UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2021

or

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

For the transition period from to

Commission file number 001-39729

SOTERA HEALTH COMPANY

(Exact name of registrant as specified in its charter)

Delaware	**47-3531161**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
9100 South Hills Blvd, Suite 300 **Broadview Heights, Ohio**	**44147**
(Address of principal executive offices)	(Zip Code)
Registrant's telephone number, including area code	**(440) 262-1409**

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.01 par value per share	**SHC**	**The Nasdaq Stock Market LLC**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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.

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

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

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

As of May 6, 2021, there were 282,869,957 shares of the registrant's common stock, $0.01 par value per share, outstanding.

SOTERA HEALTH COMPANY
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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q includes “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward looking statements are often characterized by the use of the words such as “believes,” “estimates,” “expects,” “projects,” “may,” “intends,” “plans” or “anticipates,” or by discussions of strategy, plans or intentions. Such forward-looking statements involve known and unknown risks, uncertainties and other important factors that could cause our actual results, performance or achievements, or industry results, to differ materially from historical results or any future results, performance or achievements expressed, suggested or implied by such forward-looking statements. Such risks and uncertainties include, but are not limited to:

- any disruption in the availability of, or increases in the price of, ethylene oxide (“EO”), cobalt-60 (“Co-60”) or our other direct materials, services and supplies, including as a result of current geopolitical instability arising from U.S. relations with Russia and related sanctions;
- adverse changes in industry trends;
- adverse changes in environmental, health and safety regulations;
- accidents resulting from the safety risks associated with the use and disposal of potentially hazardous materials such as EO and Co-60;
- accidents resulting from the safety risks associated with the transportation of potentially hazardous materials such as EO and Co-60;
- liability claims relating to health risks associated with the use of EO and Co-60;
- current and future legal proceedings;
- the intensity of competition we face;
- any market changes that impact our long-term supply contracts with variable price clauses;
- allegations of our failure to properly perform our services and any potential product liability claims, recalls, penalties and reputational harm;
- the regulatory requirements to which we are subject, and any failures to receive or maintain, or delays in receiving, required clearance or approvals;
- business continuity hazards and other risks associated with our operations, including our reliance on the use and sale of products and services from a single location;
- the impact of the COVID-19 pandemic;
- our ability to increase capacity at existing facilities and build new facilities in a timely and cost-effective manner;
- our ability to renew the long-term leases for our facilities at the end of their terms;
- the risks of doing business internationally;
- instability in global and regional economic and political conditions;
- our failure to retain key personnel and attract talent;
- the significant regulatory oversight to which our import and export operations are subject, and any failure to comply with applicable regulations;
- any cyber security breaches and data leaks as a result of our dependence on information technology systems;
- the risks of pursuing strategic transactions, including acquisitions, and our ability to find suitable acquisition targets or integrate strategic acquisitions successfully into our business;
- our ability to maintain effective internal controls over financial reporting;
- our reliance on intellectual property to maintain our competitive position and the risk of claims from third parties that we infringe or misappropriate their intellectual property rights;
- the data privacy and security laws and regulations to which we are subject, and any ineffective compliance efforts with such laws and regulations;
- our ability to maintain profitability in the future;
- impairment charges on our goodwill and other intangible assets with indefinite lives;
- unionization efforts and labor regulations in certain countries in which we operate;
- the variety of laws involving the cannabis industry to which we are subject, and any failure to comply with those laws;
- the risk of government or private civil antitrust actions;
- adverse changes to our tax positions in U.S. or non-U.S. jurisdictions, the interpretation and application of recent U.S. tax legislation or other changes in U.S. or non-U.S. taxation of our operations;
- our substantial leverage could adversely affect our ability to raise additional capital, limit our ability to react to changes in the economy or our industry and prevent us from meeting our obligations under our existing and future indebtedness; and
- our ability to generate sufficient cash flows or access sufficient additional capital to meet our debt obligations or to fund our other liquidity needs.

These statements are based on current plans, estimates and projections, and therefore you should not place undue reliance on them. Forward-looking statements speak only as of the date they are made, and we undertake no obligation to update them publicly in light of new information or future events, except as required by law. The inclusion of this forward-looking information should not be regarded as a representation by us or any other person that the future plans, estimates or expectations contemplated by us will be achieved.

You should carefully consider the above factors, as well as the factors discussed elsewhere in this Quarterly Report on Form 10-Q, including under Part II, Item 1A, “Risk Factors,” as well as Part I, Item 1A, “Risk Factors” of our Annual Report on Form 10-K for the year ended December 31, 2020 (the “2020 10-K”). If any of these trends, risks or uncertainties actually occurs or continues, our business, financial condition or operating results could be materially adversely affected, the trading prices of our securities could decline and you could lose all or part of your investment. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by this cautionary statement.

Unless expressly indicated or the context requires otherwise, the terms “Sotera Health,” “Company,” “we,” “us,” and “our” in this document refer to Sotera Health Company, a Delaware corporation, and, where appropriate, its subsidiaries on a consolidated basis.

Part I—FINANCIAL INFORMATION

Item 1. Financial Statements

Sotera Health Company

Consolidated Balance Sheets
(in thousands)

	As of	
	March 31, 2021	December 31, 2020
Assets	*(Unaudited)*	
Current assets:		
Cash and cash equivalents	**$ 108,009**	$ 102,447
Restricted cash short-term	**7**	7
Accounts receivable, net of allowance for uncollectible accounts of $603 and $708, respectively	**96,393**	91,735
Inventories, net	**33,375**	34,093
Prepaid expenses and other current assets	**69,758**	64,964
Income taxes receivable	**20,825**	21,769
Total current assets	**328,367**	315,015
Property, plant, and equipment, net	**611,620**	609,814
Operating lease assets	**47,117**	45,963
Deferred income taxes	**8,088**	8,424
Investment in unconsolidated affiliate	**9,227**	13,457
Other assets	**9,281**	9,304
Other intangible assets, net	**656,572**	643,366
Goodwill	**1,106,728**	1,115,936
Total assets	**$ 2,777,000**	$ 2,761,279
Liabilities and equity		
Current liabilities:		
Accounts payable	**$ 57,174**	$ 52,400
Accrued liabilities	**56,373**	60,518
Deferred revenue	**5,958**	6,056
Current portion of finance lease obligations	**1,108**	1,173
Current portion of operating lease obligations	**9,631**	9,383
Current portion of asset retirement obligations	**391**	620
Income taxes payable	**7,384**	10,448
Total current liabilities	**138,019**	140,598
Long-term debt, less current portion	**1,837,580**	1,824,789
Finance lease obligations, less current portion	**33,432**	34,939
Operating lease obligations, less current portion	**39,806**	38,941
Noncurrent asset retirement obligations	**45,633**	45,013
Deferred lease income	**21,362**	21,255
Post-retirement obligations	**46,959**	48,223
Mandatorily redeemable noncontrolling interest	**—**	13,625
Noncurrent liabilities	**18,795**	17,506
Deferred income taxes	**129,670**	121,816
Total liabilities	**2,311,256**	2,306,705
See Commitments and contingencies note		
Equity:		
Common stock, with $0.01 par value, 1,200,000 shares authorized; 285,990 shares issued at March 31, 2021 and December 31, 2020, respectively	**2,860**	2,860
Preferred stock, with $0.01 par value, 120,000 authorized; no shares issued at March 31, 2021 and December 31, 2020, respectively	**—**	—
Treasury stock, at cost (3,090 and 2,742 shares at March 31, 2021 and December 31, 2020, respectively)	**(34,000)**	(34,000)
Additional paid-in capital	**1,169,852**	1,166,412
Retained deficit	**(578,286)**	(589,128)
Accumulated other comprehensive loss	**(97,162)**	(93,842)
Total equity attributable to Sotera Health Company	**463,264**	452,302
Noncontrolling interests	**2,480**	2,272
Total equity	**465,744**	454,574
Total liabilities and equity	**$ 2,777,000**	$ 2,761,279

See notes to consolidated financial statements.

Sotera Health Company

Consolidated Statements of Operations and Comprehensive Income (Loss)
(in thousands, except per share amounts)

	Three Months Ended March 31,	
	2021	**2020**
	(Unaudited)	
Revenues:		
Service	**$ 188,698**	$ 167,405
Product	**23,450**	20,795
Total net revenues	**212,148**	188,200
Cost of revenues:		
Service	**85,036**	83,069
Product	**11,740**	8,614
Total cost of revenues	**96,776**	91,683
Gross profit	**115,372**	96,517
Operating expenses:		
Selling, general and administrative expenses	**52,465**	37,053
Amortization of intangible assets	**16,543**	14,599
Total operating expenses	**69,008**	51,652
Operating income	**46,364**	44,865
Interest expense, net	**21,282**	56,562
Loss on extinguishment of debt	**14,312**	—
Foreign exchange loss (gain)	**578**	(627)
Other (income) expense, net	**(3,890)**	3,150
Income (loss) before income taxes	**14,082**	(14,220)
Provision (benefit) for income taxes	**3,017**	(12,234)
Net income (loss)	**11,065**	(1,986)
Less: Net income (loss) attributable to noncontrolling interests	**223**	(22)
Net income (loss) attributable to Sotera Health Company	**10,842**	(1,964)
Other comprehensive (loss) income net of tax:		
Pension and post-retirement benefits (net of taxes of $84 and $(744), respectively)	**(249)**	2,207
Interest rate swaps (net of taxes of $0 and $1,234, respectively)	**—**	(3,479)
Foreign currency translation	**(3,086)**	(72,967)
Comprehensive income (loss)	**7,730**	(76,225)
Less: comprehensive income (loss) attributable to noncontrolling interests	**208**	(22)
Comprehensive income (loss) attributable to Sotera Health Company	**$ 7,522**	$ (76,203)
Earnings (loss) per share:		
Basic	**$ 0.04**	$ (0.01)
Diluted	**0.04**	(0.01)
Weighted average number of shares outstanding:		
Basic	**278,827**	232,400
Diluted	**278,968**	232,400

See notes to consolidated financial statements.

Sotera Health Company

Consolidated Statements of Cash Flows
(in thousands)

	Three Months Ended March 31,	
	2021	2020
	(Unaudited)	
Operating activities:		
Net income (loss)	$ 11,065	$ (1,986)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation	15,379	16,110
Amortization of intangible assets	22,282	19,913
Loss on extinguishment of debt	14,312	—
Deferred income taxes	(3,637)	(6,683)
Share-based compensation expense	3,449	1,725
Accretion of asset retirement obligations	551	471
Unrealized foreign exchange (gains) / losses	2,354	(4,876)
Unrealized (gain) / loss on embedded derivative instruments	(853)	4,819
Gain (loss) on interest rate swap	—	(4,713)
Amortization of debt issuance costs	1,663	2,977
Other	(2,843)	(2,306)
Changes in operating assets and liabilities:		
Accounts receivable	(4,134)	(433)
Inventories	1,099	(1,553)
Other current assets	(2,324)	(1,404)
Accounts payable	6,625	(733)
Accrued liabilities	(5,542)	(8,334)
Income taxes payable / receivable	(4,518)	(8,132)
Other liabilities	1,513	(61)
Other long-term assets	(282)	889
Net cash provided by operating activities	56,159	5,690
Investing activities:		
Purchases of property, plant and equipment	(20,942)	(12,989)
Purchase of mandatorily redeemable noncontrolling interest in Nelson Laboratories Fairfield, Inc.	(12,425)	—
Purchase of BioScience Laboratories, LLC, net of cash acquired	(13,152)	—
Net cash used in investing activities	(46,519)	(12,989)
Financing activities:		
Proceeds from revolving credit facility	—	50,000
Payments of debt issuance costs	(3,435)	(207)
Payments on long-term borrowings	—	(142)
Other	(348)	(344)
Net cash provided by (used in) financing activities	(3,783)	49,307
Effect of exchange rate changes on cash and cash equivalents	(295)	154
Net increase in cash and cash equivalents, including restricted cash	5,562	42,162
Cash and cash equivalents, including restricted cash, at beginning of period	102,454	63,025
Cash and cash equivalents, including restricted cash, at end of period	$ 108,016	$ 105,187
Supplemental disclosures of cash flow information:		
Cash paid during the period for interest	$ 19,745	$ 63,570
Cash paid during the period for income taxes, net of tax refunds received	11,561	1,868
Equipment purchases included in accounts payable	7,389	5,100

See notes to consolidated financial statements.

Sotera Health Company

Consolidated Statements of Equity (Deficit)
(in thousands)
(Unaudited)

	Shares	Amount	Amount					
	Common Stock	Common Stock	Treasury Stock	Additional Paid-In Capital	Retained Earnings / (Accumulated Deficit)	Accumulated Other Comprehensive (Loss) Income	Noncontrolling Interests	Total Equity
Balance at December 31, 2019	**232,400**	**$ 2,324**	**$ —**	**$ —**	**$ (550,511)**	**$ (94,387)**	**$ 1,442**	**$ (641,132)**
Share-based compensation plans	—	—	—	1,725	—	—	—	**1,725**
Comprehensive income (loss):								
Pension and post-retirement plan adjustments, net of tax	—	—	—	—	—	2,207	—	**2,207**
Foreign currency translation	—	—	—	—	—	(72,967)	—	**(72,967)**
Interest rate swaps	—	—	—	—	—	(3,479)	—	**(3,479)**
Net income (loss)	—	—	—	—	(1,964)	—	(22)	**(1,986)**
Balance at March 31, 2020	**232,400**	**$ 2,324**	**$ —**	**$ 1,725**	**$ (552,475)**	**$ (168,626)**	**$ 1,420**	**$ (715,632)**

	Shares	Amount	Amount					
	Common Stock	Common Stock	Treasury Stock	Additional Paid-In Capital	Retained Earnings / (Accumulated Deficit)	Accumulated Other Comprehensive (Loss) Income	Noncontrolling Interests	Total Equity
Balance at December 31, 2020	**283,248**	**$ 2,860**	**$ (34,000)**	**$ 1,166,412**	**$ (589,128)**	**$ (93,842)**	**$ 2,272**	**$ 454,574**
Share-based compensation plans	(348)	—	—	3,440	—	—	—	**3,440**
Comprehensive income (loss):								
Pension and post-retirement plan adjustments, net of tax	—	—	—	—	—	(249)	—	**(249)**
Foreign currency translation	—	—	—	—	—	(3,071)	(15)	**(3,086)**
Net income (loss)	—	—	—	—	10,842	—	223	**11,065**
Balance at March 31, 2021	**282,900**	**$ 2,860**	**$ (34,000)**	**$ 1,169,852**	**$ (578,286)**	**$ (97,162)**	**$ 2,480**	**$ 465,744**

See notes to consolidated financial statements.

1. Basis of Presentation

Principles of Consolidation – Sotera Health Company (also referred to herein as the "Company," "we," "our," "us" or "its"), is a global provider of mission-critical sterilization and lab testing and advisory services to the medical device and pharmaceutical industries with operations primarily in the Americas, Europe and Asia.

We operate and report in three segments, Sterigenics, Nordion and Nelson Labs. We describe our reportable segments in Note 18, "Segment Information". All significant intercompany balances and transactions have been eliminated in consolidation.

Noncontrolling interests represent the noncontrolling stockholders' proportionate share of the total equity in the Company's consolidated subsidiaries. As of March 31, 2021, our subsidiaries were wholly owned by us, except for noncontrolling interests of 15% and 33% in our two China subsidiaries. We consolidate the results of operations of these subsidiaries with our results of operations and reflect the noncontrolling interests in our two China subsidiaries on our Consolidated Statements of Operations and Comprehensive Income (Loss) as "Net income attributable to noncontrolling interests." On March 11, 2021, we purchased the 15% noncontrolling interest that remained from the August 2018 acquisition of Nelson Laboratories Fairfield, Inc. ("Nelson Labs Fairfield"). This required future purchase was considered mandatorily redeemable, and therefore no earnings were allocated to this noncontrolling interest. See Note 4, "Acquisitions" for additional details.

In the first quarter of 2021, we entered into binding agreements to purchase the outstanding noncontrolling interests of 15% and 33% of our two China subsidiaries, respectively. The purchase transactions are expected to close in the second quarter of 2021 for a total purchase price of $8.6 million.

In July 2020, we acquired a 60% equity ownership interest in a joint venture to construct an E-beam facility in Alberta, Canada in connection with our acquisition of Iotron Industries Canada, Inc. ("Iotron"). Refer to Note 4, "Acquisitions" for additional information. We have determined this to be an investment in a variable interest entity ("VIE"). The investment is not consolidated as the Company has concluded that we are not the primary beneficiary of the VIE. The Company accounts for the joint venture using the equity method. The investment is reflected within "Investment in unconsolidated affiliates" on the Consolidated Balance Sheets.

Use of Estimates – In preparing our consolidated financial statements in conformity with U.S. Generally Accepted Accounting Principles ("GAAP"), we make estimates and assumptions that affect the amounts reported and the accompanying notes. We regularly evaluate the estimates and assumptions used and revise them as new information becomes available. Actual results may vary from those estimates.

Interim Financial Statements – The accompanying consolidated financial statements include the assets, liabilities, operating results, and cash flows of the Company and its wholly owned subsidiaries. These financial statements are prepared in accordance with U.S. GAAP for interim financial information and the instructions to the Quarterly Report on Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. These unaudited interim financial statements should be read in conjunction with the Company's annual consolidated financial statements and accompanying notes on Form 10-K for the year ended December 31, 2020.

2. Recent Accounting Standards

ASU's Issued But Not Yet Adopted

Under the Jumpstart Our Business Startups Act of 2012, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. As an emerging growth company, we have elected to take advantage of the extended transition period for complying with new or revised accounting standards until those standards would otherwise apply to private companies or at which time we conclude it is appropriate to avail ourselves of early adoption provisions of applicable standards. As a result, our results of operations and financial statements may not be comparable to the results of operations and financial statements of other companies who have adopted the new or revised accounting standards.

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update *("ASU") 2016-13, Financial Instruments – Credit Losses* ("ASU 2016-13"): *Measurement of Credit Losses on Financial Instruments*, and subsequently issued additional guidance that modified ASU 2016-13. The standard requires an entity to change its accounting approach in determining impairment of certain financial instruments, including trade receivables, from an "incurred loss" to a "current expected credit loss" model. We intend to adopt the standard as of January 1, 2022. We are currently assessing the effect that ASU 2016-13 will have on our financial position, results of operations, and disclosures.

In March 2019, the FASB issued *ASU 2019-12 - Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*. The standard simplifies the accounting for income taxes and makes a number of changes meant to add or clarify guidance on accounting for income taxes. This update is effective for annual financial statement periods beginning after March 15, 2021 and interim periods beginning after March 15, 2022, with early adoption permitted in any interim period for which financial statements have not yet been filed. We are currently assessing the effect that ASU 2019-12 will have on our financial position, results of operations, and disclosures.

