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

FORM 10-Q

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

For the quarterly period ended June 30, 2020

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: 001-38441

ChampionX Corporation

(Exact name of registrant as specified in its charter)

Delaware	**82-3066826**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

2445 Technology Forest Blvd, Building 4, 12th Floor	
The Woodlands, Texas	**77381**
(Address of principal executive offices)	(Zip Code)

(281) 403-5772
(Registrant's telephone number, including area code)
Apergy Corporation
(Former name, former address and former fiscal year, if changed since last report)

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	CHX	New York Stock Exchange

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

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

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

The registrant had 199,808,901 shares of common stock, $0.01 par value, outstanding as of August 3, 2020.

CHAMPIONX CORPORATION

TABLE OF CONTENTS

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains “forward-looking statements” within the meaning of the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, contained in this report are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Forward-looking statements usually relate to future events and anticipated revenues, earnings, cash flows or other aspects of our operations or operating results. Forward-looking statements are often identified by the words “believe,” “anticipate,” “expect,” “may,” “intend,” “foresee,” “guidance,” “estimate,” “potential,” “outlook,” “plan,” “should,” “would,” “could,” “target,” “forecast” and similar expressions, including the negative thereof. The absence of these words, however, does not mean that the statements are not forward-looking statements. Forward-looking statements are based on our current expectations, beliefs and assumptions concerning future developments and business conditions and their potential effect on us. While management believes that these forward-looking statements are reasonable as and when made, there can be no assurance that future developments affecting us will be those that we anticipate.

All of our forward-looking statements involve risks, uncertainties (some of which are significant or beyond our control) and assumptions that could cause actual results to materially differ from our historical experience and our present expectations or projections. Known material factors that could cause actual results to materially differ from those contemplated in the forward-looking statements are those set forth in Part II, Item 1A, “Risk Factors” of this Quarterly Report on Form 10-Q.

We wish to caution you not to place undue reliance on any forward-looking statements, which speak only as of the date hereof. We undertake no obligation to publicly update, revise or correct any of our forward-looking statements after the date they are made, whether as a result of new information, future events or otherwise, except to the extent required under the federal securities laws.

PART I — FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

CHAMPIONX CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF INCOME (LOSS)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
(in thousands, except per share data)	2020	2019	2020	2019
Product revenue	$ 248,871	$ 269,670	$ 473,316	$ 535,622
Service revenue	36,846	24,063	61,770	47,874
Lease and other revenue	13,197	12,437	25,262	23,168
Total revenue	298,914	306,170	560,348	606,664
Cost of goods and services	266,684	197,410	445,779	394,893
Gross profit	32,230	108,760	114,569	211,771
Selling, general and administrative expense	130,657	66,687	208,800	130,816
Goodwill impairment	—	—	616,271	—
Long-lived asset impairment	—	—	40,980	1,746
Interest expense, net	11,262	10,109	20,301	20,636
Other (income) expense, net	312	2,676	(1,321)	3,778
Income (loss) before income taxes	(110,001)	29,288	(770,462)	54,795
Provision for (benefit from) income taxes	(954)	6,280	(27,960)	11,849
Net income (loss)	(109,047)	23,008	(742,502)	42,946
Net income attributable to noncontrolling interest	598	71	871	353
Net income (loss) attributable to ChampionX	$ (109,645)	$ 22,937	$ (743,373)	$ 42,593
Earnings (loss) per share attributable to ChampionX:				
Basic	$ (0.95)	$ 0.30	$ (7.72)	$ 0.55
Diluted	$ (0.95)	$ 0.30	$ (7.72)	$ 0.55
Weighted-average shares outstanding:				
Basic	115,149	77,425	96,313	77,394
Diluted	115,149	77,632	96,313	77,636

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

CHAMPIONX CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
(in thousands)	**2020**	**2019**	**2020**	**2019**
Net income (loss)	$ (109,047)	$ 23,008	$ (742,502)	$ 42,946
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments (1)	5,703	974	(5,349)	2,064
Other activities, net (2)	752	68	851	167
Other comprehensive income (loss)	6,455	1,042	(4,498)	2,231
Comprehensive income (loss)	(102,592)	24,050	(747,000)	45,177
Comprehensive income attributable to noncontrolling interest	598	71	871	353
Comprehensive income (loss) attributable to ChampionX	$ (103,190)	$ 23,979	$ (747,871)	$ 44,824

(1) Net of income tax (expense) benefit of $0 for the three and six months ended June 30, 2020 and 2019.
(2) Net of income tax (expense) benefit of $(33) and $(24) for the three months ended June 30, 2020 and 2019, respectively, and $(66) and $(179) for the six months ended June 30, 2020 and 2019, respectively.

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

CHAMPIONX CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

(in thousands)	June 30, 2020	December 31, 2019
Assets		
Cash and cash equivalents	$ 141,895	$ 35,290
Receivables, net	517,110	219,874
Inventories, net	527,642	211,342
Prepaid expenses and other current assets	71,900	26,934
Total current assets	1,258,547	493,440
Property, plant and equipment, net of accumulated depreciation of $463,962 in 2020 and $426,722 in 2019	944,745	248,181
Operating lease right-of-use assets	124,289	24,289
Goodwill	644,381	911,113
Intangible assets, net	485,988	238,707
Other non-current assets	62,883	7,095
Total assets	$ 3,520,833	$ 1,922,825
Liabilities and Equity		
Current portion of long-term debt	$ 31,656	$ 4,845
Accounts payable	274,964	120,291
Accrued compensation and employee benefits	48,044	38,470
Current portion of operating lease liabilities	34,771	7,620
Accrued distributor fees	47,044	—
Accrued expenses and other current liabilities	121,870	28,455
Total current liabilities	558,349	199,681
Long-term debt	1,071,727	559,821
Deferred income taxes	156,622	84,060
Operating lease liabilities	85,668	19,419
Other long-term liabilities	63,871	23,630
Total liabilities	1,936,237	886,611
Stockholders’ equity:		
Common stock (2.5 billion shares authorized, $0.01 par value) 199.8 million shares and 77.5 million shares issued and outstanding in 2020 and 2019, respectively	1,998	775
Capital in excess of par value of common stock	2,283,096	969,174
Retained earnings (accumulated deficit)	(637,861)	107,048
Accumulated other comprehensive loss	(48,535)	(44,037)
Total stockholders’ equity	1,598,698	1,032,960
Noncontrolling interest	(14,102)	3,254
Total equity	1,584,596	1,036,214
Total liabilities and equity	$ 3,520,833	$ 1,922,825

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

CHAMPIONX CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(Unaudited)

