired a total of approximately 0.1 million and 0.5 million shares of the Company's common stock, respectively, for total expenditures of approximately $10.5 million and $44.2 million, respectively.

Through September 30, 2023, the Company has repurchased and retired a total of approximately 8.3 million shares of its common stock for approximately $512.7 million under this program. As of September 30, 2023, an additional $87.3 million remained available for repurchase of shares under this program.

Environmental Liabilities

(in thousands, except percentages)	September 30, 2023	December 31, 2022	Change	% Change
Closure and post-closure liabilities	$ 119,891	$ 118,801	$ 1,090	0.9 %
Remedial liabilities	111,704	116,290	(4,586)	(3.9)
Total environmental liabilities	$ 231,595	$ 235,091	$ (3,496)	(1.5)%

Total environmental liabilities as of September 30, 2023 were $231.6 million, relatively consistent with the balance as of December 31, 2022. During the nine months ended September 30, 2023, expenditures of $24.1 million were partially offset by accretion of $10.3 million, changes in estimates for the environmental liabilities, including those related to liabilities assumed in prior period acquisitions, of $7.4 million, and new liabilities of $2.8 million, including those assumed in current period acquisitions.

We anticipate our environmental liabilities, substantially all of which we assumed in connection with our acquisitions, will be payable over many years and that cash flow from operations will generally be sufficient to fund the payment of such liabilities when required.

Events not anticipated (such as future changes in environmental laws and regulations) could require that payments to satisfy our environmental liabilities be made earlier or in greater amounts than currently anticipated, which could adversely affect our results of operations, cash flow and financial condition. Conversely, the development of new treatment technologies or other circumstances may arise in the future which may reduce amounts ultimately paid.

Letters of Credit

We obtain standby letters of credit as security for financial assurances we have been required to provide to regulatory bodies for our hazardous waste facilities and which would be called only in the event that we fail to satisfy closure, post-closure and other obligations under the permits issued by those regulatory bodies for such licensed facilities. As of September 30, 2023, there were $122.4 million outstanding letters of credit. See Note 12, "Financing Arrangements," to the accompanying financial statements.

Critical Accounting Policies and Estimates

Other than as described below, there were no material changes in the first nine months of 2023 to the information provided under the heading “Critical Accounting Policies and Estimates” included in our Annual Report on Form 10-K for the year ended December 31, 2022.

Goodwill and Other Long-Lived Assets. Pursuant to the previous succession announcement, effective March 31, 2023, Michael L. Battles and Eric W. Gerstenberg, were appointed Co-CEOs and as a result, the Company’s new Chief Operating Decision Maker (“CODM”) is a committee comprised of both Co-CEOs, who, going forward, will manage the business, make operating decisions and assess performance. The Company does not expect that the new CODM structure will change how the Company is managed and as such will continue to report as two operating segments; (i) the Environmental Services segment and (ii) the Safety-Kleen Sustainability Solutions segment and assess the recoverability of goodwill under three reporting units; (i) Environmental Sales and Service, (ii) Environmental Facilities and (iii) Safety-Kleen Sustainability Solutions.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There were no material changes in the first nine months of 2023 to the information provided under Item 7A. “Quantitative and Qualitative Disclosures about Market Risk” in the Company's Annual Report on Form 10-K for the year ended December 31, 2022.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Based on an evaluation under the supervision and with the participation of our Co-Chief Executive Officers and Chief Financial Officer, as of the end of the period covered by this Quarterly Report on Form 10-Q, our Co-Chief Executive Officers and Chief Financial Officer have concluded that our disclosure controls and procedures (as defined under Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”)) were effective as of September 30, 2023 to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to our management, including our Co-Chief Executive Officers and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Exchange Act Rules 13a-15 or 15d-15 that was conducted during the nine months ended September 30, 2023 that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

CLEAN HARBORS, INC. AND SUBSIDIARIES

PART II—OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See Note 16, “Commitments and Contingencies,” to the unaudited consolidated financial statements included in Item 1 of this report, which description is incorporated herein by reference.

ITEM 1A. RISK FACTORS

There have been no material changes to the risk factors from the information provided in Item 1A. in the Company's Annual Report on Form 10-K for the year ended December 31, 2022.

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

Common Stock Repurchase Program

The following table provides information with respect to the shares of common stock repurchased by us for the periods indicated.

Period	Total Number of Shares Purchased (1)	Average Price Paid Per Share (2)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (in thousands) (3)
July 1, 2023 through July 31, 2023	34,805	$ 164.43	—	97,265
August 1, 2023 through August 31, 2023	60,529	171.24	58,341	87,265
September 1, 2023 through September 30, 2023	2,667	173.37	—	87,265
Total	98,001	$ 168.88	58,341	

(1) Includes 39,660 shares withheld by us from employees to satisfy employee tax obligations upon vesting of restricted stock granted to our employees under the Company's equity incentive plans.