3. Revenue Recognition

The following table shows disaggregated net revenues from contracts with external customers by timing of revenue and by segment for the three months ended March 31, 2021 and 2020:

(thousands of U.S. dollars)	Three Months Ended March 31, 2021			
	Sterigenics	Nordion	Nelson Labs	Consolidated
Point in time	$ 131,151	$ 25,918	$ —	$ 157,069
Over time	—	—	55,079	55,079
Total	**$ 131,151**	**$ 25,918**	**$ 55,079**	**$ 212,148**

(thousands of U.S. dollars)	Three Months Ended March 31, 2020			
	Sterigenics	Nordion	Nelson Labs	Consolidated
Point in time	$ 117,280	$ 23,625	$ —	$ 140,905
Over time	—	—	47,295	47,295
Total	**$ 117,280**	**$ 23,625**	**$ 47,295**	**$ 188,200**

Contract Balances

As of March 31, 2021, and December 31, 2020, contract assets included in prepaid expenses and other current assets on the Consolidated Balance Sheets totaled approximately $14.1 million and $12.7 million, respectively, resulting from revenue recognized over time in excess of the amount billed to the customer.

When we receive consideration from a customer prior to transferring goods or services under the terms of a sales contract, we record deferred revenue, which represents a contract liability. Deferred revenue totaled $6.0 million and $6.1 million at March 31, 2021 and December 31, 2020, respectively. We recognize deferred revenue after all revenue recognition criteria are met.

4. Acquisitions

Acquisition of BioScience Laboratories, LLC

On March 8, 2021, we acquired BioScience Laboratories, LLC ("BioScience") for approximately $13.2 million, net of $0.8 million of cash acquired plus the contemporaneous repayment of BioScience's outstanding debt of $1.9 million. BioScience is a provider of outsourced topical antimicrobial product testing in the pharmaceutical, medical device, and consumer products industries with one location in Bozeman, Montana.

The purchase price of BioScience was allocated to the underlying assets acquired and liabilities assumed based upon management's estimated fair values at the date of acquisition. Changes to the allocation of the purchase price may occur as these measurements are completed. Approximately $8.4 million of goodwill was recorded related to the BioScience acquisition, representing the excess of the purchase price over preliminary estimated fair values of all the assets acquired and liabilities assumed. The Company funded this acquisition using available cash. The acquisition price and the results of operations for this acquired entity are not material in relation to the Company's consolidated financial statements.

Acquisition of Mandatorily Redeemable Noncontrolling Interest - Nelson Labs Fairfield

On March 11, 2021, we completed the acquisition of the remaining 15% ownership of Nelson Labs Fairfield for $12.4 million, resulting in a gain of $1.2 million included in “Other expense (income), net” in the Consolidated Statements of Operations and Comprehensive Income (Loss) relative to the $13.6 million previously accrued. Pursuant to the terms of the August 2018 acquisition, we initially acquired 85% of the equity interests of Nelson Labs Fairfield in August 2018 and were obligated to acquire the remaining 15% noncontrolling interest within three years from the date of the acquisition.

Acquisition of Iotron Industries Canada, Inc.

On July 31, 2020, we acquired Iotron Industries Canada, Inc.(“Iotron”) for approximately $105.2 million. Iotron was an independent contact sterilizer with two North American locations in Vancouver, Canada, and Columbia City, Indiana. Each location uses proprietary high energy electron beam technology to process products for orthopedic, medical device, plastics, and agricultural businesses. The acquisition was financed by the issuance of $100.0 million of First Lien Notes due 2026. Refer to Note 9, “Long-Term Debt” for additional details.

As part of this acquisition, we also acquired Iotron’s 60% equity ownership interest in a joint venture to construct an E-beam facility in Alberta, Canada. The joint venture is accounted for using the equity method.

The opening balance sheet for the Iotron acquisition reflects the net tangible and intangible assets acquired and liabilities assumed at their preliminary estimated fair values at the acquisition date.

The preliminary estimated fair value of the underlying acquired assets and assumed liabilities of the Iotron acquisition and the measurement period adjustments recognized during the three months ended March 31, 2021, were as follows:

(thousands of U.S. dollars)

Allocation of purchase price to the fair value of net assets acquired (net of cash acquired):	**Amount recognized as of December 31, 2020**	**Measurement Period Adjustments**	**Amount recognized as of March 31, 2021**
Goodwill	$ 69,046	$ (17,142)	**$ 51,904**
Intangibles	16,427	26,273	**42,700**
Property, plant, and equipment	13,812	4,346	**18,158**
Working capital, net	1,115	2	**1,117**
Investment in unconsolidated affiliate	12,881	(4,181)	**8,700**
Assumed long-term liabilities	(2,248)	—	**(2,248)**
Other assets/liabilities, net	(5,846)	(9,298)	**(15,144)**
Total estimated purchase price	$ 105,187	$ —	**$ 105,187**

The fair value of all the above assets acquired and liabilities assumed are preliminary in nature since the fair value analyses are not yet complete, including finalizing third party appraisals and analyzing the tax attributes of the fair value adjustments. Changes to the allocation of the purchase price may occur as these analyses are completed.

Approximately $51.9 million of goodwill was recorded related to the Iotron acquisition, representing the excess of the purchase price over preliminary estimated fair values of all the assets acquired and liabilities assumed. The fair value allocated to goodwill and tangible and intangible assets are deductible for tax purposes. The qualitative elements of goodwill primarily represent the expanded future growth opportunities for the combined company and the addition of Iotron’s highly skilled workforce. A preliminary valuation was recorded of approximately $39.1 million and $3.6 million for intangible assets as part of the acquisition related to customer relationships and employee non-compete agreements, respectively. The estimated useful lives of the identifiable finite-lived intangible assets range from 5 to 15 years.

Iotron’s results of operations are included in our consolidated financial statements from the date of the transaction within the Sterigenics segment. The unaudited pro forma consolidated results for the three months ended March 31, 2020, are reflected in the pro forma table below had the transaction occurred on January 1, 2020. The following unaudited supplemental pro forma financial information is based on our historical consolidated financial statements and Iotron’s historical consolidated financial statements, as adjusted for amortization of acquired intangible assets, an increase in interest expense resulting from interest on the First Lien Notes to finance the acquisition, and to reflect the change in the estimated income tax rate for federal and state purposes.

(thousands of U.S. dollars)

Three Months Ended March 31,		**2020**
Net revenues	$	194,402
Net loss		(889)

In connection with the Iotron acquisition, we incurred approximately $1.0 million in transaction costs for the three months ended March 31, 2020, which were included in “Selling, general and administrative expenses” in the Consolidated Statements of Operations and Comprehensive Income (Loss).

5. Inventories

Inventories consisted primarily of the following:

(thousands of U.S. dollars)

		March 31, 2021		**December 31, 2020**
Raw materials and supplies	**$**	**29,512**	$	29,114
Work-in-process		**1,371**		846
Finished goods		**2,617**		4,256
		33,500		34,216
Reserve for excess and obsolete inventory		**(125)**		(123)
Inventories, net	**$**	**33,375**	$	34,093

6. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted primarily of the following:

(thousands of U.S. dollars)

		March 31, 2021		**December 31, 2020**
Prepaid taxes	**$**	**25,356**	$	22,883
Prepaid business insurance		**7,421**		10,403
Prepaid rent		**1,212**		1,170
Customer contract assets		**14,133**		12,670
Insurance and indemnification receivables		**2,751**		2,751
Current deposits		**797**		673
Prepaid maintenance contracts		**432**		404
Value added tax receivable		**1,385**		2,094
Prepaid software licensing		**1,299**		1,181
Stock supplies		**3,210**		2,715
Other		**11,762**		8,020
Prepaid expenses and other current assets	**$**	**69,758**	$	64,964

7. Goodwill and Other Intangible Assets

Changes to goodwill during the three months ended March 31, 2021 were as follows:

(thousands of U.S. dollars)	Sterigenics	Nordion	Nelson Labs	Total
Goodwill at December 31, 2020	$ 683,481	$ 287,932	$ 144,523	$ 1,115,936
BioScience acquisition	—	—	8,435	8,435
Iotron acquisition measurement period adjustments	(17,142)	—	—	(17,142)
Changes due to foreign currency exchange rates	(2,252)	3,408	(1,657)	(501)
Goodwill at March 31, 2021	**$ 664,087**	**$ 291,340**	**$ 151,301**	**$ 1,106,728**

Other intangible assets consisted of the following:

(thousands of U.S. dollars) **As of March 31, 2021**	Gross Carrying Amount	Accumulated Amortization
Finite-lived intangible assets		
Customer relationships	**$ 662,509**	**$ 322,685**
Proprietary technology	**89,604**	**39,707**
Trade names	**142**	**100**
Land-use rights	**9,454**	**1,364**
Sealed source and supply agreements	**243,660**	**98,237**
Other	**5,675**	**1,138**
Total finite-lived intangible assets	**1,011,044**	**463,231**
Indefinite-lived intangible assets		
Regulatory licenses and other[a]	**82,807**	—
Trade names / trademarks	**25,952**	—
Total indefinite-lived intangible assets	**108,759**	—
Total	**$ 1,119,803**	**$ 463,231**

As of December 31, 2020		Gross Carrying Amount		Accumulated Amortization
Finite-lived intangible assets				
Customer relationships	$	634,454	$	309,428
Proprietary technology		90,964		38,075
Trade names		156		105
Land-use rights		9,489		1,311
Sealed source and supply agreements		240,791		92,953
Other		1,937		519
Total finite-lived intangible assets		977,791		442,391
Indefinite-lived intangible assets				
Regulatory licenses and other[a]		81,832		—
Trade names / trademarks		26,134		—
Total indefinite-lived intangible assets		107,966		—
Total	$	1,085,757	$	442,391

[a] Includes certain transportation certifications, a class 1B nuclear license and other intangibles related to obtaining such licensure. These assets are considered indefinite-lived as the decision for renewal by the Canadian Nuclear Safety Commission is highly based on a licensee's previous assessments, reported incidents, and annual compliance and inspection results. New applications for license can take a significant amount of time and cost; whereas an existing licensee with a historical record of compliance and current operating conditions more than likely ensures renewal for another 10 years license period as Nordion has demonstrated over its 70 years of history.

Amounts include the impact of foreign currency translation. Fully amortized amounts are written off.

Amortization expense for other intangible assets was $22.3 million ($5.8 million is included in "Cost of revenues" and $16.5 million in "Selling, general and administrative expenses") in the Consolidated Statements of Operations and Comprehensive Income (Loss) and $19.9 million ($5.3 million is included in "Cost of revenues" and $14.6 million in "Selling, general and administrative expenses") in the Consolidated Statements of Operations and Comprehensive Income (Loss) for the three months ended March 31, 2021 and 2020, respectively.

The estimated aggregate amortization expense for finite-lived intangible assets for each of the next five years and thereafter is as follows:

(thousands of U.S. dollars)		
For the remainder of 2021	**$**	**65,889**
2022		**80,665**
2023		**80,659**
2024		**79,882**
2025		**41,982**
Thereafter		**198,736**
Total	**$**	**547,813**

The weighted-average remaining useful life of the finite-lived intangible assets was approximately 10 years as of March 31, 2021.

8. Accrued Liabilities

Accrued liabilities consisted of the following:

(thousands of U.S. dollars)	March 31, 2021	December 31, 2020
Accrued employee compensation	**$ 27,651**	$ 34,760
Legal reserves	**2,751**	2,751
Accrued interest expense	**764**	186
Embedded derivatives	**229**	670
Professional fees	**13,744**	12,686
Accrued utilities	**2,397**	1,864
Insurance accrual	**1,886**	1,255
Accrued taxes	**3,332**	2,599
Other	**3,619**	3,747
Accrued liabilities	**$ 56,373**	$ 60,518

9. Long-Term Debt

Long-term debt consisted of the following:

(thousands of U.S. dollars)	March 31, 2021	December 31, 2020
Term loan, due 2026	**$ 1,763,100**	$ 1,763,100
Senior notes, due 2026	**100,000**	100,000
Other long-term debt	**1,059**	450
Total long-term debt	**1,864,159**	1,863,550
Less unamortized debt issuance costs and debt discounts	**(26,579)**	(38,761)
Total long-term debt, less debt issuance costs and debt discounts	**$ 1,837,580**	$ 1,824,789

Debt Facilities

Senior Secured Credit Facilities

On December 13, 2019, Sotera Health Holdings, LLC ("SHH"), our wholly owned subsidiary, entered into senior secured first lien credit facilities (the "Senior Secured Credit Facilities"), consisting of both a prepayable senior secured first lien term loan (the "Term Loan") and a senior secured first lien revolving credit facility (the "Revolving Credit Facility") pursuant to a first lien credit agreement (the "Credit Agreement"). The Term Loan matures on December 13, 2026, and the Revolving Credit Facility's original maturity date was December 13, 2024. On December 17, 2020, we increased the capacity of our Revolving Credit Facility from $190.0 million to $347.5 million. The Senior Secured Credit Facilities also provide SHH the right at any time and under certain conditions to request incremental term loans or incremental revolving credit commitments based on a formula defined in the Senior Secured Credit Facilities. As of March 31, 2021 and December 31, 2020, total borrowings under the Term Loan were $1,763.1 million and $1,763.1 million, respectively, and there were no borrowings outstanding on the Revolving Credit Facility. The weighted average interest rate on borrowings under the Term Loan for the three months ended March 31, 2021 and March 31, 2020 was 3.73% and 6.18%, respectively.

On January 20, 2021, we closed on an amendment repricing our Term Loan. The interest rate spread over the London Interbank Offered Rate ("LIBOR") on the facility was reduced from 450 basis points to 275 basis points, and the facility's LIBOR floor was reduced from 100 basis points to 50 basis points. The changes result in an effective reduction in current interest rates of 2.25%. In connection with this amendment, we wrote off $11.3 million of unamortized debt issuance and discount costs and incurred an additional $2.9 million of expense related to debt issuance costs attributable to the refinancing. These costs were recorded to "Loss on extinguishment of debt" in our Consolidated Statements of Operations and Comprehensive Income (Loss).

As of March 31, 2021 and December 31, 2020, capitalized debt issuance costs totaled $3.1 million and $3.4 million, respectively, and debt discounts totaled $20.0 million and $31.6 million, respectively, related to the Senior Secured Credit Facilities. Such costs are recorded as a reduction of debt on our consolidated balance sheets and amortized as a component of interest expense over the term of the debt agreement.

On March 26, 2021, we amended the Revolving Credit Facility, to (i) decrease the Applicable Rate (as defined in the Credit Agreement) related to any Revolving Loans (as defined in the Credit Agreement) from a rate per annum that ranged from an alternative base rate ("ABR") plus 2.50% to ABR plus 3.00% depending on SHH's Senior Secured First Lien Net Leverage Ratio to ABR plus 1.75%; and in the case of Eurodollar Loans (as defined in the Credit Agreement) from a rate per annum which ranged from the Adjusted LIBOR plus 3.50% to the Adjusted LIBOR plus 4.00% depending on SHH's Senior Secured First Lien Net Leverage Ratio (as defined in the Credit Agreement), to the Adjusted LIBOR (as defined in the Credit Agreement) plus 2.75%, and (ii) extend the maturity date of the Revolving Facility from December 13, 2024 to June 13, 2026. The other material terms of the Credit Agreement are unchanged and the amendment does not change the capacity of our Revolving Credit Facility, which is $347.5 million. No unamortized debt issuance costs associated with the Revolving Credit Facility were written off and direct fees and costs incurred in connection with the amendment were immaterial.

As of March 31, 2021 and December 31, 2020, there were no borrowings on the Revolving Credit Facility. SHH borrowed $50.0 million on the Revolving Credit Facility during the first quarter of 2020 which was repaid in the second quarter of 2020. The interest rate on the borrowings under the Revolving Credit Facility during 2020 averaged approximately 5.0%.

All of SHH's obligations under the Senior Secured Credit Facilities are unconditionally guaranteed by the Company and each existing and subsequently acquired or organized direct or indirect wholly-owned domestic restricted subsidiary of the Company, with customary exceptions including, among other things, where providing such guarantees is not permitted by law, regulation or contract or would result in material adverse tax consequences. All obligations under the Senior Secured Credit Facilities, and the guarantees of such obligations, are secured by substantially all assets of the borrower and guarantors, subject to permitted liens and other exceptions and exclusions, as outlined in the Senior Secured Credit Facilities.

Outstanding letters of credit are collateralized by encumbrances against the Revolving Credit Facility and the collateral pledged thereunder, or by cash placed on deposit with the issuing bank. As of March 31, 2021, the Company had $65.8 million of letters of credit issued against the Revolving Credit Facility, resulting in total availability under the Revolving Credit Facility of $281.7 million.

First Lien Notes

On July 31, 2020, SHH issued $100.0 million aggregate principal amount of senior secured first lien notes due 2026 (the "First Lien Notes"), which mature on December 13, 2026. The First Lien Notes bear interest at a rate equal to LIBOR subject to a 1.00% floor plus 6.00% per annum. Interest is payable on a quarterly basis with no principal due until maturity. The weighted average interest rate on the First Lien Notes for the three months ended March 31, 2021 was 7.00%.

SHH is entitled to redeem all or a portion of the First Lien Notes, at any time and from time to time, subject to certain premiums depending on the date of redemption; any time on or prior to July 31, 2021, a customary make-whole premium applies and, thereafter, specified premiums that decline to zero apply (in each case as described in the indenture governing the First Lien Notes).

All of SHH's obligations under the First Lien Notes are unconditionally guaranteed by the Company and each existing and subsequently acquired or organized direct or indirect wholly-owned domestic restricted subsidiary of SHH, with customary exceptions including, among other things, where providing such guarantees is not permitted by law, regulation or contract or would result in material adverse tax consequences. All obligations under the First Lien Notes, and the guarantees of such obligations, are secured by substantially all of the assets of the borrower and guarantors, subject to permitted liens and other exceptions and exclusions, as outlined in the First Lien Notes. Such collateral is substantially the same collateral that secures the Senior Secured Credit Facilities. Such collateral securing the First Lien Notes ranks pari passu with that of the Senior Secured Credit Facilities.

At March 31, 2021 and December 31, 2020, capitalized debt issuance costs were $0.8 million and $0.9 million, respectively, and debt discounts were $2.7 million and $2.8 million, respectively, related to the First Lien Notes, which are recorded as a reduction of debt on our Consolidated Balance Sheets and amortized into interest expense over the term of the debt agreement.