	Common Stock						
(in thousands)	Shares	Par Value	Capital in Excess of Par Value	Retained Earnings	Accum. Other Comp. Loss	Non-controlling Interest	Total
December 31, 2018	77,353	$ 774	$ 960,773	$ 54,884	$ (42,906)	$ 2,458	$ 975,983
Net income	—	—	—	19,656	—	282	19,938
Other comprehensive income	—	—	—	—	1,189	—	1,189
Stock-based compensation	39	—	2,285	—	—	—	2,285
Taxes withheld on issuance of stock-based awards	—	—	(719)	—	—	—	(719)
Other	—	—	—	—	—	14	14
March 31, 2019	77,392	$ 774	$ 962,339	$ 74,540	$ (41,717)	$ 2,754	$ 998,690
Net income	—	—	—	22,937	—	71	23,008
Other comprehensive income	—	—	—	—	1,042	—	1,042
Stock-based compensation	67	1	2,735	—	—	—	2,736
Taxes withheld on issuance of stock-based awards	—	—	(1,080)	—	—	—	(1,080)
Other	—	—	—	—	—	(14)	(14)
June 30, 2019	77,459	775	963,994	97,477	(40,675)	2,811	1,024,382

(in thousands)	Common stock: Shares	Common stock: Par Value	Capital in Excess of Par Value	Retained Earnings (Accum. Deficit)	Accum. Other Comp. Loss	Non-controlling Interest	Total
December 31, 2019	77,460	$ 775	$ 969,174	$ 107,048	$ (44,037)	$ 3,254	$ 1,036,214
Cumulative effect of accounting changes, net of tax (Note 3)	—	—	—	(1,573)	—	—	(1,573)
Net income (loss)	—	—	—	(633,728)	—	273	(633,455)
Other comprehensive loss	—	—	—	—	(10,953)	—	(10,953)
Stock-based compensation	44	—	2,429	—	—	—	2,429
Taxes withheld on issuance of stock-based awards	—	—	(368)	—	—	—	(368)
March 31, 2020	77,504	$ 775	$ 971,235	$ (528,253)	$ (54,990)	$ 3,527	$ 392,294
Issuance of common stock related to the Merger	122,237	1,223	1,262,708	—	—	—	1,263,931
Issuance of replacement awards related to the Merger	—	—	43,964	—	—	—	43,964
Non-controlling interest acquired in the Merger	—	—	—	—	—	(16,015)	(16,015)
Net income (loss)	—	—	—	(109,645)	—	598	(109,047)
Other comprehensive income	—	—	—	—	6,455	—	6,455
Stock-based compensation	67	—	5,433	—	—	—	5,433
Taxes withheld on issuance of stock-based awards	—	—	(244)	—	—	—	(244)
Distributions to noncontrolling interest	—	—	—	—	—	(2,200)	(2,200)
Other	—	—	—	37	—	(12)	25
June 30, 2020	199,808	1,998	2,283,096	(637,861)	(48,535)	(14,102)	1,584,596

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

CHAMPIONX CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Six Months Ended June 30,	
(in thousands)	**2020**	**2019**
Cash provided by (used for) operating activities:		
Net income (loss)	$ (742,502)	$ 42,946
Adjustments to reconcile net income to net cash provided (required) by operating activities:		
Depreciation	58,139	34,190
Amortization	26,274	25,873
Stock-based compensation	7,862	5,021
Loss on disposal of fixed assets	4,040	65
Loss on goodwill and long-lived asset impairment	657,251	1,746
Loss on sale of business	—	2,475
Provision for losses on accounts receivable	3,498	(307)
Provision for inventory obsolescence and write-downs	8,354	—
Amortization of deferred loan costs and accretion of discount	1,999	1,295
Deferred income taxes	(24,682)	(5,300)
Employee benefit plan expense	859	1,135
Other	(264)	(418)
Changes in operating assets and liabilities (net of effects of foreign exchange):		
Receivables	77,777	(5,161)
Inventories	24,794	1,029
Prepaid expenses and other current assets	22,088	(2,311)
Accounts payable	(30,331)	(3,088)
Accrued compensation and employee benefits	(13,846)	(7,989)
Accrued expenses and other liabilities	4,717	(3,126)
Leased assets	(9,311)	(29,421)
Other	1,317	647
Net cash provided by operating activities	78,033	59,301
Cash provided by (used for) investing activities:		
Capital expenditures	(19,322)	(22,688)
Acquisitions, net of cash acquired	57,588	—
Proceeds from sale of fixed assets	1,066	2,475
Payment on sale of business	—	(2,194)
Net cash provided by (used for) investing activities	39,332	(22,407)
Cash provided by (used for) financing activities:		
Proceeds from long-term debt, net of discounts	125,000	4,000
Payment of debt issue costs	(4,356)	—
Repayment of long-term debt	(125,000)	(54,000)
Distribution to noncontrolling interest	(2,200)	—
Payment of finance lease obligations	(2,802)	(2,690)
Payments related to taxes withheld on stock-based compensation	(612)	(1,799)
Net cash used for financing activities	(9,970)	(54,489)
Effect of exchange rate changes on cash and cash equivalents	(790)	99
Net increase (decrease) in cash and cash equivalents	106,605	(17,496)
Cash and cash equivalents at beginning of period	35,290	41,832
Cash and cash equivalents at end of period	$ 141,895	$ 24,336

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

NOTE 1—BASIS OF PRESENTATION

ChampionX Corporation is a global leader in chemistry solutions and highly engineered equipment and technologies that help companies drill for and produce oil and gas safely and efficiently around the world.

Unless the context requires otherwise, references in this report to “we,” “us,” “our,” “the Company,” or “ChampionX” mean ChampionX Corporation, together with our subsidiaries where the context requires.

On June 3, 2020, the Company and Ecolab Inc. (“Ecolab”) completed a Reverse Morris Trust transaction in which Ecolab transferred their upstream energy business to Champion X Holding, Inc. (“legacy ChampionX”) and, thereafter, distributed all of the shares of legacy ChampionX common stock to certain Ecolab stockholders (“the Distribution”). Immediately following the Distribution, a wholly owned subsidiary of the Company merged with and into legacy ChampionX, with legacy ChampionX continuing as the surviving company in the Merger and as a wholly owned subsidiary of the Company (“the Merger”). In association with the completion of the Merger, the Company has changed its name from Apergy Corporation (“Apergy”) to ChampionX Corporation, and common shares began trading on the New York Stock Exchange under the symbol "CHX".