(2) The average price paid per share of common stock repurchased under the stock repurchase program includes the commissions paid to brokers.

(3) Our board of directors has authorized the repurchase of up to $600.0 million of our common stock. We have funded and intend to fund the repurchases through available cash resources. The stock repurchase program authorizes us to purchase our common stock on the open market or in privately negotiated transactions periodically in a manner that complies with applicable U.S. securities laws. The number of shares purchased and the timing of the purchases has depended and will depend on several factors, including share price, cash required for business plans, trading volume and other conditions. We maintain a repurchase plan in accordance with Rule 10b5-1 promulgated under the Securities Exchange Act of 1934, as amended. During the three months ended September 30, 2023, no shares were repurchased under the Rule 10b5-1 plan. Future repurchases may be made as open market or privately negotiated transactions as described above. We have no obligation to repurchase stock under this program and may suspend or terminate the repurchase program at any time.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None

ITEM 4. MINE SAFETY DISCLOSURE

Not applicable

ITEM 5. OTHER INFORMATION

During the quarter ended September 30, 2023, no director or “officer” (as defined in Rule 16a-1(f)) of Clean Harbors, Inc. adopted or terminated a “Rule 10b5-1 trading arrangement” or “non-Rule 10b5-1 trading arrangement,” as each term is defined in Item 408(a) of Regulation S-K.

ITEM 6. EXHIBITS

Item No.	Description	Location
31.1	Rule 13a-14a/15d-14(a) Certification of the Co-CEO Michael L. Battles	Filed herewith
31.2	Rule 13a-14a/15d-14(a) Certification of the Co-CEO Eric W. Gerstenberg	Filed herewith
31.3	Rule 13a-14a/15d-14(a) Certification of the CFO Eric J. Dugas	Filed herewith
32	Section 1350 Certifications	Filed herewith
101	Interactive Data Files Pursuant to Rule 405 of Regulation S-T: Financial statements from the quarterly report on Form 10-Q of Clean Harbors, Inc. for the quarterly period ended September 30, 2023, formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Unaudited Consolidated Statements of Operations, (iii) Unaudited Consolidated Statements of Comprehensive Income, (iv) Unaudited Consolidated Statements of Cash Flows, (v) Unaudited Consolidated Statements of Stockholders' Equity and (vi) Notes to Unaudited Consolidated Financial Statements.	*
104	The cover page from the Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2023, formatted in iXBRL and contained in Exhibit 101.	

* Interactive data files are furnished and deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

CLEAN HARBORS, INC. AND SUBSIDIARIES

SIGNATURES

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

CLEAN HARBORS, INC.
Registrant

By: /s/ MICHAEL L. BATTLES
Michael L. Battles
Co-Chief Executive Officer and Co-President

Date: November 1, 2023

By: /s/ ERIC W. GERSTENBERG
Eric W. Gerstenberg
Co-Chief Executive Officer and Co-President

Date: November 1, 2023

By: /s/ ERIC J. DUGAS
Eric J. Dugas
Executive Vice President and Chief Financial Officer

Date: November 1, 2023

EXHIBIT 31.1

CERTIFICATION OF CO-CHIEF EXECUTIVE OFFICER

I, Michael L. Battles, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Clean Harbors, 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/ MICHAEL L. BATTLES

Michael L. Battles
Co-Chief Executive Officer and Co-President

Date: November 1, 2023

EXHIBIT 31.2

CERTIFICATION OF CO-CHIEF EXECUTIVE OFFICER

I, Eric W. Gerstenberg, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Clean Harbors, 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/ ERIC W. GERSTENBERG

Eric W. Gerstenberg
Co-Chief Executive Officer and Co-President

Date: November 1, 2023

EXHIBIT 31.3

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Eric J. Dugas, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Clean Harbors, 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/ ERIC J. DUGAS

Eric J. Dugas
Executive Vice President and Chief Financial Officer

Date: November 1, 2023

EXHIBIT 32

CLEAN HARBORS, INC. AND SUBSIDIARIES

**CERTIFICATION PURSUANT TO
SECTION 1350, CHAPTER 63 OF TITLE 18, UNITED STATES CODE,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES OXLEY ACT OF 2002**

Pursuant to 18 U.S.C. §1350, each of the undersigned certifies that, to his knowledge, this Quarterly Report on Form 10-Q for the period ended September 30, 2023 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and the information contained in this report fairly presents, in all material respects, the financial condition and results of operations of Clean Harbors, Inc.

By: /s/ MICHAEL L. BATTLES
Michael L. Battles
Co-Chief Executive Officer and Co-President

Date: November 1, 2023

By: /s/ ERIC W. GERSTENBERG
Eric W. Gerstenberg
Co-Chief Executive Officer and Co-President

Date: November 1, 2023

By: /s/ ERIC J. DUGAS
Eric J. Dugas
Executive Vice President and Chief Financial Officer

Date: November 1, 2023