2020 Debt Repayments

On November 24, 2020, we closed our initial public offering (the "IPO"), in which we sold 53,590,000 shares of our common stock at a price of $23.00 per share, which included the full exercise by the underwriters of their option to purchase up to an additional 6,990,000 shares of common stock. We raised approximately $1.2 billion in net proceeds after deducting underwriters' discounts and commissions. We used the net proceeds received by us from the IPO to (i) redeem $770.0 million in aggregate principal amount of the Second Lien Senior Secured Notes with an original maturity date of December 13, 2027 (the "Second Lien Notes"), plus accrued and unpaid interest thereon and $15.4 million of redemption premium, (ii) repurchase 1,568,445 shares of our common stock from certain of our executive officers at a purchase price per share equal to the IPO price per share of our common stock less an amount equal to the underwriting discounts and commissions payable thereon and (iii) repay $341.0 million of the outstanding indebtedness under the Term Loan, plus accrued and unpaid interest thereon. In connection with the debt repayments, we wrote off $28.9 million of debt issuance and discount costs and recognized $15.4 million in premiums paid for the early extinguishment of the Second Lien Notes. We recognized these costs within "Loss on extinguishment of debt" in our Consolidated Statements of Operations and Comprehensive Income (Loss) in the fourth quarter of 2020.

Aggregate Maturities

Aggregate maturities of the Company's long-term debt, excluding debt discounts, as of March 31, 2021, are as follows:

(thousands of U.S. dollars)	
2021	$ —
2022	**609**
2023	**450**
2024	**—**
2025	**—**
Thereafter	**1,863,100**
Total	**$ 1,864,159**

As referenced above, the Company utilized its IPO proceeds toward prepaying the Second Lien Notes in full as well as prepaying a portion of the Term Loan. The Term Loan prepayment amount eliminated all subsequent scheduled and outstanding repayments of the term borrowings resulting in no remaining short-term commitments.

10. Income Taxes

Income tax expense is provided on an interim basis based upon our estimate of the annual effective income tax rate. In determining the estimated annual effective income tax rate, we analyze various factors, including projections of our annual earnings and the taxing jurisdictions where the earnings will occur, the impact of state and local taxes, our ability to utilize tax credits and net operating loss carryforwards and available tax planning alternatives.

Our effective tax rate was 21.4 % and (86.0)% for the three months ended March 31, 2021 and 2020, respectively. Income tax expense for the three months ended March 31, 2021 differs from the statutory rate primarily due to the impact of the foreign rate differential, global intangible low-tax income ("GILTI"), and a net increase in the valuation allowance attributable to the limitation on the deductibility of interest expense. This was offset by a discrete item, which reversed the valuation allowance on deferred tax assets related to certain asset retirement obligations.

Income tax benefit for the three months ended March 31, 2020 differed from the statutory rate primarily due to the impact of the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"), which increased the limitation on the deductibility of interest expense from 30% to 50% for tax years beginning in 2019 or 2020, and other provisions. The increased limitation resulted in a current tax benefit for the three months ended March 31, 2020 of $9.1 million. The increased limitation also resulted in a $5.6 million valuation allowance reversal in the three months ended March 31, 2020.

11. Employee Benefits

The Company sponsors various post-employment benefit plans including, in certain countries outside the U.S., defined benefit and defined contribution pension plans, retirement compensation arrangements, and plans that provide extended health care coverage to retired employees, the majority of which relate to Nordion.

Defined benefit pension plan

The interest cost and expected return on plan assets are recorded in "Other income, net" and the service cost component is included in the same financial statement line item as the applicable employee's wages in the Consolidated Statements of Operations and Comprehensive Income (Loss). The components of net periodic pension cost for the defined benefit plans for the three months ended March 31, 2021 and 2020 were as follows:

Three Months Ended March 31, *(thousands of U.S. dollars)*	**2021**	**2020**
Service cost	**$ 298**	$ 276
Interest cost	**1,613**	2,007
Expected return on plan assets	**(3,557)**	(3,599)
Amortization of net actuarial loss	**267**	197
Net periodic benefit	**$ (1,379)**	$ (1,119)

Other benefit plans

Other benefit plans include a supplemental retirement arrangement, a retirement and termination allowance, and post-retirement benefit plans, which include contributory health and dental care benefits and contributory life insurance coverage. All but one, non-pension post-employment benefit plans are unfunded. The components of net periodic pension cost for the other benefit plans for the three months ended March 31, 2021 and 2020 were as follows:

Three Months Ended March 31, *(thousands of U.S. dollars)*	**2021**	**2020**
Service cost	**$ 7**	$ 7
Interest cost	**59**	73
Amortization of net actuarial (gain) loss	**8**	13
Net periodic benefit cost	**$ 74**	$ 93

We currently expect funding requirements of approximately $2.8 million in each of the next five years to fund the regulatory solvency deficit, as defined by Canadian federal regulation, which require solvency testing on defined benefit pension plans.

The Company may obtain a qualifying letter of credit for solvency payments, up to 15% of the market value of solvency liabilities as determined on the valuation date, instead of paying cash into the pension fund. As of March 31, 2021, and December 31, 2020, we had letters of credit outstanding relating to the defined benefit plans totaling $42.6 million and $41.3 million, respectively. The actual funding requirements over the five-year period will be dependent on subsequent annual actuarial valuations. These amounts are estimates, which may change with actual investment performance, changes in interest rates, any pertinent changes in Canadian government regulations and any voluntary contributions.

12. Related Parties

We do business with a number of companies affiliated with Warburg Pincus and GTCR, which we refer to collectively as the “Sponsors,” who continue to have substantial control over us. All transactions with these companies have been conducted in the ordinary course of our business and are not material to our operations.

13. Other Comprehensive Income (Loss)

Amounts in accumulated other comprehensive income (loss) are presented net of the related tax. Foreign currency translation is not adjusted for income taxes.

Changes in our accumulated other comprehensive income (loss) balances, net of applicable tax, were as follows:

(thousands of U.S. dollars)	Defined Benefit Plans	Foreign Currency Translation	Interest Rate Swaps	Total
Beginning balance – January 1, 2021	**$ (44,143)**	**$ (49,699)**	**$ —**	**$ (93,842)**
Other comprehensive income (loss) before reclassifications	**(524)**	**(3,071)**	**—**	**(3,595)**
Amounts reclassified from accumulated other comprehensive income (loss)	**275** (a)	**—**	**—**	**275**
Net current-period other comprehensive income (loss)	**(249)**	**(3,071)**	**—**	**(3,320)**
Ending balance – March 31, 2021	**$ (44,392)**	**$ (52,770)**	**$ —**	**$ (97,162)**
Beginning balance – January 1, 2020	$ (27,113)	$ (67,453)	$ 179	$ (94,387)
Other comprehensive income (loss) before reclassifications	2,207	(72,967)	(3,292)	(74,052)
Amounts reclassified from accumulated other comprehensive income (loss)	—	—	(187) (b)	(187)
Net current-period other comprehensive income (loss)	2,207	(72,967)	(3,479)	(74,239)
Ending balance – March 31, 2020	$ (24,906)	$ (140,420)	$ (3,300)	$ (168,626)

(a) For defined benefit pension plans, amounts reclassified from accumulated other comprehensive income (loss) are recorded to “Other income, net” within the Consolidated Statements of Operations and Comprehensive Income (Loss).

(b) For interest rate swaps, amounts reclassified from accumulated other comprehensive income (loss) are recorded to “Interest expense, net” within the Consolidated Statements of Operations and Comprehensive Income (Loss).

14. Share-Based Compensation

Pre-IPO Awards

Restricted stock distributed in respect of pre-IPO Class B-1 time vesting units vests on a daily basis pro rata over the five-year vesting period (20% per year) beginning on the original vesting commencement date of the corresponding Class B-1 time vesting units, subject to the grantee’s continued services through each vesting date. Upon the occurrence of a change in control of the Company, all then outstanding unvested shares of our common stock distributed in respect of Class B-1 Units will become vested as of the date of consummation of such change in control, subject to the grantee’s continued services through the consummation of the change in control.

Restricted stock distributed in respect of pre-IPO Class B-2 Units (which were considered performance vesting units) are scheduled to vest only upon satisfaction of certain thresholds. These units generally vest as of the first date on which (i) our Sponsors have received actual cash proceeds in an amount equal to or in excess of at least two and one-half times their invested capital in Sotera Health Topco Parent, L.P. (of which the Company was a direct wholly owned subsidiary prior to the IPO) and (ii) the Sponsors’ internal rate of return exceeds twenty percent, subject to such grantee’s continued services through such date.

In the event of a change in control of the Company, any outstanding shares of our common stock distributed in respect of Class B-2 Units that remain unvested immediately following the consummation of such a change in control of the Company shall be immediately canceled and forfeited without compensation. Stock based compensation expense attributed to the pre-IPO Class B-2 awards was recorded in the fourth quarter of 2020 as the related performance conditions were considered probable of achievement and the implied service conditions were met. As of March 31, 2021, these awards remain unvested.

We recognized $0.7 million and $1.7 million of share-based compensation expense related to the pre-IPO Class B-1 awards for the three months ended March 31, 2021 and 2020, respectively.

A summary of the activity for the three months ended March 31, 2021 related to the restricted stock awards distributed to the Company service providers in respect of the pre-IPO awards (Class B-1 and B-2 Units) is presented below:

	Restricted Stock - Pre-IPO B-1	Restricted Stock - Pre-IPO B-2
Unvested at December 31, 2020	2,201,239	2,323,333
Forfeited	(43,361)	(254,839)
Vested	(228,862)	—
Unvested at March 31, 2021	**1,929,016**	**2,068,494**

2020 Omnibus Incentive Plan

We maintain a long-term incentive plan (the “2020 Omnibus Incentive Plan” or the “2020 Plan”) that allows for grants of incentive stock options to employees (including employees of any of our subsidiaries), nonstatutory stock options, restricted stock awards (“RSAs”), restricted stock units (“RSUs”) and other cash-based, equity-based or equity-related awards to employees, directors, and consultants, including employees or consultants of our subsidiaries.

We recognized $2.8 million ($1.3 million for stock options and $1.5 million for RSUs) of share-based compensation expense for these awards in our Consolidated Statements of Operations and Comprehensive Income (Loss), in “Selling, general and administrative expenses,” for the three months ended March 31, 2021.

Stock Options

Stock options have a four-year vesting period, an exercise price equal to the fair market value of a share of common stock on the date of grant, and a contractual term of 10 years. The following table summarizes our stock option activity:

	Number of Shares	Weighted-average Exercise Price
At December 31, 2020	2,389,258	$ 23.00
Granted	20,407	26.26
Forfeited	(9,316)	23.00
Exercised	—	—
At March 31, 2021	**2,400,349**	**$ 23.03**

RSUs

RSUs generally vest ratably over a period of one to four years and are valued based on our market price on the date of grant. The following table summarizes our unvested RSUs activity:

	Number of Shares	Weighted-average Grant Date Fair Value
Unvested at December 31, 2020	771,276	$ 23.00
Granted	10,851	26.03
Forfeited	(24,999)	23.00
Vested	—	—
Unvested at March 31, 2021	**757,128**	**$ 23.05**

15. Earnings (Loss) Per Share

Basic earnings (loss) per share represents the amount of income (loss) attributable to each common share outstanding. Diluted earnings (loss) per share represents the amount of income (loss) attributable to each common share outstanding adjusted for the effects of potentially dilutive common shares. Potentially dilutive common shares include stock options and other stock-based awards. In the periods where the effect would be antidilutive, potentially dilutive common shares are excluded from the calculation of diluted earnings per share.

In periods in which the Company has net income, earnings per share is calculated using the two-class method. This method is required as unvested restricted stock distributed in respect of pre-IPO Class B-1 and B-2 awards have the right to receive non-forfeitable dividends or dividend equivalents if the Company were to declare dividends on its common stock. Pursuant to the two-class method, earnings for each period are allocated on a pro-rata basis to common stockholders and unvested pre-IPO Class B-1 and B-2 restricted stock awards. Diluted earnings per share is computed using the more dilutive of (a) the two-class method, or (b) treasury stock method, as applicable, to the potentially dilutive instruments.

In periods in which the Company has a net loss, the two-class method is not applicable because the pre-IPO Class B-1 and B-2 restricted stock awards do not participate in losses.

Our basic and diluted earnings per common share are calculated as follows:

in thousands of U.S. dollars and share amounts (except per share amounts)	Three Months Ended March 31, 2021	Three Months Ended March 31, 2020
Earnings (Loss):		
Net income (loss)	**$ 11,065**	$ (1,986)
Less: Net income (loss) attributable to noncontrolling interests	**223**	(22)
Less: Allocation to participating securities	**157**	—
Net income (loss) attributable to Sotera Health Company common shareholders	**$ 10,685**	$ (1,964)
Weighted Average Common Shares:		
Weighted-average common shares outstanding - basic	**278,827**	**232,400**
Dilutive effect of potential common shares	**141**	**—**
Weighted-average common shares outstanding - diluted[(a)]	**278,968**	**232,400**
Earnings (loss) per Common Share:		
Net income (loss) attributable to Sotera Health Company common shareholders - basic	**$ 0.04**	$ (0.01)
Net income (loss) attributable to Sotera Health Company common shareholders - diluted	**0.04**	(0.01)

(a) An additional 2,400,349 and 3,645 equivalent shares related to stock options and RSUs, respectively, issued in connection with the 2020 Omnibus Incentive Plan were excluded from the calculation of diluted weighted average common shares outstanding for the three months ended March 31, 2021 as they were anti-dilutive. For the three months ended March 31, 2020, there were no potentially dilutive common shares outstanding.

16. Commitments and Contingencies

From time to time, we may be subject to various lawsuits and other claims in the ordinary course of our business. In addition, from time to time, we receive communications from government or regulatory agencies concerning investigations or allegations of noncompliance with laws or regulations in jurisdictions in which we operate.

We establish reserves for specific liabilities in connection with regulatory and legal actions that we determine to be both probable and reasonably estimable. No material amounts have been accrued in our consolidated financial statements with respect to any loss contingencies. In certain of the matters described below, we are not able to make a reasonable estimate of any liability because of the uncertainties related to the outcome and/or the amount or range of loss. While it is not possible to determine the ultimate disposition of each of these matters, we do not expect that the ultimate resolution of pending regulatory and legal matters in future periods, including the matters described below, will have a material effect on our financial condition or results of operations. Despite the above, the Company may incur material defense and settlement costs, diversion of management resources and other adverse effects on our business, financial condition, or results of operations.

FM Global Business Interruption Claim (NRU Outage)

Nordion, due to the shutdown of AECL's NRU reactor in 2009, suffered a cessation of supply of radioisotopes and business interruption loss. Nordion, by Statement of Claim dated October 22, 2010, issued in Ontario Superior Court an action against the insurer, Factory Mutual Insurance Company (FM Global), claiming $25.0 million USD in losses resulting from the shutdown of AECL's reactor and its inability to supply radioisotopes through the specified period of approximately 15 months. FM Global objected to Nordion's claim.

Trial commenced in March 2019 and was completed in September 2019. On March 30, 2020, Nordion received a favorable judgment in the amount of $25.0 million USD, plus pre-judgment interest, for a total judgment value of $39.8 million USD, or $56.4 million CAD based on exchange rates approved by the trial court. In addition, costs and disbursements have been assessed and awarded by the trial court in favor of Nordion in the approximate amount of $1.1 million CAD ($0.8 million USD) and $161,863 CAD ($0.1 million USD), respectively. On April 27, 2020, FM Global appealed the judgment. In January 2021, The Insurance Bureau of Canada was granted leave to intervene in the appeal. Hearing before the Court of Appeal was held on April 15, 2021. Pending a favorable judgment in the appellate court, any final proceeds would be subject to post judgment interest, a contingent fee owed to legal counsel and applicable taxes. As the judgment is considered a contingent gain, any favorable outcome will be recognized in a future period when all appeals are exhausted. It is anticipated that the overall appeal process could take a year or more to complete.

Willowbrook, Illinois – Government Litigation

On October 30, 2018, the Illinois Attorney General and the State's Attorney of DuPage County, Illinois, sued Sterigenics U.S., LLC (the "IAG Action"), alleging that authorized EO air emissions from a commercial sterilization facility Sterigenics formerly operated in Willowbrook, Illinois "cause, threaten, or allow air pollution" in violation of the Illinois Environmental Protection Act. The IAG Action did not assert that Sterigenics violated its permit from the Illinois Environmental Protection Agency ("IEPA") authorizing Sterigenics' release of regulated levels of EO at the Willowbrook facility.

On February 15, 2019, the acting IEPA director, John Kim, issued a "Seal Order" effectively precluding Sterigenics' operations at the Willowbrook facility based on many of the same allegations asserted in the IAG Action. Sterigenics disputed those allegations and opposed the IEPA's Seal Order. The Seal Order was resolved by a Consent Order entered on September 6, 2019. The Consent Order provided that Sterigenics did not admit the allegations of the IAG Action, provided for the removal of the Seal Order and allowed the Willowbrook facility to reopen upon implementation of supplemental emissions control measures consistent with a new law that became effective in Illinois in June 2019 and an IEPA permit, which the IEPA approved in September 2019. Following entry of the Consent Order, the Seal Order was withdrawn.

On September 30, 2019, Sterigenics announced the closure of the Willowbrook facility due to the inability to reach an agreement with its landlord to renew the facility's lease and the unstable legislative and regulatory landscape in Illinois. Sterigenics is in the process of decommissioning the facility and completing the work required by the terms of its lease to return the property to the landlord.

On October 20, 2020 Sterigenics, the Illinois Attorney General and the State’s Attorney of DuPage County filed a Joint Motion to Terminate Consent Order, stating that the community projects which Sterigenics voluntarily agreed to fund have been completed and funded as required by the Consent Order, and that Sterigenics has permanently ceased operations and surrendered all permits for its operations in Willowbrook, Illinois. On October 27, 2020 the DuPage County Circuit Court entered the Agreed Order Terminating Consent Order.

Ethylene Oxide Tort Litigation - Illinois

Since September 2018, tort lawsuits on behalf of approximately 835 personal injury plaintiffs (which are further described in the following paragraphs) have been filed in Illinois state courts against Sotera Health LLC, Sterigenics U.S., LLC, GTCR, LLC and other parties related to Sterigenics’ Willowbrook, Illinois operations. Specifically, those plaintiffs allege that they suffered personal injuries including cancer and other diseases, or wrongful death, resulting from purported emissions and releases of EO from the Willowbrook facility. Additional derivative claims are alleged on behalf of other individuals related to these personal injury plaintiffs. Plaintiffs seek damages in an amount to be determined by the trier of fact. Sterigenics denies these allegations and intends to vigorously defend against these claims. Plaintiffs have voluntarily dismissed without prejudice a number of cases since September 2018, including certain individual cases alleging personal injuries and two class actions seeking damages for alleged diminution of property values.