As a result of the Merger, the results of operations of legacy ChampionX have been reflected in our accompanying condensed consolidated financial statements from the closing date of the Merger through June 30, 2020. Results for the periods prior to June 3, 2020 reflect the financial and operating results of Apergy and do not include the financial and operating results of legacy ChampionX. See Note 2—Merger Transaction for additional information on the Merger.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of ChampionX have been prepared in accordance with generally accepted accounting principles in the United States (“GAAP”) and pursuant to the rules and regulations of the Securities and Exchange Commission pertaining to interim financial information. As permitted under those rules, certain footnotes or other financial information that are normally required by GAAP have been condensed or omitted. Therefore, these financial statements should be read in conjunction with the audited consolidated financial statements, and notes thereto, which are included in our Annual Report on Form 10-K for the year ended December 31, 2019.

The preparation of financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Although these estimates are based on management’s best knowledge of current events and actions that we may undertake in the future, actual results may differ from our estimates. In the opinion of management, the accompanying unaudited condensed consolidated financial statements reflect all adjustments (consisting of normal recurring adjustments unless otherwise specified) necessary for a fair statement of our financial condition and results of operations as of and for the periods presented. Revenue, expenses, assets and liabilities can vary during each quarter of the year. Therefore, the results and trends in these financial statements may not be representative of the results that may be expected for the year ending December 31, 2020.

Change in Accounting Estimate

During the quarter, we entered into new commercial agreements, which changed the economics of the leased asset program of our Electrical Submersible Pump (“ESP”) subsidiary in our Production & Automation Technologies segment. As such, we re-evaluated the estimated useful life and salvage value of our assets based on the combination of new commercial contracts and historical operating trends related to the aging of our lease fleet, including functioning assets beyond original expected life. Based on our analysis, effective April 1, 2020, we changed our estimate of useful life and salvage values for certain equipment to better reflect the useful life and estimated values of these assets at the end of their useful life. The estimated useful life, previously estimated at 12 months, was increased to 18 months. The estimated salvage value of the equipment, previously estimated at 50%, was decreased to 0%. The effect of the changes in estimate for the three months ended June 30, 2020, was an increase in depreciation expense of $17.6 million, a decrease in net income of $15.4 million, and a decrease in basic and diluted earnings per share of $0.13 per share.

Reclassifications

Certain prior period amounts have been reclassified to conform to the presentation of the current period financial statements. Long-lived asset impairment for the six months ended June 30, 2019 has been reclassified from selling, general, and administrative expense to conform with our current period presentation of long-lived asset impairment on the condensed consolidated statements of income (loss). These reclassifications had no effect on the previously reported net loss.

Revisions

We revised our previously issued financial statements for the three and six months ended June 30, 2019, for the correction of immaterial errors related to: (i) the assessing and recording of liabilities for state sales tax and associated penalties and interest, primarily resulting in an understatement of our selling, general, and administrative expense and interest expense for the three and six months ended June 30, 2019; and (ii) previously recorded amounts including, but not limited to, the write-off of inventory and leased assets, timing of revenue recognition, and revenue classification, that the Company concluded were immaterial to our previously filed condensed consolidated financial statements. See the following table for the impact of the corrections on our condensed consolidated financial statements:

Condensed Consolidated Statement of Income

	Three Months Ended June 30, 2019		
(in thousands, except per share data)	**As Reported**	**Adjustments**	**As Revised**
Product revenue	$ 270,273	$ (603)	$ 269,670
Service revenue	24,071	(8)	24,063
Lease and other revenue	11,710	727	12,437
Total revenue	306,054	116	306,170
Cost of goods and services	196,285	1,125	197,410
Gross profit	109,769	(1,009)	108,760
Selling, general and administrative expense	66,642	45	66,687
Interest expense, net	10,057	52	10,109
Other expense, net	2,676	—	2,676
Income before income taxes	30,394	(1,106)	29,288
Provision for income taxes	6,544	(264)	6,280
Net income	23,850	(842)	23,008
Net income attributable to noncontrolling interest	71	—	71
Net income attributable to ChampionX	$ 23,779	$ (842)	$ 22,937
Earnings per share attributable to ChampionX:			
Basic	$ 0.31	$ (0.01)	$ 0.30
Diluted	$ 0.31	$ (0.01)	$ 0.30
Comprehensive income	$ 24,892	$ (842)	$ 24,050
Comprehensive income attributable to ChampionX	$ 24,821	$ (842)	$ 23,979

(in thousands, except per share data)	Six Months Ended June 30, 2019 As Reported	Adjustments	As Revised
Product revenue	$ 536,417	$ (795)	$ 535,622
Service revenue	47,978	(104)	47,874
Lease and other revenue	23,350	(182)	23,168
Total revenue	607,745	(1,081)	606,664
Cost of goods and services	392,427	2,466	394,893
Gross profit	215,318	(3,547)	211,771
Selling, general and administrative expense	130,231	585	130,816
Long-lived asset impairment [1]	1,746	—	1,746
Interest expense, net	20,531	105	20,636
Other expense, net	3,778	—	3,778
Income before income taxes	59,032	(4,237)	54,795
Provision for income taxes	12,613	(764)	11,849
Net income	46,419	(3,473)	42,946
Net income attributable to noncontrolling interest	353	—	353
Net income attributable to ChampionX	$ 46,066	$ (3,473)	$ 42,593
Earnings per share attributable to ChampionX:			
Basic	$ 0.60	$ (0.05)	$ 0.55
Diluted	$ 0.59	$ (0.04)	$ 0.55
Comprehensive income	48,650	(3,473)	45,177
Comprehensive income attributable to ChampionX	48,297	(3,473)	44,824

[1] Long-lived asset impairment has been reclassified from selling, general, and administrative expense to conform with our current period presentation of long-lived asset impairment on the condensed consolidated statements of income (loss).

Condensed Consolidated Statement of Changes in Stockholders' Equity

(in thousands)	June 30, 2019 As Reported	Adjustments	As Revised
Stockholders' Equity:			
Capital in excess of par value of common stock	$ 968,593	$ (4,599)	$ 963,994
Retained earnings	100,233	(2,756)	97,477
Total equity	1,031,737	(7,355)	1,024,382

(in thousands)	As Reported	Adjustments	As Revised
Total equity at December 31, 2018	$ 981,527	$ (5,544)	$ 975,983
Cumulative effect of accounting changes	(1,662)	1,662	—
Net income	22,569	(2,631)	19,938
Total equity at March 31, 2019	1,005,203	(6,513)	998,690
Net income	23,850	(842)	23,008
June 30, 2019	1,031,737	(7,355)	1,024,382

Condensed Consolidated Statements of Cash Flows

(in thousands)	Six Months Ended June 30, 2019		
	As Reported	Adjustments	As Revised
Cash provided (required) by operating activities:			
Net income	$ 46,419	$ (3,473)	$ 42,946
Adjustments to reconcile net income to net cash provided (required) by operating activities:			
Deferred income taxes	(10,891)	5,591	(5,300)
Loss on sale of fixed assets [1]	65	—	65
Provision for losses on accounts receivable [1]	(307)	—	(307)
Amortization of deferred loan costs and accretion of discount [1]	1,295	—	1,295
Other	(406)	(12)	(418)
Changes in operating assets and liabilities (net of effects of foreign exchange):			
Receivables	(6,115)	954	(5,161)
Inventories	(2,290)	3,319	1,029
Prepaid expenses and other current assets	3,470	(5,781)	(2,311)
Accounts payable	(1,506)	(1,582)	(3,088)
Accrued compensation and employee benefits	(10,570)	2,581	(7,989)
Accrued expenses and other liabilities	49	(3,175)	(3,126)
Leased assets	(30,999)	1,578	(29,421)

[1] Each of these amounts were included within “Other” on the condensed consolidated statements of cash flows reported for the six months ended June 30, 2019. These amounts have been reclassified consistent with the presentation in the current reporting period.