Sterigenics sought consolidation of the cases for pretrial purposes, and in October 2019 obtained an order consolidating the then-pending cases and related cases filed in the future before Judge Lawler in the Cook County Circuit Court, Illinois (the “Consolidated Case”). All plaintiffs in the Consolidated Case filed a single Master Complaint on October 24, 2019 by which Sotera Health LLC was added as a co-defendant, followed by a First Amended Master Complaint on January 31, 2020. On April 28, 2020, the defendants filed motions to dismiss the claims in the First Amended Master Complaint. On August 17, 2020, the Court entered an order largely denying the motions to dismiss, and the same day plaintiffs filed a Second Amended Master Complaint.

Plaintiffs filed a Third Amended Master Complaint on October 30, 2020 adding Griffith Foods Group, Inc., Griffith Foods, Inc., Griffith Foods International, Inc. and Griffith Foods Worldwide Inc. as defendants. Defendants’ responses to the Third Amended Master Complaint were filed on or about December 1, 2020, including a motion to dismiss by Griffith Foods Group, Inc., Griffith Foods, Inc., Griffith Foods International, Inc. and Griffith Foods Worldwide, Inc. That motion was granted in part on March 16, 2021 and plaintiffs were granted leave to file a Fourth Amended Master Complaint. The Fourth Amended Master Complaint was filed on April 16, 2021, including claims against Griffith Foods International, Inc. but not the other Griffith entities. All defendants’ responses to the Fourth Amended Master Complaint are due by May 14, 2021.

Written and deposition fact discovery is on-going in the Consolidated Case. Currently, there are no dates set for the close of fact discovery, for expert discovery or for dispositive motion practice. Plaintiffs have not yet made any specific damages claims.

Trials in five of the individual cases now included in the Consolidated Case had previously been scheduled to begin in 2021. Based on the Court's administrative orders related to the impact of COVID-19 on jury trials, however, and subject to the Court's discretion to make changes, we anticipate that the earliest any of the individual cases in the Consolidated Case will be tried will be 2022 and that trials will be scheduled in roughly the order in which the individual cases were filed.

Ethylene Oxide Tort Litigation – Georgia

On May 19, 2020, a lawsuit against Sotera Health LLC, Sterigenics U.S., LLC and other parties was filed in the State Court of Cobb County, Georgia by 53 employees of a contract sterilization customer of Sterigenics. In the operative complaint, Plaintiffs claim personal injuries resulting from alleged exposure to residual EO while working at the customer’s distribution center in Lithia Springs, Georgia, allege they were unaware that they were being exposed to EO in their workplace and seek damages in an amount to be determined by the trier of fact. Defendants filed motions to dismiss and answers to the Complaint on April 30, 2021. All defendants are being defended and indemnified by Sterigenics’ contract sterilization customer (plaintiffs’ employer and a co-defendant in the lawsuit).

In May 2020, the Cobb County, Georgia Board of Tax Assessors reduced certain residential property value assessments around the Sterigenics Atlanta facility by 10% citing an “Epd-identified environmental issue,” without supporting market data. On

August 14, 2020, Sterigenics U.S., LLC filed a lawsuit against members of the Cobb County Board of Tax Assessors in the U.S. District Court for the Northern District of Georgia, seeking a declaration that the reduction in property value assessments is arbitrary and unlawful and is causing Sterigenics reputational and imminent economic harm. On February 5, 2021 the Court issued an order finding that Sterigenics lacks standing to obtain the relief sought and dismissed the case. Sterigenics has appealed that decision to the 11th Circuit Court of Appeals and anticipates that appellate briefing will be completed before the end of August 2021.

Since August 17, 2020, six lawsuits against Sotera Health LLC, Sterigenics U.S., LLC and other parties have been filed by plaintiffs in the State Court of Cobb County, Georgia and the State Court of Gwinnett County, Georgia in which plaintiffs allege that they suffered personal injuries and loss of consortium resulting from emissions and releases of EO from Sterigenics' Atlanta facility. Our subsidiaries are also defendants in lawsuits alleging that the Atlanta facility has devalued and harmed plaintiffs' use of real properties they own in Smyrna, Georgia and caused other damages. Plaintiffs in these cases seek various forms of relief including damages in amounts to be determined by the trier of fact. Sotera Health LLC filed motions to dismiss in each case on personal jurisdiction grounds. That motion was denied in one case pending in the State Court of Gwinnett County and the other motions remain pending. Sterigenics U.S., LLC and Sotera Health LLC filed a motion to dismiss the strict liability claim in each case. That motion was denied in one case pending in the State Court of Gwinnett County and the other motions remain pending.

Suspension of Georgia Facility Operations & Related Litigation

On August 7, 2019, Sterigenics U.S., LLC entered into a voluntary Consent Order with the Georgia Environmental Protection Division ("EPD") under which Sterigenics agreed to install emissions reduction enhancements at its Atlanta facility to further reduce the facility's EO emissions below already permitted levels. Sterigenics voluntarily suspended operations at the facility in early September 2019 to expedite completion of the enhancements. Installation of these enhancements is complete, and Sterigenics successfully tested the enhanced emissions controls in cooperation with EPD during the second quarter of 2020 while the facility was in operation.

In October 2019, while Sterigenics had voluntarily suspended the facility's operations, Cobb County, Georgia officials asserted that the facility had an incorrect "certificate of occupancy" and could not resume operations without obtaining a new certificate of occupancy after a third-party code compliance review they required.

After the Cobb County officials would not allow Sterigenics to resume operations, on March 30, 2020, Sterigenics U.S., LLC filed a lawsuit in the United States District Court for the Northern District of Georgia against Cobb County, Georgia and Cobb County officials Nicholas Dawe and Kevin Gobble. In the lawsuit, Sterigenics sought immediate injunctive relief and permanent declaratory relief to resume normal operations of the Atlanta facility in the interest of public health and on the basis that the positions asserted by Cobb County were unfounded. On April 1, 2020 the Court entered a Temporary Restraining Order prohibiting Cobb County officials from precluding or interfering with the facility's normal operations. On April 8, 2020, the Court entered a Consent Order extending the Temporary Restraining Order and allowing the facility to continue normal operations until entry of a final judgment in the case. Defendants filed a motion to dismiss the claims. On November 9, 2020, the Court held a hearing and denied the motion to dismiss. The parties are conducting discovery, which is presently scheduled to end on July 23, 2021. A settlement conference is scheduled to be held by September 27, 2021.

Ethylene Oxide Litigation – New Mexico

On December 22, 2020 the New Mexico Attorney General filed a lawsuit in the Third Judicial District Court, Doña Ana County, New Mexico ("the Third Judicial District") against the Company, Sterigenics U.S., LLC and other subsidiaries alleging that emissions of EO from Sterigenics U.S., LLC's sterilization facility in Santa Teresa, New Mexico constitute a public nuisance and have deteriorated the air quality in Santa Teresa and surrounding communities and materially contributed to increased health risks suffered by residents of those communities. The Complaint asserts claims for public nuisance, negligence, strict liability, violations of New Mexico's Public Nuisance Statute and Unfair Practices Act and a request for a temporary restraining order and preliminary injunctive relief. On December 28, 2020 Sterigenics U.S., LLC removed the case to the United States District Court for the District of New Mexico. On April 13, 2021 the case was remanded to the Third Judicial District where Plaintiff's Emergency Motion for Temporary Restraining Order and Preliminary Injunction has been scheduled for a preliminary injunction hearing on May 26, 2021.

The Emergency Motion does not demand facility closure but seeks an order requiring Defendants to cease any and all uncontrolled emissions or releases of EO from the Santa Teresa facility, including by making certain modifications to sterilization processes at the facility.

* * *

We carry insurance for alleged environmental liabilities (including litigation like that pending in Illinois, Georgia and New Mexico described above), with limits of $10.0 million per occurrence and $20.0 million in the aggregate. The per occurrence limit related to the Willowbrook government and EO tort litigation was fully utilized by June 30, 2020.

Additional personal injury, property devaluation or other lawsuits may be filed in the future against us or our subsidiaries relating to Sterigenics' Willowbrook, Atlanta, Santa Teresa or other EO sterilization facilities. The Company, Sterigenics U.S., LLC and other Company subsidiaries intend to defend themselves vigorously in all such current or future EO litigation.

While an adverse outcome in one or more of the proceedings could have a material adverse effect on our business, financial condition and results of operations, no contingency reserve has been reflected in our consolidated financial statements as a loss is not deemed probable, nor is a loss or range of losses reasonably estimable.

17. Financial Instruments and Financial Risk

Derivative Instruments

We do not use derivatives for trading or speculative purposes and are not a party to leveraged derivatives.

Derivatives Designated in Hedge Relationships

During the third quarter of 2019, we entered into two interest rate swap agreements to hedge our exposure to interest rate movements and to manage interest expense related to our then outstanding variable-rate debt. The notional amount of the interest rate swap agreements totaled $1,000.0 million. These swaps were designated as cash flow hedges and were designed to hedge the variability of cash flows attributable to changes in LIBOR, the benchmark interest rate being hedged. We received interest at one-month LIBOR and paid a fixed interest rate under the terms of the swap agreement. The swap agreements terminated on August 31, 2020.

Derivatives Not Designated in Hedge Relationships

In October 2017, we entered into two interest rate cap agreements with a total notional amount of $400.0 million for a total option premium of $0.6 million; these agreements terminated on September 30, 2020. The interest rate caps limited the Company's cash flow exposure related to LIBOR under the variable rate Term Loan borrowings to 3.0%.

In June 2020, SHH entered into two interest rate cap agreements with notional amounts of $1,000.0 million and $500.0 million, respectively, for a total option premium of $0.3 million. These instruments were initially scheduled to terminate on August 31, 2021 and February 28, 2022, respectively. The interest rate caps limit our cash flow exposure related to the LIBOR base rate under a portion of our variable rate borrowings to 1.0%. In February 2021, we amended the two interest rate cap agreements referenced above to reduce the strike rate from 1.0% to 0.5%, and extend the termination date of the $1,000.0 million notional cap to September 30, 2021. Premiums paid to amend the interest rate caps were immaterial. We also entered into two additional interest rate cap agreements in February 2021 with a combined notional amount of $1,000.0 million, for a total option premium of $0.4 million. These instruments are effective September 30, 2021, and will terminate on March 31, 2022. The amended and new interest rate caps limit our cash flow exposure related to LIBOR under a portion of our variable rate borrowings to 0.5%.

The interest rate caps were entered into to manage economic risks associated with our variable rate borrowings, but were not designated in hedge relationships. These instruments are recorded at fair value on the Consolidated Balance Sheets, with any changes in the value being recorded in "Interest expense, net" in the Consolidated Statements of Operations and Comprehensive Income (Loss).

The Company also entered into foreign currency forward contracts to manage foreign currency exchange rate risk of our intercompany loans in certain of our international subsidiaries. The foreign currency forward contracts expire on a monthly basis. The fair value of the outstanding foreign currency forward contracts was zero as of March 31, 2021 and December 31, 2020, respectively.

Embedded Derivatives

We have embedded derivatives in certain of our customer and supply contracts as a result of the currency of the contract being different from the functional currency of the parties involved. Changes in the fair value of the embedded derivatives are recognized in "Other income, net" in the Consolidated Statements of Operations and Comprehensive Income (Loss).

The following table provides a summary of the notional and fair values of our derivative instruments:

(in U.S. Dollars; notional in millions, fair value in thousands)	**March 31, 2021**			**December 31, 2020**		
		Fair Value			**Fair Value**	
	Notional Amount	**Derivative Assets**	**Derivative Liabilities**	**Notional Amount**	**Derivative Assets**	**Derivative Liabilities**
Derivatives not designated as hedging instruments						
Interest rate caps	**$ 2,500.0**	**$ 9**	**$ —**	$ 1,500.0	$ 7	$ —
Embedded derivatives	**77.7** [(a)]	**403**	**229**	83.3	—	670
Total	**$ 2,577.7**	**$ 412**	**$ 229**	$ 1,583.3	$ 7	$ 670

(a) Represents the total notional amounts for certain of the Company's supply and sales contracts accounted for as embedded derivatives.

The interest rate caps and embedded derivative assets are included in "Prepaid expenses and other current assets" on our consolidated balance sheets. Embedded derivative liabilities are included in "Accrued liabilities" on the Consolidated Balance Sheets.

The following tables summarize the activities of our derivative instruments for the periods presented, and the line item they are recorded in in the Consolidated Statements of Operations and Comprehensive Income (Loss):

(thousands of U.S. dollars) **Three Months March 31,**	**2021**	**2020**
Unrealized loss on interest rate caps recorded in interest expense, net	**$ 90**	$ —
Unrealized (gain) loss on embedded derivatives recorded in other income, net	**(853)**	4,819
Realized gain on foreign currency forward contracts recorded in foreign exchange (gain) loss	**(2,374)**	—

In addition, during the three months ended March 31, 2020, we recognized $3.5 million of losses, net of tax, in accumulated other comprehensive income (loss) related to the change in fair value of the interest rate swaps.

Credit Risk

Certain of our financial assets, including cash and cash equivalents, are exposed to credit risk.

We are also exposed, in our normal course of business, to credit risk from our customers. As of March 31, 2021 and December 31, 2020, accounts receivable was net of an allowance for uncollectible accounts of $0.6 million and $0.7 million, respectively.

Credit risk on financial instruments arises from the potential for counterparties to default on their contractual obligations to us. We are exposed to credit risk in the event of non-performance, but do not anticipate non-performance by any of the counterparties to our financial instruments. We limit our credit risk by dealing with counterparties that are considered to be of high credit quality. In the event of non-performance by counterparties, the carrying value of our financial instruments represents the maximum amount of loss that would be incurred.

Fair Value Hierarchy

The fair value of our financial instruments is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The valuation techniques we would use to determine such fair values are described as follows: Level 1—fair values determined by inputs utilizing quoted prices in active markets for identical assets or liabilities; Level 2—fair values based on observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable; Level 3—fair values determined by unobservable inputs reflecting our own assumptions, consistent with reasonably available assumptions made by other market participants.

The following table discloses the fair value of our financial assets and liabilities:

As of March 31, 2021		Fair Value		
(thousands of U.S. dollars)	Carrying Amount	Level 1	Level 2	Level 3
Derivatives not designated as hedging instruments[(a)]				
Interest rate caps	**$ 9**	**$ —**	**$ 9**	**$ —**
Embedded derivative assets	**403**	**—**	**403**	**—**
Embedded derivative liabilities	**(229)**	**—**	**(229)**	**—**
Long-Term Debt[(b)]				
Term loan, due 2026	**1,740,071**	**—**	**1,760,896**	**—**
Senior notes, due 2026	**96,458**	**—**	**97,587**	**—**
Other long-term debt	**1,051**	**—**	**1,051**	**—**
Finance Lease Obligations (with current portion)[(c)]	**34,540**	**—**	**34,540**	**—**

As of December 31, 2020		Fair Value		
(thousands of U.S. dollars)	Carrying Amount	Level 1	Level 2	Level 3
Derivatives not designated as hedging instruments[(a)]				
Interest rate caps	$ 7	$ —	$ 7	$ —
Embedded derivative liabilities	(670)	—	(670)	—
Long-Term Debt[(b)]				
Term loan, due 2026	1,728,018	—	1,772,180	—
Senior notes, due 2026	96,329	—	99,863	—
Other long-term debt	442	—	442	—
Finance Lease Obligations (with current portion)[(c)]	36,112	—	36,112	—

(a) Derivatives that are not designated as hedging instruments are measured at fair value with gains or losses recognized immediately in the Consolidated Statements of Operations and Comprehensive Income (Loss). Interest rate caps are valued using pricing models that incorporate observable market inputs including interest rate and yield curves. Embedded derivatives are valued using internally developed models that rely on observable market inputs including foreign currency forward curves.

(b) Carrying amounts of long-term debt instruments are reported net of discounts and debt issuance costs. The estimated fair value of these instruments is based on information provided by the agent under the Company’s senior secured credit facility. Fair value approximates carrying value for “Other long-term debt.”

(c) Fair value approximates carrying value.

18. Segment Information

We identify our operating segments based on the way we manage, evaluate and internally report our business activities for purposes of allocating resources and assessing performance. We have three reportable segments: Sterigenics, Nordion and Nelson Labs. We have determined our reportable segments based upon an assessment of organizational structure, service types, and internally prepared financial statements. Our chief operating decision maker evaluates performance and allocates resources based on net revenues and segment income after the elimination of intercompany activities. The accounting policies of our reportable segments are the same as those described in Note 1, “Significant Accounting Policies” of our 2020 Form 10-K.

Sterigenics

The Sterigenics segment provides outsourced terminal sterilization and irradiation services for the medical device, pharmaceutical, food safety and advanced applications markets.

Nordion

Nordion is a global provider of Co-60 and gamma irradiators, which are key components to the gamma sterilization process.

Nelson Labs

Nelson Labs provides outsourced microbiological and analytical chemistry testing and advisory services for the medical device and biopharmaceutical industries.

For the three months ended March 31, 2021, three customers reported within the Nordion segment individually represented 10% or more of the segment’s total net revenues. These customers represented 23.7%, 20.0%, and 12.2% of the total segment’s external net revenues for the three months ended March 31, 2021. For the three months ended March 31, 2020, two customers reported within the Nordion segment individually represented 10% or more of the segment's total net revenues. These customers represented 18.7% and 11.6% of the total segment's external net revenues for the three months ended March 31, 2020.

(thousands of U.S. dollars)	Three Months Ended March 31, 2021			
	Sterigenics	**Nordion**	**Nelson Labs**	**Consolidated**
Net revenues[a]	**$ 131,151**	**$ 25,918**	**$ 55,079**	**$ 212,148**
Segment income[b]	**68,461**	**13,786**	**23,070**	**105,317**
Capital expenditures	**19,514**	**489**	**939**	**20,942**

	Three Months Ended March 31, 2020			
	Sterigenics	**Nordion**	**Nelson Labs**	**Consolidated**
Net revenues[a]	$ 117,280	$ 23,625	$ 47,295	$ 188,200
Segment income[b]	61,091	13,022	17,770	91,883
Capital expenditures	10,940	1,234	815	12,989

(a) Revenues are reported net of intersegment sales. Our Nordion segment recognized $10.5 million and $10.9 million in revenues from sales to our Sterigenics segment for the three months ended March 31, 2021 and 2020, respectively, that is not reflected in net revenues in the table above. Intersegment sales for Sterigenics and Nelson Labs are immaterial for both periods.

(b) Segment income is only provided on a net basis to the chief operating decision maker and is reported net of intersegment profits.

Corporate operating expenses for executive management, accounting, information technology, legal, human resources, treasury, corporate development, tax, purchasing, and marketing are allocated to the segments based on total revenue.

Total assets and depreciation and amortization expense by segment are not readily available and are not reported separately to the chief operating decision maker.

A reconciliation of segment income to consolidated income (loss) before taxes is as follows:

(thousands of U.S. dollars) Three Months Ended March 31,	2021	2020
Segment income	**$ 105,317**	$ 91,883
Less adjustments:		
Interest expense, net	**21,282**	56,562
Depreciation and amortization[a]	**37,661**	36,023
Share-based compensation[b]	**3,449**	1,725
(Gain) loss on foreign currency and embedded derivatives[c]	**(336)**	4,267
Acquisition and divestiture related charges, net[d]	**(185)**	994
Business optimization project expenses[e]	**261**	1,049
Plant closure expenses[f]	**542**	771
Loss on extinguishment of debt[g]	**14,312**	—
Professional services relating to EO sterilization facilities[h]	**13,399**	4,146
Accretion of asset retirement obligation[i]	**551**	490
COVID-19 expenses[j]	**299**	76
Consolidated income (loss) before taxes	**$ 14,082**	$ (14,220)

(a) Includes depreciation of Co-60 held at gamma irradiation sites.
(b) Represents non-cash share-based compensation expense.
(c) Represents the effects of (i) fluctuations in foreign currency exchange rates, primarily related to remeasurement of intercompany loans denominated in currencies other than subsidiaries' functional currencies, and (ii) non-cash mark-to-fair value of embedded derivatives relating to certain customer and supply contracts at Nordion.
(d) Represents (i) certain direct and incremental costs related to the acquisitions of BioScience in 2021, Iotron in July 2020 and Nelson Labs Fairfield in 2018 (including the first quarter 2021 gain on the mandatorily redeemable noncontrolling interest as described in Note 4, "Acquisitions"), and certain related integration efforts as a result of those acquisitions, (ii) the earnings impact of fair value adjustments (excluding those recognized within amortization expense) resulting from the businesses acquired, and (iii) transition services income and non-cash deferred lease income associated with the terms of the divestiture of the Medical Isotopes business in 2018.
(e) Represents professional fees, contract termination and exit costs, severance and other payroll costs, and other costs associated with business optimization and cost savings projects relating to the integration of Nelson Labs, the Sotera Health rebranding, operating structure realignment and other process enhancement projects.
(f) Represents professional fees, severance and other payroll costs, and other costs including ongoing lease and utility expenses associated with the closure of the Willowbrook, Illinois facility.
(g) Represents expenses incurred in connection with the repricing of our Term Loan in January 2021 including accelerated amortization of prior debt issuance and discount costs.
(h) Represents professional fees related to litigation associated with our EO sterilization facilities and other related professional fees. See Note 16, "Commitments and Contingencies".
(i) Represents non-cash accretion of asset retirement obligations related to Co-60 and gamma processing facilities, which are based on estimated site remediation costs for any future decommissioning of these facilities (without regard for whether the decommissioning services would be performed by employees of Nordion, instead of by a third party) and are accreted over the life of the asset.
(j) Represents non-recurring costs associated with the COVID-19 pandemic, including incremental costs to implement workplace health and safety measures.

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

You should read the following discussion and analysis in conjunction with our consolidated financial statements and related notes included in Part I, Item 1 of this Quarterly Report on Form 10-Q, as well as the audited consolidated financial statements and notes and Management’s Discussion and Analysis of Financial Condition and Results of Operations contained in our 2020 Form 10-K. This discussion and analysis contains forward-looking statements that are based on management’s current expectations, estimates and projections about our business and operations. Our actual results may differ materially from those currently anticipated and expressed in such forward-looking statements as a result of various factors, including the factors we describe in the section entitled Part II, Item 1A, “Risk Factors” in this Quarterly Report on Form 10-Q, as well as Part I, Item 1A, “Risk Factors” in our 2020 Form 10-K.

OVERVIEW

We are a leading global provider of mission-critical sterilization and lab testing and advisory services to the medical device and pharmaceutical industries. We are driven by our mission: Safeguarding Global Health®. We provide end-to-end sterilization as well as microbiological and analytical lab testing and advisory services to help ensure that medical, pharmaceutical and food products are safe for healthcare practitioners, patients and consumers in the United States and around the world. Our services are an essential aspect of our customers’ manufacturing process and supply chains, helping to ensure sterilized medical products reach healthcare practitioners and patients. Most of these services are necessary for our customers to satisfy applicable government requirements.

We serve our customers throughout their product lifecycles, from product design to manufacturing and delivery, helping to ensure the sterility, effectiveness and safety of their products for the end user. We operate across two core businesses: sterilization services and lab services. The combination of Sterigenics, our terminal sterilization business, and Nordion, our Co-60 supply business, makes us the only vertically integrated global gamma sterilization provider in the sterilization industry. For financial reporting purposes, our sterilization services business consists of two reportable segments, Sterigenics and Nordion, and our lab services business consists of one reportable segment, Nelson Labs.

For the three months ended March 31, 2021, we recorded net revenues of $212.1 million, net income of $11.1 million, Adjusted Net Income of $51.5 million and Adjusted EBITDA of $105.3 million. For the definition of Adjusted Net Income and Adjusted EBITDA and the reconciliation of these non-GAAP measures from net income (loss), please see “Non-GAAP Financial Measures.”

STRATEGIC DEVELOPMENTS AND KEY FACTORS AFFECTING OUR RESULTS OF OPERATIONS

The following summarizes strategic developments and key factors that have underpinned our operating results for the three months ended March 31, 2021 and may continue to affect our performance and financial condition in future periods.

- **Driving organic growth**. During the three months ended March 31, 2021, we continued to make investments to expand capacity and implement EO facility enhancements in our Sterigenics business and expand our cobalt development resources in our Nordion business. In addition, we continue to expand capacity to meet demand for microbiological testing and extractables and leachables testing in our Nelson Labs business.
- **Disciplined and strategic M&A activity**. We continue to pursue strategic acquisitions to grow our footprint and expand our capabilities. On March 8, 2021, we acquired BioScience Laboratories, LLC (“BioScience”) with one location in Bozeman, Montana for approximately $13.2 million, net of $0.8 million of cash acquired plus the repayment of BioScience's outstanding debt of $1.9 million. BioScience is a provider of outsourced topical antimicrobial product testing in the pharmaceutical, medical device, and consumer products industries. BioScience’s expertise in analytical testing and clinical trial services will complement Nelson Labs’ existing strengths in antimicrobial and virology testing. On February 8, 2021, we entered into binding agreements to purchase the outstanding noncontrolling interests of 15% and 33% of our two China subsidiaries, respectively, for a total purchase price of $8.6 million. The purchase transactions are expected to close in the second quarter of 2021. In addition, on March 11, 2021, we completed the acquisition of the remaining 15% ownership of Nelson Labs Fairfield for $12.4 million. Pursuant to the terms of the transaction, we acquired 85% of the equity interests of Nelson Labs Fairfield in August 2018 and were required to acquire the 15% noncontrolling interest within three years from the date of the acquisition. In July 2020, we acquired Iotron Industries Canada, Inc. (“Iotron”), an E-beam processing services and equipment provider.
- **Borrowings and financing costs.** A combination of lower outstanding borrowings and reduced pricing on our debt resulted in a reduction in cash interest expense for the three months ended March 31, 2021 compared to the three

months ended March 31, 2020. On January 20, 2021 we amended our Term Loan to reduce the interest rate spread over LIBOR from 4.50% to 2.75%, and the LIBOR floor from 1.00% to 0.50%. The changes resulted in an effective reduction in current interest rates of 2.25%. We expect the amendment to provide additional cash interest savings of approximately $40.0 million per year based on the outstanding principal balance as of the date of the amendment. Interest savings in 2021 will be offset by cash and non-cash charges associated with the repricing amendment. In connection with this transaction, we wrote off approximately $11.3 million in debt issuance costs and debt discounts and incurred approximately $2.9 million in costs directly related to the refinancing transaction. In addition, on March 26, 2021, we amended our Revolving Credit Facility to reduce the interest rate spread over LIBOR applicable to revolving loans from 3.50% to 2.75%.

- **Impacts of our IPO**. As a newly public company, we continue to incur certain expenses on an ongoing basis that we did not incur as a private company including third-party and internal resources related to accounting, auditing, Sarbanes-Oxley Act compliance, legal, and investor and public relations expenses. These costs are primarily classified as selling, general and administrative ("SG&A") expenses. We continue to dedicate internal resources, hire additional personnel, and engage outside consultants to assess and document the adequacy of internal controls over financial reporting. In addition, we incurred costs related to a secondary offering of 25 million shares of our common stock offered by selling stockholders, which included certain affiliates of Warburg Pincus LLC and GTCR, LLC as well as certain current and former members of management of the Company.
- **Exit activities and litigation costs**. In connection with the ongoing litigation related to our Willowbrook, Illinois, Atlanta, Georgia and Santa Teresa, New Mexico facilities, as described in Note 16, "Commitments and Contingencies", we recorded costs of $13.4 million for the three months ended March 31, 2021 relating to legal and other professional service costs, as well as $0.5 million related to the closure of the Willowbrook, Illinois facility.
- **Impact of COVID-19 pandemic**. We remain subject to risks and uncertainties as a result of the COVID-19 pandemic. Our business continuity plans remain in effect and we have maintained certain measures to decrease exposure risk and manage our supply chain for critical materials. The extent to which our operations will continue to be impacted by the pandemic will largely depend on future developments, which still remain uncertain and cannot be predicted.

CONSOLIDATED RESULTS OF OPERATIONS

Three Months Ended March 31, 2021 as compared to Three Months Ended March 31, 2020

The following table sets forth the components of our results of operations for the three months ended March 31, 2021 and 2020.

(thousands of U.S. dollars)	2021	2020	$ Change	% Change
Total net revenues	**$ 212,148**	$ 188,200	$ 23,948	12.7 %
Total cost of revenues	**96,776**	91,683	5,093	5.6 %
Total operating expenses	**69,008**	51,652	17,356	33.6 %
Operating income	**46,364**	44,865	1,499	3.3 %
Net income (loss)	**11,065**	(1,986)	13,051	657.2 %
Adjusted Net Income[(a)]	**51,506**	23,738	27,768	117.0 %
Adjusted EBITDA[(a)]	**105,317**	91,883	13,434	14.6 %

(a) Adjusted Net Income and Adjusted EBITDA are non-GAAP financial measures. For more information regarding our calculation of Adjusted Net Income and Adjusted EBITDA, including information about their limitations as tools for analysis and a reconciliation of net income (loss), the most directly comparable financial measure calculated and presented in accordance with GAAP, to Adjusted Net Income and Adjusted EBITDA, please see the reconciliation included below in "Non-GAAP Financial Measures."

Total Net Revenues

The following table compares our revenues by type for the three months ended March 31, 2021 to the three months ended March 31, 2020.

(thousands of U.S. dollars)

Net revenues for the three months ended March 31,	2021	2020	$ Change	% Change
Service	**$ 188,698**	$ 167,405	$ 21,293	12.7 %
Product	**23,450**	20,795	2,655	12.8 %
Total net revenues	**$ 212,148**	$ 188,200	$ 23,948	12.7 %

Net revenues were $212.1 million in the three months ended March 31, 2021, an increase of $23.9 million, or 12.7%, as compared with the three months ended March 31, 2020. Excluding the impact of foreign currency exchange rates, net revenues in the three months ended March 31, 2021 increased approximately 10.9% compared with the same period in the three months ended March 31, 2020.

Service revenues

Service revenues increased $21.3 million, or 12.7%, to $188.7 million in the three months ended March 31, 2021 as compared to $167.4 million in the three months ended March 31, 2020. The increase in net service revenues reflected a $5.8 million increase due to the July 31, 2020 acquisition of Iotron, coupled with favorable pricing and organic sales volume growth in our Sterigenics segment of $3.8 million and $2.7 million, respectively. Service revenue growth was also attributable to a $4.9 million increase in demand for testing services related to personal protective equipment used to provide protection against COVID-19 and a $1.6 million increase due to favorable pricing of laboratory and testing services in our Nelson Labs segment. The remainder of the increase is primarily due to a favorable impact from foreign exchange rates of $2.4 million.

Product revenues

Product revenues increased $2.7 million, or 12.8%, to $23.5 million in the three months ended March 31, 2021 as compared to $20.8 million in the three months ended March 31, 2020. The increase in product revenues was primarily attributable to a $1.3 million overall net volume increase driven largely by shipments of medical use Co-60 and a favorable impact from foreign exchange rates of $1.0 million.

Total Cost of Revenues

The following table compares our cost of revenues by type for the three months ended March 31, 2021 to the three months ended March 31, 2020.

(thousands of U.S. dollars)

Cost of revenues for the three months ended March 31,	2021	2020	$ Change	% Change
Service	**$ 85,036**	$ 83,069	$ 1,967	2.4 %
Product	**11,740**	8,614	3,126	36.3 %
Total cost of revenues	**$ 96,776**	$ 91,683	$ 5,093	5.6 %

Total cost of revenues accounted for approximately 45.6% and 48.7% of our consolidated net revenues for the three months ended March 31, 2021 and 2020, respectively.

Cost of service revenues

Cost of service revenues increased $2.0 million, or 2.4%, for the three months ended March 31, 2021 as compared to the three months ended March 31, 2020. The increase was attributable to the Iotron acquisition and the impact of foreign currency exchange rates on cost of sales within our foreign subsidiaries.

Cost of product revenues

Cost of product revenues increased $3.1 million, or 36.3%, for the three months ended March 31, 2021 as compared to the three months ended March 31, 2020. The increase was primarily a result of incremental costs associated with increased sales volumes. The remainder of the increase is primarily due to an unfavorable impact from foreign exchange rates of $0.7 million.

Operating Expenses

The following table compares our operating expenses for the three months ended March 31, 2021 to the three months ended March 31, 2020:

(thousands of U.S. dollars)

Operating expenses for the three months ended March 31,	**2021**	**2020**	$ Change	% Change
Selling, general and administrative expenses	**$ 52,465**	$ 37,053	$ 15,412	41.6 %
Amortization of intangible assets	**16,543**	14,599	1,944	13.3 %
Total operating expenses	**$ 69,008**	$ 51,652	$ 17,356	33.6 %

Operating expenses accounted for approximately 32.5% and 27.4% of our consolidated net revenues for the three months ended March 31, 2021 and 2020, respectively.

SG&A

SG&A increased $15.4 million, or 41.6%, for the three months ended March 31, 2021 as compared to the three months ended March 31, 2020. The increase was driven primarily by the following:

- A $9.3 million increase in legal and other professional services expense associated with EO litigation;
- $4.0 million in incremental corporate expenses largely attributed to costs associated with being a public company. This includes $1.2 million in professional fees associated with the secondary offering of common shares by the selling stockholders in March 2021.
- An increase in share-based compensation expense of $1.7 million related to our 2020 Omnibus Incentive Plan.

Amortization of intangible assets

Amortization of intangible assets was $16.5 million for the three months ended March 31, 2021, or 13.3% above the three months ended March 31, 2020. The change was primarily attributable to amortization on newly acquired intangible assets related to the Iotron and BioScience acquisitions.

Interest Expense, Net

Interest expense, net decreased $35.3 million, or 62.4%, for the three months ended March 31, 2021 as compared to the three months ended March 31, 2020. The decrease was largely due to a lower outstanding debt balance for the first quarter of 2021and lower interest rates subsequent to the January 2021 Term Loan refinancing. The weighted average interest rate on our outstanding debt was 3.45% and 7.11% at March 31, 2021 and 2020, respectively.

Foreign Exchange Loss (Gain)

Foreign exchange loss was $0.6 million for the three months ended March 31, 2021 as compared to a gain of $0.6 million in the three months ended March 31, 2020. The foreign exchange loss (gain) in our Consolidated Statements of Operations and Comprehensive Income (Loss) relates primarily to U.S. dollar denominated intercompany indebtedness with certain of our European and Canadian subsidiaries.

Other (Income) Expense, Net

Other income, net was $3.9 million for the three months ended March 31, 2021 compared to $3.2 million of expense for the three months ended March 31, 2020. The fluctuation was driven by changes in the fair value of the embedded derivatives in Nordion's contracts. We recorded an unrealized gain on embedded derivatives of $0.9 million for the three months ended March 31, 2021 as compared to an unrealized loss on embedded derivatives of $4.8 million for the three months ended March 31, 2020. In addition, we recorded $1.2 million of other income related to the gain on purchase of the mandatorily redeemable noncontrolling interest of 15% of Nelson Labs Fairfield as compared to the amount previously accrued.

Provision (Benefit) for Income Taxes

Provision for income tax increased $15.3 million, or 124.7%, to a net provision of $3.0 million for the three months ended March 31, 2021 as compared to a $12.2 million benefit in the three months ended March 31, 2020. The change was primarily attributable to pre-tax income in the three months ended March 31, 2021 compared to a pre-tax loss in the three months ended

March 31, 2020. In addition, the increased limitation on interest expense deduction provided by the CARES Act in March 2020 resulted in a $9.1 million discrete tax benefit in the three months ended March 31, 2020 as well as a reversal of a $5.6 million valuation allowance on deferred tax assets related to nondeductible interest expense.

Provision for income taxes for the three months ended March 31, 2021 differed from the statutory rate primarily due to the impact of the foreign rate differential, GILTI, and a net increase in the valuation allowance attributable to the limitation on the deductibility of interest expense. This was partially offset by a discrete item, which reversed the valuation allowance on deferred tax assets related to certain asset retirement obligations. Provision for income taxes for the three months ended March 31, 2020 differed from the statutory rate primarily due to the impact of the CARES Act, including the increased limitation on interest expense deduction and valuation allowance reversal, as described above.

Net Income (Loss), Adjusted Net Income and Adjusted EBITDA

Net income for the three months ended March 31, 2021 was $11.1 million, as compared to a net loss of $2.0 million for the three months ended March 31, 2020. Adjusted Net Income was $51.5 million for the three months ended March 31, 2021, as compared to $23.7 million for the three months ended March 31, 2020, due to the factors described above. Adjusted EBITDA was $105.3 million for the three months ended March 31, 2021, as compared to $91.9 million for the three months ended March 31, 2020, due to the factors described above. Please see "Non-GAAP Financial Measures" below for a reconciliation of Adjusted Net Income and Adjusted EBITDA to their most directly comparable financial measure calculated and presented in accordance with GAAP.

NON-GAAP FINANCIAL MEASURES

To supplement our consolidated financial statements presented in accordance with Generally Accepted Accounting Principles ("GAAP"), we consider Adjusted Net Income and Adjusted EBITDA, financial measures that are not based on any standardized methodology prescribed by GAAP.