NOTE 2—MERGER TRANSACTION

On June 3, 2020 we completed the acquisition of the legacy ChampionX business through the merger of one of our wholly owned subsidiaries with legacy ChampionX. Immediately prior to the Merger, Ecolab transferred their upstream energy business to legacy ChampionX. Pursuant to the Merger, shares of Ecolab common stock that were tendered through an exchange offer were converted into common shares of legacy ChampionX on a 1-for-24.6667 basis, with each share of legacy ChampionX automatically converting into one share of the Company. To complete the acquisition, we issued 122.2 million shares of common stock, at a share price of $10.34 per share, in exchange for 100% equity ownership of legacy ChampionX. The transaction resulted in legacy ChampionX equityholders owning approximately 62% of the Company on a fully diluted basis, with equityholders of the Company prior to the Merger owning approximately 38% on a fully diluted basis.

Acquisition-related costs associated with the Merger were expensed as incurred and total $52.3 million and $60.2 million for the three and six months ended June 30, 2020, respectively, and are included in selling, general, and administrative expense in our condensed consolidated statements of income (loss). The acquisition-related transaction costs consisted primarily of investment banker fees and legal and accounting costs.

The Merger constitutes a business combination, with the Company (formerly known as Apergy) treated as the accounting acquirer and legacy ChampionX treated as the acquired company for accounting purposes.

Legacy ChampionX provides on-site, technology-driven chemistry programs and value-enabling solutions and services to the global upstream oil and natural gas industry.

Preliminary Purchase Price Allocation

The acquisition-date fair value of the consideration transferred consisted of the following:

(in thousands)		
Equity consideration	$	1,263,931
Replacement awards attributable to pre-combination services[1]		43,964
Unfavorable supply agreement[2]		44,000
Favorable supply agreement[2]		(55,000)
Fair value of consideration transferred	$	1,296,895

(1) Represents the fair value of the replacement equity awards to the extent services were provided by employees of legacy ChampionX prior to closing. See Note 12—Equity And Cash Incentive Programs for additional information about the replacement equity awards.
(2) As part of the Merger, the Company entered into a Cross Supply and Product Transfer Agreement with Ecolab in which over a period of approximately three years from the merger date, certain products will be manufactured by one party for the other. The cross selling prices in which each party will transfer their products, and include a take-or-pay element, have been set forth within this agreement and are not reflective of market terms. As a result, we recognized an intangible asset recorded at fair value for the favorable terms and a liability recorded at fair value for the unfavorable terms. The intangible asset will be amortized on a straight-line basis over a three-year period into cost of goods and services and the liability will be amortized as a component of product revenue.

The purchase price was allocated to the tangible and intangible assets acquired and liabilities assumed based on their preliminary fair value estimates as of the acquisition date. The measurements of assets acquired and liabilities assumed, other than debt which was measured using Level 2 measurements, are based on inputs that are not observable in the market and thus represent Level 3 inputs. The excess of the purchase price over such fair values was recorded as goodwill. Due to the proximity of the Merger to the quarter end of June 30, 2020, the purchase price allocation is based upon a preliminary valuation only and will be finalized upon completion of certain valuation procedures. Our estimates and assumptions are subject to change within the measurement period (up to one year from the acquisition date). The primary areas in which the preliminary purchase price allocation is not yet finalized relate to the fair values of certain tangible assets acquired and liabilities assumed, the valuation of intangible assets acquired, certain working capital items, deferred income taxes and residual goodwill. We will complete the purchase price allocation and valuation during the 12-month period following the Merger date.

The following table provides the preliminary allocation of the purchase price as of the acquisition date.

(in thousands)		
Cash and cash equivalents	$	57,588
Receivables		364,199
Inventories		341,938
Prepaid expenses and other current assets		75,806
Property, plant, and equipment		740,607
Identifiable intangible assets[1]		260,000
Other non-current assets		152,916
Total identifiable assets acquired		1,993,054
Accounts payable		162,848
Other current liabilities		186,730
Long-term debt [2]		537,000
Deferred tax liabilities		95,651
Other liabilities		81,962
Total liabilities assumed		1,064,191
Net identifiable assets acquired		928,863
Add: Negative fair value of non-controlling interests		16,015
Goodwill		352,017
Total net assets acquired	$	1,296,895

(1) The fair value of the consideration transferred related to the Favorable supply agreements has been excluded.
(2) In connection with the Merger, we assumed a term loan from legacy ChampionX. See Note 6—Debt for further information.

Summary of Significant Fair Value Methods

<u>Inventories</u>

Acquired inventory is comprised of raw materials and finished goods. The preliminary fair value of finished goods was calculated as the estimated selling price, adjusted for costs of the selling effort and a reasonable profit allowance relating to the selling effort. The preliminary fair value of raw materials and supplies was determined based on replacement cost which approximates historical carrying value. The preliminary fair value step-up of $13.6 million of inventories measured on a First In First Out (“FIFO”) basis is amortized to “Cost of goods and services” in the condensed consolidated financial statements as the inventory is sold, which is expected to be a period of two months from the acquisition date. For inventories measured on a Last In First Out (“LIFO”) basis, the acquired inventory becomes the LIFO base layer inventory.