We define Adjusted Net Income as net income (loss) before amortization and certain other adjustments that we do not consider in our evaluation of our ongoing operating performance from period to period as discussed further below. We define Adjusted EBITDA as Adjusted Net Income before interest expense, depreciation (including depreciation of Co-60 used in our operations) and income tax provision applicable to Adjusted Net Income.

We use Adjusted Net Income and Adjusted EBITDA, non-GAAP financial measures, as the principal measures of our operating performance. Management believes Adjusted Net Income and Adjusted EBITDA are useful because they allow management to more effectively evaluate our operating performance and compare the results of our operations from period to period without the impact of certain non-cash items and non-routine items that we do not expect to continue at the same level in the future and other items that are not core to our operations. We believe that these measures are useful to our investors because they provide a more complete understanding of the factors and trends affecting our business than could be obtained absent this disclosure. In addition, we believe Adjusted Net Income and Adjusted EBITDA will assist investors in making comparisons to our historical operating results and analyzing the underlying performance of our operations for the periods presented. Our management also uses Adjusted Net Income and Adjusted EBITDA in their financial analysis and operational decision-making, and Adjusted EBITDA serves as the basis for the metric we utilize to determine attainment of our primary annual incentive program. Adjusted Net Income and Adjusted EBITDA may be calculated differently from, and therefore may not be comparable to, a similarly titled measure used by other companies.

Adjusted Net Income and Adjusted EBITDA should not be considered in isolation from, or as a substitute for, financial information prepared in accordance with GAAP. There are a number of limitations related to the use of Adjusted Net Income and Adjusted EBITDA rather than net income (loss), the nearest GAAP equivalent. For example, Adjusted Net Income and Adjusted EBITDA exclude:

- certain recurring non-cash charges such as depreciation of fixed assets, although these assets may have to be replaced in the future, as well as amortization of acquired intangible assets and asset retirement obligations;
- costs of acquiring and integrating businesses, which will continue to be a part of our growth strategy;
- non-cash gains or losses from fluctuations in foreign currency exchange rates, primarily related to remeasurement of intercompany loans denominated in currencies other than subsidiaries' functional currencies, and the mark-to-fair value of embedded derivatives relating to certain customer and supply contracts at Nordion;
- impairment charges on long-lived assets and intangible assets;

- expenses and charges related to the litigation and other activities associated with our EO sterilization facilities in Willowbrook, Illinois, Atlanta, Georgia and Santa Teresa, New Mexico, even though that litigation remains ongoing;
- in the case of Adjusted EBITDA, interest expense or the cash requirements necessary to service interest or principal payments on our indebtedness; and
- share-based compensation expense, which has been, and will continue to be for the foreseeable future, a significant recurring expense and an important part of our compensation strategy.

In evaluating Adjusted Net Income and Adjusted EBITDA, you should be aware that in the future, we will incur expenses similar to the adjustments in this presentation. Our presentations of Adjusted Net Income and Adjusted EBITDA should not be construed as suggesting that our future results will be unaffected by these expenses or any unusual or non-recurring items. When evaluating our performance, you should consider Adjusted Net Income and Adjusted EBITDA alongside other financial performance measures, including our net income (loss) and other GAAP measures.

The following table presents a reconciliation of net income (loss), the most directly comparable financial measure calculated and presented in accordance with GAAP to Adjusted Net Income and Adjusted EBITDA, for each of the periods indicated:

	Three Months Ended March 31,	
(thousands of U.S. dollars)	**2021**	**2020**
Net income (loss)	**$ 11,065**	$ (1,986)
Amortization of intangibles	**22,282**	19,913
Share-based compensation[a]	**3,449**	1,725
(Gain) loss on foreign currency and embedded derivatives[b]	**(336)**	4,267
Acquisition and divestiture related charges, net[c]	**(185)**	994
Business optimization project expenses[d]	**261**	1,049
Plant closure expenses[e]	**542**	771
Loss on extinguishment of debt[f]	**14,312**	—
Professional services relating to EO sterilization facilities[g]	**13,399**	4,146
Accretion of asset retirement obligations[h]	**551**	490
COVID-19 expenses[i]	**299**	76
Income tax provision (benefit) associated with pre-tax adjustments[j]	**(14,133)**	(7,707)
Adjusted Net Income	**51,506**	23,738
Interest expense, net	**21,282**	56,562
Depreciation[k]	**15,379**	16,110
Income tax provision (benefit) applicable to Adjusted Net Income[l]	**17,150**	(4,527)
Adjusted EBITDA	**$ 105,317**	$ 91,883

(a) Represents non-cash share-based compensation expense.
(b) Represents the effects of (i) fluctuations in foreign currency exchange rates, primarily related to remeasurement of intercompany loans denominated in currencies other than subsidiaries' functional currencies, and (ii) non-cash mark-to-fair value of embedded derivatives relating to certain customer and supply contracts at Nordion.
(c) Represents (i) certain direct and incremental costs related to the acquisitions of BioScience in 2021, Iotron in July 2020 and Nelson Labs Fairfield in 2018 (including the first quarter 2021 gain on the mandatorily redeemable noncontrolling interest as described in Note 4, "Acquisitions"), and certain related integration efforts as a result of those acquisitions, (ii) the earnings impact of fair value adjustments (excluding those recognized within amortization expense) resulting from the businesses acquired, and (iii) transition services income and non-cash deferred lease income associated with the terms of the divestiture of the Medical Isotopes business in 2018.
(d) Represents professional fees, contract termination and exit costs, severance and other payroll costs, and other costs associated with business optimization and cost savings projects relating to the integration of Nelson Labs, the Sotera Health rebranding, operating structure realignment and other process enhancement projects.
(e) Represents professional fees, severance and other payroll costs, and other costs including ongoing lease and utility expenses associated with the closure of the Willowbrook, Illinois facility.
(f) Represents expenses incurred in connection with the repricing of our Term Loan in January 2021 including accelerated amortization of prior debt issuance and discount costs.
(g) Represents professional fees related to litigation associated with our EO sterilization facilities and other related professional fees. See Note 16, "Commitments and Contingencies".

(h) Represents non-cash accretion of asset retirement obligations related to Co-60 and gamma processing facilities, which are based on estimated site remediation costs for any future decommissioning of these facilities (without regard for whether the decommissioning services would be performed by employees of Nordion, instead of by a third party) and are accreted over the life of the asset.
(i) Represents non-recurring costs associated with the COVID-19 pandemic, including incremental costs to implement workplace health and safety measures.
(j) Represents the tax benefit or provision associated with the reconciling items between net income (loss) and Adjusted Net Income. To determine the aggregate tax effect of the reconciling items, we utilized statutory income tax rates ranging from 0% to 35%, depending upon the applicable jurisdictions of each adjustment.
(k) Includes depreciation of Co-60 held at gamma irradiation sites.
(l) Represents the difference between income tax provision or benefit as determined under U.S. GAAP and the income tax provision or benefit associated with pre-tax adjustments described in footnote (j).

SEGMENT RESULTS OF OPERATIONS

We have three reportable segments: Sterigenics, Nordion and Nelson Labs. Our chief operating decision maker evaluates performance and allocates resources within our business based on Segment Income, which excludes certain items which are included in income (loss) before tax as determined in our Consolidated Statements of Operations and Comprehensive Income (Loss). The accounting policies for our reportable segments are the same as those for the consolidated Company.

Our Segments

Sterigenics

Our Sterigenics business provides outsourced terminal sterilization and irradiation services for the medical device, pharmaceutical, food safety and advanced applications markets using three major technologies: gamma irradiation, EO processing and E-beam irradiation.

Nordion

Our Nordion business is a global provider of Co-60 and gamma irradiators, which are the key components to the gamma sterilization process.

As a result of the time required to meet regulatory and logistics requirements for delivery of radioactive products, combined with accommodations made to our customers to minimize disruptions to their operations during the installation of Co-60, Nordion sales patterns can often vary significantly from one quarter to the next. However, timing-related impacts on our sales performance tend to be resolved within several quarters, resulting in more consistent performance over longer periods of time. In addition, sales of production irradiators occur infrequently and tend to be for larger amounts.

Results for our Nordion segment are also impacted by Co-60 supplier mix, harvest schedules and product and service mix.

Nelson Labs

Our Nelson Labs business provides outsourced microbiological and analytical chemistry testing and advisory services for the medical device and pharmaceutical industries.

For more information regarding our reportable segments please refer to Note 18, “Segment Information” to our consolidated financial statements.

Segment Results for the Three Months Ended March 31, 2021 and 2020

The following tables compare segment net revenue and segment income for the three months ended March 31, 2021 to the three months ended March 31, 2020:

(thousands of U.S. dollars)	Three Months Ended March 31, 2021	2020	$ Change	% Change
Net Revenues				
Sterigenics	**$ 131,151**	$ 117,280	$ 13,871	11.8 %
Nordion	**25,918**	23,625	2,293	9.7 %
Nelson Labs	**55,079**	47,295	7,784	16.5 %
Segment Income				
Sterigenics	**$ 68,461**	$ 61,091	$ 7,370	12.1 %
Nordion	**13,786**	13,022	764	5.9 %
Nelson Labs	**23,070**	17,770	5,300	29.8 %
Segment Income margin				
Sterigenics	**52.2 %**	52.1 %		
Nordion	**53.2 %**	55.1 %		
Nelson Labs	**41.9 %**	37.6 %		

Net Revenues by Segment

Sterigenics net revenues were $131.2 million for the three months ended March 31, 2021, an increase of $13.9 million, or 11.8%, as compared to the three months ended March 31, 2020. The increase reflects a 5.0% increase in revenues attributable to the Iotron acquisition coupled with a 3.2% favorable impact from pricing and 2.3% growth in organic sales volume.

Nordion net revenues were $25.9 million for the three months ended March 31, 2021, an increase of $2.3 million, or 9.7%, as compared to the three months ended March 31, 2020. The increase reflects a 4.2% impact from the strengthening of the Canadian dollar compared to the U.S. dollar for the three months ended March 31, 2021 as compared to the three months ended March 31, 2020, a 3.6% impact from favorable pricing, and a 1.9% impact from higher volumes primarily due to increases in shipments of medical-use Co-60.

Nelson Labs net revenues were $55.1 million for the three months ended March 31, 2021, an increase of $7.8 million, or 16.5%, as compared to the three months ended March 31, 2020. The increase was primarily driven by a 10.3% increase in testing services related to personal protective equipment used to provide protection against COVID-19 and a 3.5% impact from favorable pricing. The remainder of the increase is primarily due to a favorable impact from foreign exchange rates of 1.7%.

Segment Income

Sterigenics segment income was $68.5 million for the three months ended March 31, 2021, an increase of $7.4 million, or 12.1%, as compared to the three months ended March 31, 2020. The increase in segment income was primarily a result of the contributions of the Iotron acquisition coupled with revenue growth stemming from both favorable pricing and volume, as referenced above. This was partially offset by incremental overhead associated with being a public company.

Nordion segment income was $13.8 million for the three months ended March 31, 2021, an increase of $0.8 million, or 5.9%, as compared to the three months ended March 31, 2020. The increase in segment income was primarily due to the favorable impact from foreign exchange rates as well as favorable customer pricing and increases in sales volume, referenced above. This was partially offset by incremental overhead associated with being a public company.

Nelson Labs segment income was $23.1 million for the three months ended March 31, 2021, an increase of $5.3 million, or 29.8%, as compared to the three months ended March 31, 2020, due to the increase in sales volumes, driven largely by testing of personal protective equipment and favorable pricing. This increase was partially offset by incremental overhead associated with being a public company.

LIQUIDITY AND CAPITAL RESOURCES

The primary sources of liquidity for our business are cash flows from operations and borrowings under our credit facilities. We expect that our primary liquidity requirements will be to service our debt, to invest in fixed assets to build and/or expand existing facilities, to fund selective business acquisitions, make capital expenditures and for other general corporate purposes.

As of March 31, 2021, we had $108.0 million of cash and cash equivalents. This is an increase of $5.6 million from the balance at December 31, 2020. Our foreign subsidiaries held cash of approximately $101.8 million at March 31, 2021 and $88.8 million at December 31, 2020, to meet their liquidity needs. No material restrictions exist to accessing cash held by our foreign subsidiaries notwithstanding any potential tax consequences. Cash balances in the United States decreased in the three months ended March 31, 2021 primarily as a result of the cash outflows for the BioScience acquisition and the purchase of the 15% mandatorily redeemable noncontrolling interest of Nelson Labs Fairfield, coupled with normal quarterly interest payments on our outstanding debt.

Our capital expenditure program is a component of our long-term strategy. This program includes, among other things, investments in new and existing facilities, business expansion projects, Co-60 used by Sterigenics at its gamma irradiation facilities, cobalt development projects and information technology enhancements. During the three months ended March 31, 2021, our capital expenditures amounted to $20.9 million, compared to $13.0 million for the three months ended March 31, 2020.

We expect that cash on hand, operating cash flows and amounts available under our credit facilities will provide sufficient working capital to operate our business, make expected capital expenditures, meet litigation costs and meet foreseeable liquidity requirements, including debt service on our long-term debt, for at least the next twelve months. As of March 31, 2021, there were no outstanding borrowings on the Revolving Credit Facility. We expect to use cash provided by operations in excess of amounts needed for capital expenditures, to fund potential acquisitions, or for other general corporate purposes. Our ability to meet future working capital, capital expenditures and debt service requirements will depend on our future financial performance, which will be affected by a range of macroeconomic, competitive and business factors, including interest rate changes and changes in our industry, many of which are outside of our control. As of March 31, 2021, the amended and new interest rate caps limit our cash flow exposure related to LIBOR for approximately 81% of our variable rate borrowings to the facility LIBOR floor of 0.5%. Refer to Note 17, “Financial Instruments and Financial Risk” under the heading “Derivative Instruments” for additional information regarding the interest rate caps used to manage economic risks associated with our variable rate borrowings.

Cash Flow Information

Three Months Ended March 31, 2021 compared to the Three Months Ended March 31, 2020

(thousands of U.S. dollars)	2021	2020
Net Cash Provided by (Used in):		
Operating activities	**$ 56,159**	$ 5,690
Investing activities	**(46,519)**	(12,989)
Financing activities	**(3,783)**	49,307
Effect of foreign currency exchange rate changes on cash and cash equivalents	**(295)**	154
Net increase (decrease) in cash and cash equivalents, including restricted cash, during the period	**$ 5,562**	$ 42,162

Operating activities

Cash flows provided by operating activities increased $50.5 million to net cash provided of $56.2 million in the three months ended March 31, 2021 compared to $5.7 million for the three months ended March 31, 2020. Higher cash flows from operating activities in the three months ended March 31, 2021 compared to the three months ended March 31, 2020 were driven primarily by a decrease in cash paid for interest of $43.8 million, offset by an increase in cash paid for income taxes of $9.7 million. In addition, a decrease in net operating assets for the three months ended March 31, 2021 resulted in a lower use of cash for operating activities of $7.6 million compared to $19.8 million for the three months ended March 31, 2020.

Investing activities

Cash used by investing activities increased $33.5 million to net cash used of $46.5 million in the three months ended March 31, 2021 compared to $13.0 million for the three months ended March 31, 2020. The change was attributable to the acquisition of

BioScience on March 8, 2021 for a net purchase price of approximately $13.2 million, the acquisition of the mandatorily redeemable noncontrolling interest in Nelson Labs Fairfield for $12.4 million and an increase in cash paid for capital expenditures of $8.0 million.

Financing activities

For the three months ended March 31, 2021, net cash used in financing activities was $3.8 million compared to net cash provided of $49.3 million for the three months ended March 31, 2020. The primary use of cash from financing activities was the payment of $3.4 million of debt issuance costs in connection with our refinancing of the Senior Secured Credit Facilities as described in “Debt Facilities” below. Cash provided by financing activities for the three months ended March 31, 2020 was primarily attributable to a $50.0 million borrowing on our Revolving Credit Facility, which was subsequently repaid in the second quarter of 2020.

Debt Facilities

Senior Secured Credit Facilities

On December 13, 2019, Sotera Health Holdings, LLC (“SHH”), our wholly owned subsidiary, entered into senior secured first lien credit facilities (the “Senior Secured Credit Facilities”), consisting of both a prepayable senior secured first lien term loan (the “Term Loan”) and a senior secured first lien revolving credit facility (the “Revolving Credit Facility”) pursuant to a first lien credit agreement (the “Credit Agreement”). The Term Loan matures on December 13, 2026, and the Revolving Credit Facility's original maturity date was December 13, 2024. On December 17, 2020, we increased the capacity of our Revolving Credit Facility from $190.0 million to $347.5 million. The Senior Secured Credit Facilities also provide SHH the right at any time and under certain conditions to request incremental term loans or incremental revolving credit commitments based on a formula defined in the Senior Secured Credit Facilities. As of March 31, 2021 and December 31, 2020, total borrowings under the Term Loan were $1,763.1 million and $1,763.1 million, respectively, and there were no borrowings outstanding on the Revolving Credit Facility. The weighted average interest rate on borrowings under the Term Loan for the three months ended March 31, 2021 and March 31, 2020 was 3.73% and 6.18%, respectively.

On January 20, 2021, we closed on an amendment repricing our Term Loan. The interest rate spread over the London Interbank Offered Rate (“LIBOR”) on the facility was reduced from 450 basis points to 275 basis points, and the facility’s LIBOR floor was reduced from 100 basis points to 50 basis points. The changes result in an effective reduction in current interest rates of 2.25%. As a result of the repricing, we expect cash interest savings of approximately $40.0 million per year based on the outstanding principal balance as of March 31, 2021. In connection with this amendment, we wrote off $11.3 million of unamortized debt issuance and discount costs and incurred an additional $2.9 million of expense related to debt issuance costs attributable to the refinancing. These costs were recorded to “Loss on extinguishment of debt” in our Consolidated Statements of Operations and Comprehensive Income (Loss).

As of March 31, 2021 and December 31, 2020, capitalized debt issuance costs totaled $3.1 million and $3.4 million, respectively, and debt discounts totaled $20.0 million and $31.6 million, respectively, related to the Senior Secured Credit Facilities. Such costs are recorded as a reduction of debt on our consolidated balance sheets and amortized as a component of interest expense over the term of the debt agreement.

On March 26, 2021, we amended the Revolving Credit Facility, to (i) decrease the Applicable Rate (as defined in the Credit Agreement) related to any Revolving Loans (as defined in the Credit Agreement) from a rate per annum that ranged from an alternative base rate (“ABR”) plus 2.50% to ABR plus 3.00% depending on SHH’s Senior Secured First Lien Net Leverage Ratio to ABR plus 1.75%; and in the case of Eurodollar Loans (as defined in the Credit Agreement) from a rate per annum which ranged from the Adjusted LIBOR plus 3.50% to the Adjusted LIBOR plus 4.00% depending on SHH’s Senior Secured First Lien Net Leverage Ratio (as defined in the Credit Agreement), to the Adjusted LIBOR (as defined in the Credit Agreement) plus 2.75% and (ii) extend the maturity date of the Revolving Facility from December 13, 2024 to June 13, 2026. The other material terms of the Credit Agreement are unchanged and the amendment does not change the capacity of our Revolving Credit Facility, which is $347.5 million. No unamortized debt issuance costs associated with the Revolving Credit Facility were written off and direct fees and costs incurred in connection with the amendment were immaterial.

As of March 31, 2021 and December 31, 2020, there were no borrowings on the Revolving Credit Facility. SHH borrowed $50.0 million on the Revolving Credit Facility during the first quarter of 2020 which was repaid in the second quarter of 2020. The interest rate on the borrowings under the Revolving Credit Facility during 2020 averaged approximately 5.0%.

All of SHH’s obligations under the Senior Secured Credit Facilities are unconditionally guaranteed by the Company and each existing and subsequently acquired or organized direct or indirect wholly-owned domestic restricted subsidiary of the Company, with customary exceptions including, among other things, where providing such guarantees is not permitted by law, regulation or contract or would result in material adverse tax consequences. All obligations under the Senior Secured Credit Facilities, and the guarantees of such obligations, are secured by substantially all assets of the borrower and guarantors, subject to permitted liens and other exceptions and exclusions, as outlined in the Senior Secured Credit Facilities.

Outstanding letters of credit are collateralized by encumbrances against the Revolving Credit Facility and the collateral pledged thereunder, or by cash placed on deposit with the issuing bank. As of March 31, 2021, the Company had $65.8 million of letters of credit issued against the Revolving Credit Facility, resulting in total availability under the Revolving Credit Facility of $281.7 million.

First Lien Notes

On July 31, 2020, SHH issued $100.0 million aggregate principal amount of senior secured first lien notes due 2026 (the “First Lien Notes”), which mature on December 13, 2026. The First Lien Notes bear interest at a rate equal to LIBOR subject to a 1.00% floor plus 6.00% per annum. Interest is payable on a quarterly basis with no principal due until maturity. The weighted average interest rate on the First Lien Notes for the three months ended March 31, 2021 was 7.00%.

SHH is entitled to redeem all or a portion of the First Lien Notes, at any time and from time to time, subject to certain premiums depending on the date of redemption; any time on or prior to July 31, 2021, a customary make-whole premium applies and, thereafter, specified premiums that decline to zero apply (in each case as described in the indenture governing the First Lien Notes).

All of SHH’s obligations under the First Lien Notes are unconditionally guaranteed by the Company and each existing and subsequently acquired or organized direct or indirect wholly-owned domestic restricted subsidiary of SHH, with customary exceptions including, among other things, where providing such guarantees is not permitted by law, regulation or contract or would result in material adverse tax consequences. All obligations under the First Lien Notes, and the guarantees of such obligations, are secured by substantially all of the assets of the borrower and guarantors, subject to permitted liens and other exceptions and exclusions, as outlined in the First Lien Notes. Such collateral is substantially the same collateral that secures the Senior Secured Credit Facilities. Such collateral securing the First Lien Notes ranks pari passu with that of the Senior Secured Credit Facilities.

At March 31, 2021 and December 31, 2020, capitalized debt issuance costs were $0.8 million and $0.9 million, respectively, and debt discounts were $2.7 million and $2.8 million, respectively, related to the First Lien Notes, which are recorded as a reduction of debt on our Consolidated Balance Sheets and amortized into interest expense over the term of the debt agreement.

2020 Debt Repayments

On November 24, 2020, we closed our initial public offering (the "IPO”), in which we sold 53,590,000 shares of our common stock at a price of $23.00 per share, which included the full exercise by the underwriters of their option to purchase up to an additional 6,990,000 shares of common stock. We raised approximately $1.2 billion in net proceeds after deducting underwriters’ discounts and commissions. We used the net proceeds received by us from the IPO to (i) redeem $770.0 million in aggregate principal amount of the Second Lien Senior Secured Notes with an original maturity date of December 13, 2027 (the "Second Lien Notes”), plus accrued and unpaid interest thereon and $15.4 million of redemption premium, (ii) repurchase 1,568,445 shares of our common stock from certain of our executive officers at a purchase price per share equal to the IPO price per share of our common stock less an amount equal to the underwriting discounts and commissions payable thereon and (iii) repay $341.0 million of the outstanding indebtedness under the Term Loan, plus accrued and unpaid interest thereon. In connection with the debt repayments, we wrote off $28.9 million of debt issuance and discount costs and recognized $15.4 million in premiums paid for the early extinguishment of the Second Lien Notes. We recognized these costs within “Loss on extinguishment of debt” in our Consolidated Statements of Operations and Comprehensive Income (Loss) in the fourth quarter of 2020.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of consolidated financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, estimates and assumptions at a specific point in time and in certain circumstances that affect amounts reported in the accompanying consolidated financial statements. In preparing these consolidated financial statements, management has made its best estimates and judgments of certain amounts, giving due consideration to materiality. The application of accounting policies involves the exercise of judgment and use of assumptions as to future uncertainties and, as a result, actual results could differ from these estimates.

A comprehensive discussion of the Company's critical accounting policies and management estimates made in connection with the preparation of the financial statements is included in Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2020. There have been no significant changes in critical accounting policies, management estimates or accounting policies since the year ended December 31, 2020.

NEW ACCOUNTING PRONOUNCEMENTS

For a description of recent accounting pronouncements applicable to our business, see Note 2, "Recent Accounting Standards".

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Market risks are described within "Quantitative and Qualitative Disclosures About Market Risk" in Part II, Item 7A of our 2020 Form 10-K. These market risks have not materially changed for the three months ended March 31, 2021.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's "disclosure controls and procedures," (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended ("Exchange Act")). Based upon their evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this Quarterly Report on Form 10-Q, our disclosure controls and procedures are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission ("SEC"), and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control

During the three months ended March 31, 2021, there were no changes in our internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Part II—OTHER INFORMATION

Item 1. Legal Proceedings.

From time to time, we may be subject to various legal proceedings arising in the ordinary course of our business, including claims relating to personal injury, property damage, workers' compensation and employee safety. In addition, from time to time, we receive communications from government or regulatory agencies concerning investigations or allegations of noncompliance with laws or regulations in jurisdictions in which we operate. At this time, and except as is noted herein, we are unable to predict the outcome of, and cannot reasonably estimate the impact of, any pending litigation matters, matters concerning allegations of non-compliance with laws or regulations and matters concerning other allegations of other improprieties, or the incidence of any such matters in the future. Information regarding our legal proceedings is included below.

Legal Proceedings Described in Note 16 of Our Consolidated Financial Statements

Note 16, "Commitments and Contingencies" to our consolidated financial statements for the three months ended March 31, 2021 contained in this Quarterly Report on Form 10-Q includes information on legal proceedings that constitute material contingencies for financial reporting purposes that could have a material effect on our financial condition or results of operations. This item should be read in conjunction with Note 16 for information regarding the following legal proceedings, which information is incorporated into this item by reference:

- FM Global Business Interruption Claim (NRU Outage)
- Willowbrook, Illinois – Government Litigation
- Ethylene Oxide Tort Litigation – Illinois
- Ethylene Oxide Tort Litigation – Georgia
- Suspension of Georgia Facility Operations & Related Litigation; and
- Ethylene Oxide Litigation – New Mexico

Legal Proceedings That Are Not Described in Note 16 to Our Consolidated Financial Statements

In addition to the matters that are identified in Note 16 to our consolidated financial statements for the three months ended March 31, 2021 contained in this Quarterly Report on Form 10-Q, and incorporated into this item by reference, the following matter also constitutes a material pending legal proceeding, other than ordinary course litigation incidental to our business, to which we are or any of our subsidiaries is a party.

Zoetermeer, Holland Criminal Proceedings and Criminal Financial Investigation

In early 2010, the Dutch Public Prosecution Service started criminal proceedings against DEROSS Holding B.V. ("DEROSS B.V."), formerly known as Sterigenics Holland B.V., in relation to certain EO emissions and alleged environmental permit violations in the period from 2004 to 2009 at its Zoetermeer processing facility. On the basis of the final indictment issued in April 2017, assuming a rarely applied increasing mechanism is not applied in this case, fines in the amount of €0.8 million (US$0.9 million) may be imposed.

In November 2010, the Public Prosecution Service also started a criminal financial investigation against DEROSS B.V. to determine whether it has obtained illegal advantages by committing the alleged criminal offenses noted above. Any illegally obtained advantage could then be recovered from DEROSS B.V. in subsequent confiscation proceedings. According to the October 2013 report of this criminal financial investigation, the Public Prosecution Service estimates the illegally obtained advantage by DEROSS B.V. to be in the amount of €0.6 million (US$0.7 million).

In January 2018, the trial in first instance took place in the criminal case against DEROSS B.V., and in February 2018, the court discharged DEROSS B.V. from further prosecution on one of the two counts asserted and acquitted DEROSS B.V. on the other count. In March 2018, the public prosecutor filed an appeal against the favorable judgment in first instance for DEROSS B.V., as well as the favorable judgments in first instance for the two individuals overseeing environmental compliance during the time period of the alleged claims and the municipality of Zoetermeer. The appeal procedure is pending.

DEROSS B.V. has agreed to defend and indemnify the two individuals overseeing environmental compliance during the time period of the alleged claims by the Public Prosecutor. Assuming a rarely applied increasing mechanism is not applied in this case, the possible monetary penalties relating to the individuals currently are estimated at a maximum of €0.2 million (US$0.2 million).

In 2011, former shareholders established an escrow account to satisfy indemnity claims for losses resulting from governmental claims related to this matter, including those relating to environmental law violations, financial advantage claims, as well as criminal and civil fines and penalties. The balance of the special escrow at March 31, 2021, was approximately US$2.1 million and the cash collateral held by ABN Amro to provide security for the claims against us was approximately €2.4 million (US$2.8 million) as of March 31, 2021. These amounts are available to satisfy claims relating to the ongoing matter through its anticipated resolution. At this time, we expect that the appeal of this matter will likely take several years to resolve, barring unforeseen delays. However, we believe the indemnification receivable continues to be recoverable and plan to ensure escrow funds remain in place to cover outcomes of an appeal.

It is possible that individuals living in the vicinity of our former Zoetermeer facility may file civil claims at some time in the future. While we have received letters from a small number of individuals claiming to live or work in the vicinity of the Zoetermeer facility, no civil claims have been filed against DEROSS B.V. or us. We have not provided for a contingency reserve in connection with any civil claims as we are unable to determine the likelihood of an unfavorable outcome and no reasonable estimate of a loss or range of losses, if any, can be made.

Item 1A. Risk Factors.

There have been no material changes to the risk factors previously disclosed in our 2020 Form 10-K. Refer to Part I, Item 1A of our 2020 Form 10-K for a detailed discussion of risk factors affecting us.

Item 6. Exhibits.

The exhibits listed in the following Exhibit Index are filed, furnished, or incorporated by reference as part of this Quarterly Report on Form 10-Q.

		Incorporated by Reference				
Exhibit No	**Description of Exhibits**	**Form**	**File No.**	**Exhibit**	**Filing Date**	**Furnished/Filed Herewith**
10.1	Refinancing Amendment to the First Lien Credit Agreement, dated as of January 20, 2021, among Sotera Health Company, Sotera Health Holdings, LLC, the Refinancing Lenders Party thereto, the Revolving Lenders party to the First Lien Credit Agreement and Jefferies Finance LLC, as First Lien Administrative Agent and First Lien Collateral Agent	10-K	001-39729	10.28	2021-03-09	
10.2	Revolving Facilities Amendment to the First Lien Credit Agreement, dated as of March 26, 2021, among Sotera Health Company, Sotera Health Holdings, LLC, the Refinancing Lenders Party thereto, the Revolving Lenders party to the First Lien Credit Agreement and Jefferies Finance LLC, as First Lien Administrative Agent and First Lien Collateral Agent					*
31.1	Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					*
31.2	Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					*
32.1	Certifications of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					**
101.INS	Inline XBRL Instance Document - The XBRL Instance Document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document					*
101.SCH	Inline XBRL Taxonomy Extension Schema Document					*
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					*
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					*
101.LAB	Inline XBRL Taxonomy Label Linkbase Document					*
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					*
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)					*

* Filed Herewith
** Furnished Herewith

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.

SOTERA HEALTH COMPANY

By:	/s/ Scott J. Leffler
Name:	Scott J. Leffler
Title:	Chief Financial Officer and Treasurer (Principal Financial Officer)

Date: May 13, 2021

EXECUTION VERSION

REVOLVING FACILITIES AMENDMENT TO FIRST LIEN CREDIT AGREEMENT, dated as of March 26, 2021 (this "Amendment"), is made and entered into by and among Sotera Health Company (f/k/a Sotera Health Topco, Inc.), a Delaware corporation ("Holdings"), Sotera Health Holdings, LLC, a Delaware limited liability company (the "Borrower"), each of the entities listed under the caption "Extending Revolving Lenders" on the signature pages hereto (each, an "Extending Revolving Lender" and, collectively, the "Extending Revolving Lenders"), each of the entities listed under the caption "Consenting Issuing Banks" on the signature pages hereto (each, a "Consenting Issuing Bank" and, collectively, the "Consenting Issuing Banks"), JPMorgan Chase Bank, N.A., as First Lien Administrative Agent (solely in such capacity, the "Administrative Agent"), and, for purposes of Sections 6 and 8 hereof only, the other Loan Parties as of the date hereof.

RECITALS:

WHEREAS, reference is made to the First Lien Credit Agreement dated as of December 13, 2019, by and among Holdings, the Borrower, the lenders from time to time party thereto and the Administrative Agent, as amended by that certain Incremental Facility Amendment to First Lien Credit Agreement, dated as of December 17, 2020, among the Borrower, Holdings, the Subsidiary Guarantors party thereto, Jefferies Finance LLC ("Jefferies"), as administrative agent, as further amended by that certain Refinancing Amendment to First Lien Credit Agreement, dated as of January 20, 2021, among the Borrower, Holdings, the Subsidiary Guarantors party thereto, Jefferies and the Refinancing Lenders party thereto, as further amended by that certain Resignation, Consent and Appointment Agreement, dated as of January 20, 2021, among Jefferies, the Borrower, Holdings and JPMorgan Chase Bank, N.A., as the successor administrative agent and collateral agent (as it may be further amended, supplemented or otherwise modified to the date hereof, the "Credit Agreement");

WHEREAS, the Borrower has (i) pursuant to Section 2.24(a) of the Credit Agreement, by written notice to the Administrative Agent, made a Loan Modification Offer (as defined in the Credit Agreement) to the Revolving Lenders to effect Permitted Amendments (as defined in the Credit Agreement) that shall (a) modify the Revolving Maturity Date (as defined in the Credit Agreement) with respect to each Revolving Commitment (as defined in the Credit Agreement) and each Revolving Loan (as defined in the Credit Agreement) of such Extending Revolving Lenders (as defined below) to be June 13, 2026 (or if such day is not a Business Day, the immediately preceding Business Day) and (b) modify the Applicable Rate (as defined in the Credit Agreement) in the manner described below with respect to each Revolving Commitment and each Revolving Loan of such Extending Revolving Lenders, which Loan Modification Offer sets forth the date hereof as the date on which such Permitted Amendments are requested to become effective, and (ii) requested that each of the Issuing Banks (as defined in the Credit Agreement) consent to such extension of maturity and modification of rate and agree to the Permitted Amendments set forth herein (the transactions described in this paragraph, collectively, the "Transactions");

WHEREAS, subject to the terms and conditions of the Credit Agreement, and pursuant to the foregoing, the Borrower has requested that the Credit Agreement be amended in the manner provided for herein; and

WHEREAS, the parties hereto wish to amend the Credit Agreement on the terms and subject to the conditions set forth herein and in the Credit Agreement.

NOW, THEREFORE, in consideration of the mutual agreements herein contained and other good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the parties hereto agree as follows:

SECTION 1. ***Defined Terms; Interpretation; Etc***. Capitalized terms used and not defined herein shall have the meanings assigned to such terms in the Credit Agreement. This Amendment is a “First Lien Loan Document” as defined in the Credit Agreement.

SECTION 2. ***Amendments to Credit Agreement***. Each of the parties hereby agrees that:

(a) Section 1.01 of the Credit Agreement is hereby amended by inserting the following new definitions in their correct alphabetical order:

““Consenting Issuing Bank” means each Issuing Bank that has consented and agreed to the Transactions set forth in the Revolving Facilities Amendment by delivering an executed counterpart thereof to the First Lien Administrative Agent on or prior to March 26, 2021.”

““Extended Revolving Commitment” means the Revolving Commitments extended on the Revolving Facilities Amendment Effective Date.”

““Extended Revolving Loan” means a Revolving Loan made with respect to an Extended Revolving Commitment.”

““Extending Revolving Lender” means each Revolving Lender that voted in favor of the Revolving Facilities Amendment by delivering an executed counterpart thereof to the First Lien Administrative Agent on or prior to March 26, 2021.”

““Revolving Facilities Amendment” means the Revolving Facilities Amendment to this Agreement, dated as of March 26, 2021 among the Borrower, the Extending Revolving Lenders party thereto, the Consenting Issuing Banks party thereto, the Administrative Agent and the other parties thereto.”

““Revolving Facilities Amendment Effective Date” means the date set forth in the definition of Revolving Facilities Amendment.”

(b) The definition of “Applicable Rate” in Section 1.01 of the Credit Agreement is hereby amended and restated in its entirety as follows”

““Applicable Rate” means, for any day, with respect to any Loan, (i) ABR plus 1.75% per annum, in the case of an ABR Loan, or (ii) the Adjusted LIBO Rate plus 2.75% per annum, in the case of a Eurodollar Loan.”

(c) The definition of “Revolving Commitment” in Section 1.01 of the Credit Agreement is hereby amended and restated in its entirety as follows:

““Revolving Commitment” means, with respect to each Lender, the commitment, if any, of such Lender to make Revolving Loans and to acquire participations in Letters of Credit and Swingline Loans hereunder, expressed as an amount representing the maximum possible aggregate amount of such Lender’s Revolving Exposure hereunder, as such commitment may be
(a) reduced from time to time pursuant to Section 2.08 and (b) reduced or increased from time to time pursuant to (i) assignments by or to such Lender pursuant to an Assignment and Assumption, (ii) an Incremental Facility Amendment, (iii) a Refinancing Amendment, (iv) an Incremental Revolving Commitment Increase, (v) without duplication of the foregoing clause (v),

the Amendment No. 1 Revolving Commitment Increase, (vi) without duplication of the following clause (vii), the Extended Revolving Commitments, (vii) a Loan Modification Agreement or (viii) an Additional/Replacement Revolving Commitment. The initial amount of each Lender's Revolving Commitment is set forth on Schedule 2.01(A), with respect to the Amendment No. 1 Revolving Commitment Increase, Schedule I of Amendment No. 1, or, in each case, in the Assignment and Assumption, Loan Modification Agreement or Refinancing Amendment pursuant to which such Lender shall have assumed its Revolving Commitment, as the case may be. As of the Amendment No. 1 Effective Date, the aggregate amount of the Lenders' Revolving Commitments is $347,500,000."

i. The definition of "Revolving Maturity Date" in Section 1.01 of the Credit Agreement is hereby amended by replacing "December 13, 2024" therein with "June 13, 2026".