<u>Property, Plant, and Equipment</u>

The preliminary fair value of identifiable fixed assets was calculated using a combination of valuation approaches, primarily including the cost approach which adjusts estimates of replacement cost for the age, condition and utility of the associated assets, as well as the market approach to value asset types where market comparable data is available, and is summarized below:

(in thousands)		**Fair Value**	**Useful Life (years)**
Land and land improvements	$	132,466	-
Buildings and leasehold improvements		201,001	5 to 40
Machinery, equipment and other		385,244	3 to 20
Capitalized software and computer hardware		21,896	3 to 7
Total property, plant, and equipment acquired	$	740,607	

<u>Identifiable Intangible Assets</u>

The preliminary fair values of trademarks, trade names, and developed technology were determined using a relief from royalty methodology which estimates cost savings generated by a company related to the ownership of an asset for which otherwise have had to pay royalties or license fees on revenues earned through the use of the asset. Customer relationships were determined using the multi-period excess earnings method which involves isolating the net earnings attributable to the asset being measured based on the present value of the incremental after-tax cash flows attributable solely to the intangible assets over its remaining useful life. Preliminary fair values are summarized below:

(in thousands)		**Fair Value**	**Useful Life (years)**
Trademarks and trade names	$	25,000	15
Developed technology		110,000	7
Customer relationships		125,000	15
Total identifiable intangible assets acquired		260,000	
Favorable supply agreements		55,000	3
Total identifiable intangible assets recognized	$	315,000	

The weighted average amortization period for identifiable intangible assets acquired is 11.6 years. The amortization period of the favorable supply agreements is three years.

<u>Leases</u>

Lease-related assets and liabilities acquired were remeasured at the present value of the future minimum lease payments over the remaining lease term utilizing an updated incremental borrowing rate of the Company as if the acquired leases were new leases as of the acquisition date. Right of use assets were further adjusted for any off-market terms of the lease. The remaining lease term is based on the remaining term at the acquisition date plus any renewal or extension options that the Company is reasonably certain will be exercised. Additionally, the Company has elected short-term lease treatment for those acquired lease contracts which, at the acquisition date, have a remaining lease term of 12 months or less. For the leases acquired through the

Merger, the Company will retain the previous lease classification. This resulted in legacy ChampionX assets and liabilities of $99.9 million and $93.2 million, respectively, as of the acquisition date.

Goodwill

Goodwill of $352.0 million arising from the acquisition consisted largely of the expected synergies and economies of scale from combining the operations of the Company and legacy ChampionX. Goodwill recognized as a result of the acquisition is not deductible for tax purposes. We have allocated goodwill of $270.5 million and $81.5 million to our Production Chemical Technologies and Reservoir Chemical Technologies operating segments, respectively. See Note 5—Goodwill And Intangible Assets for a rollforward of our goodwill balance by operating segment.

Pro forma financial information

The results of operations for legacy ChampionX that have been included in our condensed consolidated financial statements from the June 3, 2020 acquisition date through June 30, 2020 include revenue of $163.2 million and net income of $7.3 million. The following unaudited pro forma results of operations have been prepared as though the Merger was completed on January 1, 2019. Pro forma amounts are based on the preliminary purchase price allocation of the acquisition and are not necessarily indicative of results that may be reported in the future. Non-recurring pro forma adjustments including acquisition-related costs directly attributable to the Merger are included within the reported pro forma revenue and net income (loss).

	Three Months Ended June 30,		**Six Months Ended June 30,**	
(in thousands, except per share data)	**2020**	**2019**	**2020**	**2019**
Revenues	$ 614,684	$ 891,001	$ 1,435,379	$ 1,767,503
Net income (loss) attributable to ChampionX	(60,100)	57,078	(794,525)	109,879

Transactions with Ecolab

Certain agreements have been entered into between the Company and Ecolab, including, among others, a Tax Matters Agreement, an Intellectual Property Matters Agreement, a Cross Supply and Product Transfer Agreement, and a Transition Services Agreement, each entered into on the Closing Date; as well as the Employee Matters Agreement entered into on December 18, 2019. Pursuant to the Transition Services Agreement, Ecolab and its subsidiaries as well as legacy ChampionX and its subsidiaries will provide each other with specified support services and other assistance for a limited time following the closing of the Merger. Charges for services under the agreement are representative of our best estimate of market price and will be determined on an allocated cost basis, subject to an overall annual aggregate cap.

NOTE 3—NEW ACCOUNTING STANDARDS

Recently Adopted Accounting Standards

Effective January 1, 2020, we adopted Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") 2016-13, "*Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*." This update amends the impairment model to utilize an expected credit loss methodology in place of the incurred credit loss methodology for financial instruments. We applied the provisions of this ASU to our financial instruments, mostly consisting of trade receivables, as of January 1, 2020. We utilized the modified retrospective method of adoption; therefore, prior period amounts have not been adjusted and continue to be reflected in accordance with our historical accounting policies. As of January 1, 2020, we recorded a cumulative adjustment to retained earnings of $1.6 million, net of $0.5 million of income tax benefit.

Our exposure to credit losses is primarily the result of product sales to our customers, resulting in trade receivables with payment terms generally ranging from 30 days to 90 days. We manage credit risk on trade receivables by transacting only with what management believes are financially secure customers. For our legacy Apergy operating companies, our expected loss allowance for accounts receivable is estimated utilizing a single loss rate, as our customer base generally has similar collectability risk characteristics. We develop our loss rate estimate based on historical collection experience, and current economic and market conditions. For our legacy ChampionX operating companies, we estimate our expected loss allowance for accounts receivable by analyzing accounts receivable balances by age and applying historical write-off and collection trend rates as well as current economic and market conditions. Specific allowance amounts are established to record the appropriate provision for customers that have a higher probability of default.

The following table provides a rollforward of our allowance for credit losses balance:

(in thousands)	Allowance for Credit Losses
December 31, 2019	$ 8,072
Impact of adoption on January 1, 2020	2,042
Provision for expected credit losses	3,968
Accounts written off	(1,834)
Recoveries	(52)
Foreign currency translation	(517)
June 30, 2020	$ 11,679

NOTE 4—INVENTORIES

Inventories consisted of the following:

(in thousands)	June 30, 2020	December 31, 2019
Raw materials	$ 163,037	$ 50,099
Work in progress	9,890	13,325
Finished goods	385,208	175,774
	558,135	239,198
Valuation adjustments	(12,858)	(12,067)
LIFO adjustments	(17,635)	(15,789)
Inventories, net	$ 527,642	$ 211,342

NOTE 5—GOODWILL AND INTANGIBLE ASSETS

During the first quarter of 2020, certain unprecedented events caused the rapid decline of several market indicators in the oil and gas industry. Decisions by the Organization of Petroleum Exporting Countries ("OPEC") and other oil producing nations resulted in an oversupply of crude oil. Compounding this situation, demand for oil and gas commodities declined significantly as the world was impacted by the COVID-19 outbreak, which resulted in a sharp decline in crude oil prices. Consequently, our market capitalization was negatively impacted as a result of these market conditions and overall impact to our industry.

Management determined that these events and their related impact to future revenues and cash flows constituted a triggering event in the first quarter of 2020, requiring us to perform a recoverability test of our long-lived assets and an interim impairment assessment of goodwill as of March 31, 2020.

Goodwill

The carrying amount of goodwill, including changes therein, by reporting segment is below:

(in thousands)	Production Chemical Technologies	Production & Automation Technologies	Drilling Technologies	Reservoir Chemical Technologies	Total
December 31, 2019	$ —	$ 809,977	$ 101,136	$ —	$ 911,113
Acquisition [(1)]	270,532	—	—	81,485	$ 352,017
Impairment	—	(616,271)	—	—	$ (616,271)
Foreign currency translation	120	(2,600)	—	2	$ (2,478)
June 30, 2020	$ 270,652	$ 191,106	$ 101,136	$ 81,487	$ 644,381

(1) See Note 2—Merger Transaction for additional information related to the acquisition completed during June 2020.

Goodwill is not subject to amortization but is tested for impairment on an annual basis or more frequently if impairment indicators arise.

During the first quarter of 2020, we performed a quantitative analysis for each of our reporting units to determine the existence of goodwill impairment and the amount of the impairment loss. In performing the quantitative assessment, we estimated the fair value of each of our reporting units using a combination of the income and market approaches, which determined that the fair values were less than the respective carrying values for our Artificial Lift and Automation reporting units.

Our income-based valuation method determines the present value of estimated future cash flows to estimate the fair value of a reporting unit. Significant assumptions used in estimating our reporting unit fair values include: (i) annual revenue growth rates; (ii) operating margins; (iii) risk-adjusted discount rate; and (iv) terminal value determined using a long-term growth rate. If the carrying amount of a reporting unit exceeds its fair value, an impairment loss is recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to the reporting unit. Given the unprecedented uncertainty of both short-term and long-term market conditions, we utilized a weighted-average projection for estimated future cash flows that consists of three estimated future cash flows scenarios with the following weightings: (i) low case scenario with a 40% weighting, (ii) base case scenario with a 40% weighting, and (iii) high case scenario with a 20% weighting.

Under the market approach, we estimated a fair value based on comparable companies' market multiples of revenues and earnings before interest, taxes, depreciation and amortization and factored in a control premium. Finally, we compared our estimates of fair values to our March 31, 2020 total public market capitalization and assessed an implied control premium based on the 20-day average of our common stock.

The reporting unit carrying values were adjusted based on the long-lived asset impairment assessment noted below. Financial and credit market volatility directly impacts our fair value measurement through the weighted average cost of capital used to determine a discount rate. During times of volatility, significant judgment must be applied to determine whether credit market changes are a short-term or long-term trend. We utilized discount rates of 14.5% and 16.5% for our Artificial Lift and Automation reporting units, respectively.

During the first quarter of 2020, we recorded a $616.3 million impairment charge to goodwill, consisting of $539.2 million and $77.1 million in our Artificial Lift reporting unit and our Automation reporting unit, respectively. Both reporting units are within our Production & Automation Technologies reportable segment. The goodwill impairment charge includes $560.1 million of non-taxable goodwill, which was recognized as a discrete item in determining our effective tax rate for the period. We did not identify any triggering events at any of our reporting units during the second quarter of 2020.

Long-lived Asset Impairment

Long-lived assets, which include property, plant and equipment, right of use assets, and identified intangible assets, comprise a significant amount of our total assets. The Company makes judgments and estimates in conjunction with the carrying value of these assets, including amounts to be capitalized, depreciation and amortization methods and estimated useful lives.

The negative market indicators described above, as well as the results of the previously mentioned fair value determinations of certain of our reporting units, were triggering events indicating that certain of our long-lived tangible and intangible assets may be impaired. We performed recoverability tests on our asset groups as of March 31, 2020, which indicated that long-lived assets associated with two of our asset groups within Production and Automation Technologies were not recoverable as the aggregate amount of estimated undiscounted cash flows of these asset groups was determined to be below their respective carrying values. We estimated the fair value of these intangible and fixed assets using an income approach that required us to make long-term forecasts of our future revenues and costs related to the assets subject to review. These forecasts utilized assumptions about demand for our products and services, future market conditions and technological developments. The forecasts are dependent upon assumptions including those regarding oil prices and the general outlook for the global oil and gas industry, among other factors. Financial and credit market volatility directly impacts our fair value measurement through our income forecast. Changes to these assumptions, including, but not limited to: variability of spot and futures prices for crude oil; sustained declines in worldwide rig counts below current analysts' forecasts; significant deterioration of external financing for our customers; higher risk premiums or higher cost of equity; or any other significant adverse economic news could require a provision for impairment.

Accordingly, the estimated fair value of each of these asset groups was below their respective carrying value and as a result, we recorded a long-lived asset impairment charge of $41.0 million in the first quarter of 2020, consisting of $40.4 million to customer relationships and $0.6 million to trademarks. We did not identify impairment triggering events at any of our asset groups during the second quarter of 2020.

The components of our definite- and indefinite-lived intangible assets were as follows:

	June 30, 2020			December 31, 2019		
(in thousands)	**Gross Carrying Amount**	**Accumulated Amortization**	**Net Carrying Amount**	**Gross Carrying Amount**	**Accumulated Amortization**	**Net Carrying Amount**
Definite-lived intangible assets:						
Customer relationships [1]	$ 568,818	$ 297,731	$ 271,087	$ 560,316	$ 353,189	$ 207,127
Trademarks [1]	59,855	25,564	34,291	35,695	24,830	10,865
Patents	38,125	27,923	10,202	38,436	26,838	11,598
Unpatented technologies	123,700	11,123	112,577	13,700	9,811	3,889
Favorable supply agreements [2]	54,926	1,356	53,570	—	—	—
Drawings and manuals	1,719	1,719	—	2,558	1,758	800
Other	5,267	4,606	661	5,332	4,504	828
	852,410	370,022	482,388	656,037	420,930	235,107
Indefinite-lived intangible assets:						
Trademarks	3,600	—	3,600	3,600	—	3,600
Total	$ 856,010	$ 370,022	$ 485,988	$ 659,637	$ 420,930	$ 238,707

(1) Includes impairment of customer relationship and trademark intangible assets of $40.4 million and $0.6 million, respectively, all of which relate to asset groups included within our Artificial Lift business.
(2) Favorable supply agreements were entered into as part of the Merger transaction. See Note 2—Merger Transaction for further information.