SECTION 3. ***Type of Amendments***. The Borrower and the Administrative Agent hereby agree that all amendments set forth herein are Permitted Amendments, this Amendment is a Loan Modification Agreement and, in the opinion of the Administrative Agent and the Borrower, necessary and/or appropriate to effectuate the provisions of Section 2.24 of the Credit Agreement.

SECTION 4. ***Conditions to the Effectiveness of the Revolving Facilities Amendment***. This Amendment shall become effective as of the date on which the following conditions are satisfied or waived (such date, the "Revolving Facilities Amendment Effective Date"):

1. The Administrative Agent (or its counsel) shall have received from Holdings, the Borrower, each other Loan Party and each Extending Revolving Lender and each Consenting Issuing Bank either (i) a counterpart of this Amendment signed on behalf of such party or (ii) written evidence satisfactory to the Administrative Agent (which may include facsimile or other electronic transmission of a signed counterpart of this Amendment) that such party has signed a counterpart of this Amendment.

2. The Administrative Agent shall have received a written opinion (addressed to the Administrative Agent, the Extending Revolving Lenders and the Consenting Issuing Banks and dated the Revolving Facilities Amendment Effective Date) of each of (i) Cleary Gottlieb Steen & Hamilton LLP, New York counsel for the Loan Parties and (ii) Richards, Layton & Finger, P.A., Delaware counsel for the Loan Parties, in each case in form and substance reasonably satisfactory to the Administrative Agent.

3. The Administrative Agent shall have received a certificate of each Loan Party, dated the Revolving Facilities Amendment Effective Date, in form and substance reasonably satisfactory to the Administrative Agent, executed by any Responsible Officer of such Loan Party and including or attaching the documents or certifications, as applicable, referred to in paragraph (d) of this Section below.

4. The Administrative Agent shall have received (i) as to each Loan Party, either (x) a copy of each Organizational Document of such Loan Party certified, to the extent applicable, as of a recent date by the applicable Governmental Authority or (y) written certification by such Loan Party's secretary,

assistant secretary or other Responsible Officer that such Loan Party's Organizational Documents most recently certified and delivered to the Administrative Agent prior to the Revolving Facilities Amendment Effective Date pursuant to the First Lien Loan Documents remain in full force and effect on the Revolving Facilities Amendment Effective Date without modification or amendment since such original delivery, (ii) as to each Loan Party, either (x) signature and incumbency certificates of the Responsible Officers of such Loan Party executing the First Lien Loan Documents to which it is a party or (y) written certification by such Loan Party's secretary, assistant secretary or other Responsible Officer that such Loan Party's signature and incumbency certificates most recently delivered to the Administrative Agent prior to the Revolving Facilities Amendment Effective Date pursuant to the First Lien Loan Documents remain true and correct as of the Revolving Facilities Amendment Effective Date,
(iii) copies of resolutions of the board of directors and/or similar governing bodies of each Loan Party approving and authorizing the execution, delivery and performance of this Amendment, certified as of the Revolving Facilities Amendment Effective Date by a secretary, an assistant secretary or a Responsible Officer of such Loan Party as being in full force and effect without modification or amendment, and (iv) a good standing certificate (to the extent such concept exists) from the applicable Governmental Authority of each Loan Party's jurisdiction of incorporation, organization or formation as of a reasonably recent date.

1. The Administrative Agent shall have received a certificate from the chief financial officer of the Borrower certifying as to the solvency of the Borrower and its Subsidiaries on a consolidated basis after giving effect to the Transactions, substantially in the form of Exhibit P to the Credit Agreement (as updated to reflect Loan Party name changes and current Administrative Agent).

2. The Administrative Agent shall have received, at least three Business Days prior to the Revolving Facilities Amendment Effective Date, all documentation and other information about the Borrower and the other Loan Parties as shall have been reasonably requested in writing at least ten Business Days prior to the Revolving Facilities Amendment Effective Date by the Administrative Agent that they shall have reasonably determined is required by regulatory authorities under applicable "know your customer" and anti-money laundering rules and regulations, including without limitation the USA PATRIOT Act.

3. Each of the representations set forth in Section 5 of this Amendment shall be true and correct.

The Administrative Agent shall notify Holdings, the Borrower and the Lenders of the Revolving Facilities Amendment Effective Date, and such notice shall be conclusive and binding.

SECTION 5. ***Representations and Warranties***. The Borrower hereby represents and warrants that, after giving effect to this Amendment, (i) no Event of Default has occurred and is continuing and (ii) the representations and warranties of each Loan Party set forth in the First Lien Loan Documents are true and correct in all material respects on and as of the Revolving Facilities Amendment Effective Date; provided that, in each case, to the extent that such representations and warranties specifically refer to an earlier date, they are true and correct in all material respects as of such earlier date;

provided further that, in each case, any representation and warranty that is qualified as to "materiality," "Material Adverse Effect" or similar language is true and correct in all respects on the Revolving Facilities Amendment Effective Date or on such earlier date, as the case may be.

SECTION 6. ***Reaffirmation of Guarantees and Security Interests***. Each Loan Party hereby acknowledges its receipt of a copy of this Amendment and its review of the terms and conditions hereof and consents to the terms and conditions of this Amendment and the transactions contemplated hereby. Each Loan Party hereby (a) affirms and confirms its guarantees, pledges, grants and other undertakings under the Credit Agreement and the other First Lien Loan Documents to which it is a party, (b) agrees that (i) each First Lien Loan Document to which it is a party shall continue to be in full force and effect and (ii) all guarantees, pledges, grants and other undertakings thereunder shall continue to be in full force and effect and shall accrue to the benefit of the Secured Parties and (c) acknowledges that from and after the date hereof, all Revolving Loans from time to time outstanding shall be deemed to be Secured Obligations.

SECTION 7. ***Expenses; Indemnity; Damage Waiver***. Sections 9.03(a), (b), (d), (e), (f) and (g) of the Credit Agreement are hereby incorporated, *mutatis mutandis*, by reference as if such Sections were set forth in full herein; *provided* that, notwithstanding anything else therein, such expense reimbursement provisions of Section 9.03(a) of the Credit Agreement shall only apply as provided hereinabove if the Revolving Facilities Amendment Effective Date occurs.

SECTION 8. ***Miscellaneous***.

(a) ***Recordation of Revolving Loans and Revolving Commitments***. Upon execution and delivery hereof, the Administrative Agent will record in the Register the Revolving Loans that are Extended Revolving Loans and the Revolving Commitments that are Extended Revolving Commitments (all as set forth on Schedule I hereto).

(b) ***Amendment, Modification and Waiver***. This Amendment may not be amended nor may any provision hereof be waived except pursuant to a writing signed by each of the parties hereto.

(c) ***Entire Agreement.*** This Amendment, the Credit Agreement (as amended hereby) and the other First Lien Loan Documents constitute the entire agreement among the parties with respect to the subject matter hereof and thereof and supersede all other prior agreements and understandings, both written and verbal, among the parties or any of them with respect to the subject matter hereof.

(d) ***Governing Law.*** This Amendment shall be construed in accordance with and governed by the laws of the State of New York.

(e) ***Jurisdiction.*** Each party hereto hereby irrevocably and unconditionally submits, for itself and its property, to the exclusive jurisdiction of the Supreme Court of the State of New York sitting in New York County and of the United States District Court of the Southern District of New York, and any appellate court from any thereof, in any action or proceeding arising out of or relating to this Amendment, or for recognition or enforcement of any judgment, and each of the parties hereto hereby irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in such New York State or, to the extent permitted by law, in such Federal court. Each of the parties hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Nothing in any First Lien Loan Document shall affect any right that the Administrative Agent, any Extending Revolving Lender or any Consenting Issuing Bank may otherwise have to bring any action or proceeding relating to this Amendment against Holdings or the Borrower or their respective properties in the courts of any jurisdiction.

a. ***Waiver of Objection to Venue and Forum Non Conveniens*****.** Each party hereto hereby irrevocably and unconditionally waives, to the fullest extent it may legally and effectively do so, any objection that it may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to this Amendment in any court referred to in Section 10(e) above. Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted by law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

b. ***Consent to Service of Process.*** Each party to this Amendment irrevocably consents to service of process in the manner provided for notices in Section 9.01 of the Credit Agreement. Nothing in any First Lien Loan Document will affect the right of any party to this Amendment to serve process in any other manner permitted by law.

c. *WAIVER OF JURY TRIAL*. EACH PARTY HERETO HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AMENDMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AMENDMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

d. ***Severability***. Any term or provision of this Amendment which is invalid or unenforceable in any jurisdiction shall, as to that jurisdiction, be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Amendment or affecting the validity or enforceability of any of the terms or provisions of this Amendment in any other jurisdiction. If any provision of this Amendment is so broad as to be unenforceable, the provision shall be interpreted to be only so broad as would be enforceable.

e. ***Counterparts***. This Amendment may be executed in counterparts, each of which shall be deemed to be an original, but all of which shall constitute one and the same agreement. Delivery of an executed counterpart of a signature page of this Amendment by facsimile or electronic transmission shall be as effective as delivery of a manually executed counterpart hereof.

f. ***Headings***. The headings of this Amendment are for purposes of reference only and shall not limit or otherwise affect the meaning hereof.

g. ***Continued Effectiveness***. Notwithstanding anything contained herein, the terms of this Amendment are not intended to and do not serve to effect a novation as to the Credit Agreement. The parties hereto expressly do not intend to extinguish the Credit Agreement. Instead, it is the express intention of the parties hereto to reaffirm the indebtedness created under the Credit Agreement which is secured by the Collateral and the Liens and guarantees thereunder. The Credit Agreement (as amended hereby) and each of the First Lien Loan Documents remain in full force and effect.

h. ***Electronic Signatures.*** Delivery of an executed counterpart of a signature page of this Amendment, that is an Electronic Signature (as defined below) transmitted by telecopy, emailed pdf. or any other electronic means that reproduces an image of an actual executed signature page shall be effective as delivery of a manually executed counterpart of this Amendment. The words “execution,” “signed,” “signature,” “delivery,” and words of like import in or relating to any document to be signed in connection with this Amendment and the transactions contemplated hereby shall be deemed to include Electronic Signatures, deliveries or the keeping of records in any electronic form (including deliveries by telecopy, emailed pdf. or any other electronic means that reproduces an image of an actual executed signature page), each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be; provided that nothing herein shall require the Administrative Agent to accept Electronic Signatures in any form or format without its prior written consent and pursuant to procedures approved by it; provided, further, without limiting the foregoing, (i) to the extent the Administrative Agent has agreed to accept any Electronic Signature, the Administrative Agent and each of the Lenders (including the Extending Revolving Lenders) shall be entitled to rely on such Electronic Signature purportedly given by or on behalf of the Borrower or any other Loan Party without further verification thereof and without any obligation to review the appearance or form of any such Electronic Signature and (ii) upon the request of the Administrative Agent or any Lender (including any Extending Revolving Lender), any Electronic Signature shall be promptly followed by a manually executed counterpart. Without limiting the generality of the foregoing, the Borrower hereby (i) agrees that, for all purposes, including without limitation, in connection with any workout, restructuring, enforcement of remedies, bankruptcy proceedings or litigation among the Administrative Agent, the Lenders (including the Extending Revolving Lenders), and the Borrower, Electronic Signatures transmitted by telecopy, emailed pdf. or any other electronic means that reproduces an image of an actual executed signature page and/or any electronic images of this Amendment, any other First Lien Loan Document and/or any other document signed in connection with this Amendment and the transactions contemplated thereby, shall have the same legal effect, validity and enforceability as any paper original, and (ii) waives any argument, defense or right to contest the legal effect, validity or enforceability of this Amendment, any other First Lien Loan Document and/or any Ancillary Document based solely on the lack of paper original copies of this Amendment, such other First Lien Loan Document and/or such Ancillary Document, respectively, including with respect to any signature pages thereto. "Electronic Signature" means an electronic sound, symbol, or process attached to, or associated with, a contract or other record and adopted by a Person with the intent to sign, authenticate or accept such contract or record.

[*Remainder of this page intentionally left blank*]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed by their respective authorized officers as of the day and year first above written.

SOTERA HEALTH HOLDINGS, LLC,
as Borrower

By: /s/ Scott J. Leffler

Name: Scott J. Leffler

Title: Chief Financial Officer and Treasurer

SOTERA HEALTH COMPANY
as Holdings

By: /s/ Scott J. Leffler

Name: Scott J. Leffler

Title: Chief Financial Officer and Treasurer

JPMORGAN CHASE BANK N.A., as Administrative Agent, Extending Revolving Lender and Consenting Issuing Bank

By: /s/ Dawn Lee Lum

Name: Dawn Lee Lum

Title: Executive Director

CREDIT SUISSE AG, CAYMAN ISLANDS
BRANCH, as Extending Revolving Lender and Consenting Issuing Bank

By: /s/ Whitney Gaston
Name: Whitney Gaston
Title: Authorized Signatory

By: /s/ Andrew Griffin
Name: Andrew Griffin
Title: Authorized Signatory

GOLDMAN SACHS BANK USA, as Extending Revolving Lender and Consenting Issuing Bank

By: /s/ Jacob Elder

Name: Jacob Elder

Title: Authorized Signatory

[Signature Page to Revolving Facilities Amendment to Credit Agreement]

JEFFERIES FINANCE LLC, as Extending Revolving Lender and Consenting Issuing Bank

By: /s/ J.R. Young

Name: J.R. Young

Title: Managing Director

BNP PARIBAS, as Extending Revolving Lender

By: /s/ Uzo Arinzeh
Name: Uzo Arinzeh
Title: Managing Director

By: /s/ Albert Arencibia
Name: Albert Arencibia
Title: Director

KEYBANK NATIONAL ASSOCIATION, as Extending Revolving Lender and Consenting Issuing Bank

By: /s/ Matthew D. Dunson

Name: Matthew D. Dunson

Title: Vice President

PSP INVESTMENTS CREDIT USA LLC, as Extending Revolving Lender

By: /s/ Kerry Dolan
Name: Kerry Dolan
Title: Authorized Signatory

By: /s/ Alyssa Roland
Name: Alyssa Roland
Title: Authorized Signatory

BARCLAYS BANK PLC, as Extending Revolving Lender

By: /s/ Evan Moriarty
Name: Evan Moriarty
Title: Vice President

[Signature Page to Revolving Facilities Amendment to Credit Agreement]

CITIBANK, N.A., as Extending Revolving Lender and Consenting Issuing Bank

By: /s/ Stanislav Andreev

Name: Stanislav Andreev

Title: Vice President

ROYAL BANK OF CANADA, as Extending Revolving Lender and Consenting Issuing Bank

By: /s/ Diana Lee

Name: Diana Lee

Title: Authorized Signatory

CITIZENS BANK, N.A., as Extending Revolving Lender and Consenting Issuing Bank

By: /s/ Matt Kuchta
Name: Matt Kuchta
Title: Senior Vice President

ING CAPITAL LLC, as Extending Revolving Lender

By: /s/ Roy De Jongh
Name: Roy De Jongh
Title: Director

By: /s/ Michael Kim
Name: Michael Kim
Title: Director

<u>With respect only to Section 6 and Section 8:</u>
SOTERA HEALTH LLC
STERIGENICS U.S., LLC
NELSON LABORATORIES, LLC
SOTERA HEALTH SERVICES, LLC

By: /s/ Scott J. Leffler
Name: Scott J. Leffler
Title: Chief Financial Officer and Treasurer

<u>With respect only to Section 6 and Section 8:</u>
NELSON LABORATORIES HOLDINGS, LLC
NELSON LABORATORIES FAIRFIELD HOLDINGS, LLC

By: /s/ Bruce T. Krarup
Name: Bruce T. Krarup
Title: Vice President, Treasurer and Secretary

With respect only to Section 6 and Section 8:
STERIGENICS RADIATION TECHNOLOGIES HOLDINGS, LLC
STERIGENICS RADIATION TECHNOLOGIES, LLC
STERIGENICS RADIATION TECHNOLOGIES IN, INC.

By: /s/ Matthew D. Shimkus
Name: Matthew D. Shimkus
Title: Vice President, Treasurer and Secretary

Schedule I

Extending Revolving Lender	**Extending Revolving Commitment**
JPMorgan Chase Bank, N.A.	$75,000,000
Credit Suisse AG, Cayman Islands Branch	$35,000,000
Goldman Sachs Bank USA	$35,000,000
Jefferies Finance LLC	$35,000,000
BNP Paribas	$25,000,000
KeyBank National Association	$25,000,000
PSP Investments Credit USA LLC	$25,000,000
Barclays Bank PLC	$22,500,000
Citibank, N.A.	$22,500,000
Royal Bank of Canada	$22,500,000
Citizens Bank, N.A.	$12,500,000
ING Capital LLC	$12,500,000
TOTAL	**$347,500,000**

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Michael B. Petras, Jr., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Sotera Health Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) 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

   (c) 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 and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 13, 2021

/s/ Michael B. Petras, Jr.
Michael B. Petras, Jr.
Chairman and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Scott J. Leffler, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Sotera Health Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    (b) 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

    (c) 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 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 registrant's board of directors (or persons performing the equivalent functions):

    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 13, 2021

/s/ Scott J. Leffler
Scott J. Leffler
Chief Financial Officer and Treasurer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATIONS OF PRINCIPAL EXECUTIVE OFFICER AND PRINCIPAL FINANCIAL OFFICER PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code), each of the undersigned officers of Sotera Health Company (the "Company"), do hereby certify, to each such officer's knowledge, that the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2021 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 13, 2021	/s/ Michael B. Petras, Jr. Michael B. Petras, Jr. Title: Chairman and Chief Executive Officer *(Principal Executive Officer)*
Dated: May 13, 2021	/s/ Scott J. Leffler Scott J. Leffler Title: Chief Financial Officer and Treasurer *(Principal Financial Officer)*

The foregoing certifications are furnished and are not deemed filed with the Securities and Exchange Commission for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (Exchange Act), and are not deemed to be incorporated by reference into any filing of Sotera Health Company under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that Sotera Health Company specifically incorporates them by reference.