NOTE 6—DEBT

Long-term debt consisted of the following:

(in thousands)	June 30, 2020	December 31, 2019
2018 Credit Facility	$ —	$ —
2018 Term Loan Facility	265,000	265,000
2020 Term Loan Facility	537,000	—
6.375% Senior Notes due 2026	300,000	300,000
Finance lease obligations	10,501	9,375
Total	1,112,501	574,375
Net unamortized discounts and issuance costs	(9,118)	(9,709)
Total long-term debt	$ 1,103,383	$ 564,666
Current portion of long-term debt	(31,656)	(4,845)
Long-term debt, less current portion	$ 1,071,727	$ 559,821

2018 Credit Facility

On February 14, 2020, the Company entered into an amendment to its existing credit facility dated May 9, 2018 (as amended, the “2018 Credit Facility”), which (i) provided for the incurrence of an additional $150 million of revolving commitments under the 2018 Credit Facility, upon consummation of the Merger, (ii) permitted the consummation of the Merger and the incurrence of a senior secured term loan facility (“2020 Term Loan Facility”) in an aggregate amount up to $537 million by legacy ChampionX, and (iii) continued to provide that all obligations under the 2018 Credit Facility continue to be guaranteed by certain of the Company’s wholly-owned U.S. subsidiaries, including upon the consummation of the Merger, certain legacy ChampionX wholly owned U.S. subsidiaries. The weighted average interest rate on borrowings during the period was 3.16%.

2020 Term Loan Facility

On June 3, 2020, legacy ChampionX entered into a term loan facility for $537.0 million (“2020 Term Loan Facility”). Proceeds from the 2020 Term Loan Facility were utilized to fund a cash payment of $527.4 million from legacy ChampionX to Ecolab upon the completion of the Merger. We assumed the 2020 Term Loan Facility upon completion of the Merger, which is fully and unconditionally guaranteed by the Company and certain of its wholly-owned domestic subsidiaries, which also guarantee the obligations under the 2018 Credit Facility. The 2020 Term Loan Facility matures at the earlier of (i) June 3, 2027 or (ii) January 30, 2026 in the event the Company’s senior unsecured notes due May 1, 2026 remain outstanding. Amounts outstanding under the 2020 Term Loan Facility bear interest, at the option of the Company, at a rate equal to (a) LIBOR plus 5.0% for eurocurrency rate loans (to the extent LIBOR is less than 1%, the LIBOR rate will be deemed to be 1%) or (b) the highest of (i) the Federal Funds Rate plus 1/2 of 1%, (ii) the “prime rate” quoted by Bank of America, N.A., (iii) LIBOR plus 1.00% and (iv) 1.00%, plus 4.0%. The 2020 Term Loan Facility contains customary representations and warranties, covenants, and events of default for loan facilities of this type. The weighted average interest rate on borrowings during the period was 6.18%.

The term loan is subject to mandatory amortization payments of $6.7 million paid quarterly, beginning on September 30, 2020. Any voluntary prepayment of the 2020 Term Loan Facility which occurs prior to June 3, 2022, is subject to a make-whole prepayment premium on the aggregate prepaid principal amount of the 2020 Term Loan Facility.

Senior Notes

ChampionX has senior notes outstanding, the payment obligations of which are fully and unconditionally guaranteed by certain wholly owned subsidiaries of ChampionX on a joint and several basis. On June 18, 2020, the wholly-owned subsidiaries of legacy ChampionX that guarantee the 2018 Credit Facility and the 2020 Term Loan Facility, delivered a Supplemental Indenture to join as guarantors of the senior notes.

NOTE 7—COMMITMENTS AND CONTINGENCIES

The Company is subject to various claims and contingencies related to, among other things, workers’ compensation, general liability (including product liability), automobile claims, health care claims, environmental matters and lawsuits. We record liabilities where a contingent loss is probable and can be reasonably estimated. If the reasonable estimate of a probable loss is a range, the Company records the most probable estimate of the loss or the minimum amount when no amount within the range is a better estimate than any other amount. In accordance with applicable GAAP, the Company discloses a contingent liability even if the liability is not probable or the amount is not estimable, or both, if there is a reasonable possibility that a material loss may have been incurred.

Guarantees and Indemnifications

We have provided indemnities in connection with sales of certain businesses and assets, including representations and warranties, covenants and related indemnities for environmental health and safety, tax and employment matters. We do not have any material liabilities recorded for these indemnifications and are not aware of any claims or other information that would give rise to material payments under such indemnities.

In connection with the Company's separation from Dover Corporation ("Dover") in 2018 (the "Separation"), we entered into agreements with Dover that govern the treatment between Dover and us for certain indemnification matters and litigation responsibility. Generally, the separation and distribution agreement provides for cross-indemnities principally designed to place financial responsibility for the obligations and liabilities of our business with us and to place financial responsibility for the obligations and liabilities of Dover's business with Dover. The separation and distribution agreement also establishes procedures for handling claims subject to indemnification and related matters. In addition, pursuant to the tax matters agreement, we have agreed to indemnify Dover and its affiliates against any and all tax-related liabilities incurred by them relating to the Separation and/or certain related transactions to the extent caused by an acquisition of ChampionX stock or assets or by any other action or failure to act undertaken by ChampionX or its affiliates.

Pursuant to the provisions of the tax matters agreement with Dover, we recorded an indemnification liability of $3.4 million as of December 31, 2019, with respect to certain liabilities related to tax audits for the 2012-2016 tax years. We received notification in February 2020 that the tax audits and related assessments were completed, resulting in a final settlement amount of $3.0 million, which was paid in April 2020.

In connection with the Merger, we entered into agreements with Ecolab that govern the treatment between Ecolab and us for certain indemnification matters and litigation responsibility. Generally, the separation and distribution agreement provides for cross-indemnities principally designed to place financial responsibility for the obligations and liabilities of our business with us and to place financial responsibility for the obligations and liabilities of Ecolab's business with Ecolab. The separation and distribution agreement also establishes procedures for handling claims subject to indemnification and related matters. In addition, pursuant to the Tax Matters Agreement, we have agreed to indemnify Ecolab and its affiliates for (i) all taxes for which ChampionX is responsible as defined within the Tax Matters Agreement, (ii) all taxes resulting from a breach by ChampionX of any of its representations (but only to the extent relating to a breach occurring after the consummation of the Merger) or any of its covenants under the Tax Matters Agreement, (iii) all taxes resulting from an acquisition after the Merger of any of the stock or assets of ChampionX, other than as a result of the Merger or a repayment of the ChampionX Credit Facilities and (iv) reasonable costs and expenses (including reasonable attorneys' fees and expenses) related to the foregoing.

As of June 30, 2020 and December 31, 2019, we had $50.3 million and $15.7 million, respectively, of outstanding letters of credit, surety bonds and guarantees which expire at various dates through 2025. These financial instruments are primarily maintained as security for insurance, warranty and other performance obligations. Generally, we would only be liable for the amount of these letters of credit and surety bonds in the event of default in the performance of our obligations, the probability of which we believe is remote.

Litigation and Environmental Matters

We are involved in various pending or potential lawsuits, claims and environmental actions that have arisen in the ordinary course of our business. These proceedings primarily involve claims by private parties alleging injury arising out of use of our products, patent infringement, employment matters, and commercial disputes, as well as possible obligations to investigate and mitigate the effects on the environment of the disposal or release of certain chemical substances at various sites, such as Superfund sites and either operating or owned facilities. We review the probable outcome of such proceedings, the costs and expenses reasonably expected to be incurred and accrued to-date, and the availability and extent of insurance coverage. We accrue a liability for legal matters that are probable and can be reasonably estimated. If the reasonable estimate of a probable loss is a range, the Company records the most probable estimate of the loss or the minimum amount when no amount within the range is a better estimate than any other amount. We are unable to predict the ultimate outcome of these actions because of the inherent uncertainty of litigation and unfavorable rulings or developments could occur, and there can be no certainty that the Company may not ultimately incur changes in excess of recorded liabilities. However, we believe the most probable, ultimate resolution of these matters will not have a material adverse effect on our condensed consolidated financial position, results of operations or cash flows.

Environmental Matters

The Company is currently participating in environmental assessments and remediation at approximately 8 locations, the majority of which are in the U.S., and environmental liabilities have been accrued reflecting our best estimate of future costs. Potential insurance reimbursements are not anticipated in the Company's accruals for environmental liabilities. As of June 30, 2020 environmental liability accruals related to these locations were $9.0 million.

Prior to the Separation, groundwater contamination was discovered at the Norris Sucker Rods plant site located in Tulsa, Oklahoma ("Norris"). Initial remedial efforts were undertaken at the time of discovery of the contamination and Norris has since coordinated monitoring and remediation with the Oklahoma Department of Environmental Quality ("ODEQ"). As part of the ongoing long-term remediation process, Norris contracted an engineering and consulting firm to develop a range of possible additional remedial alternatives in order to accelerate the remediation process and associated cost estimates for the work. In October 2019, we received the firm's preliminary remedial alternatives for consideration. Now that we have such recommendations, we have begun discussions with ODEQ regarding our proposed long-term remediation plan. The plan is subject to ODEQ's review, input, and approval. Because we have not yet finalized a plan for further remediation at the site and discussions with ODEQ remain ongoing, we cannot fully anticipate the timing, outcome or possible impact of such further remedial activities, financial or otherwise. As a result of the recommendations in the report, we accrued liabilities for these remediation efforts of approximately $2.0 million as of December 31, 2019. Liabilities could increase in the future at such time as we ultimately reach agreement with ODEQ on our remediation plan and such liabilities become probable and can be reasonably estimated, however, there have been no changes to our estimated liability as of June 30, 2020.

Matters Related to Deepwater Horizon Incident Response

On April 22, 2010, the deepwater drilling platform, the Deepwater Horizon, operated by a subsidiary of BP plc, sank in the Gulf of Mexico after a catastrophic explosion and fire that began on April 20, 2010. A massive oil spill resulted. Approximately one week following the incident, subsidiaries of BP plc, under the authorization of the responding federal agencies, formally requested certain entities that are now subsidiaries of ChampionX as a result of the Merger (collectively the "COREXIT Defendants") to supply large quantities of COREXIT™ 9500, an oil dispersant product listed on the U.S. EPA National Contingency Plan Product Schedule. The COREXIT Defendants responded immediately by providing available COREXIT™ and increasing production to supply the product to BP's subsidiaries for use, as authorized and directed by agencies of the federal government throughout the incident. Prior to the incident, the COREXIT Defendants had not provided products or services or otherwise had any involvement with the Deepwater Horizon platform. On July 15, 2010, BP announced that it had capped the leaking well, and the application of dispersants by the responding parties ceased shortly thereafter.

On May 1, 2010, the President of the United States appointed retired U.S. Coast Guard Commandant Admiral Thad Allen to serve as the National Incident Commander in charge of the coordination of the response to the incident at the national level. The EPA directed numerous tests of all the dispersants on the National Contingency Plan Product Schedule, including those provided by the COREXIT Defendants, "to ensure decisions about ongoing dispersant use in the Gulf of Mexico are grounded in the best available science." The COREXIT Defendants cooperated with this testing process and continued to supply COREXIT™, as requested by BP and government authorities. The use of dispersants by the responding parties was one tool used by the government and BP to avoid and reduce damage to the Gulf area from the spill.

In connection with its provision of COREXIT™, the COREXIT Defendants have been named in several lawsuits as described below.

Cases arising out of the Deepwater Horizon accident were administratively transferred for pre-trial purposes to a judge in the United States District Court for the Eastern District of Louisiana (the "Court") with other related cases under In Re: Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico, on April 20, 2010, Case No. 10-md-02179 (E.D. La.) ("MDL 2179"). The COREXIT Defendants were named, along with other unaffiliated defendants, in six putative class action complaints related to the Deepwater Horizon oil spill and 21 complaints filed by individuals. Those complaints were consolidated in MDL 2179. The complaints generally allege, among other things, strict liability and negligence relating to the use of COREXIT™ dispersant in connection with the Deepwater Horizon oil spill.

Pursuant to orders issued by the Court in MDL 2179, the claims were consolidated in several master complaints, including one naming the COREXIT Defendants and others that responded to the Deepwater Horizon oil spill (known as the "B3 Master Complaint"). On May 18, 2012, the COREXIT Defendants filed a motion for summary judgment against the claims in the B3 Master Complaint, on the grounds that: (i) the plaintiffs' claims are preempted by the comprehensive oil spill response scheme set forth in the Clean Water Act and National Oil and Hazardous Substances Pollution Contingency Plan (the "National Contingency Plan"); and (ii) the COREXIT Defendants are entitled to derivative immunity from suit. On November 28, 2012, the Court granted the COREXIT Defendants' motion and dismissed with prejudice the claims in the B3 Master Complaint asserted against the COREXIT Defendants. The Court held that such claims were preempted by the Clean Water Act and National Contingency Plan. Because claims in the B3 Master Complaint remained pending against other defendants, the Court's decision was not a "final judgment" for purposes of appeal. Under Federal Rule of Appellate Procedure 4(a), plaintiffs will have 30 days after entry of final judgment to appeal the Court's decision.

The COREXIT Defendants, the incident defendants and the other responder defendants have been named as first party defendants by Transocean Deepwater Drilling, Inc. and its affiliates (the "Transocean Entities") (In re the Complaint and Petition of Triton Asset Leasing GmbH, et al, MDL No. 2179, Civil Action 10-2771). In April and May 2011, the Transocean Entities, Cameron International Corporation, Halliburton Energy Services, Inc., M-I L.L.C., Weatherford U.S., L.P. and Weatherford International, Inc. (collectively, the "Cross Claimants") filed cross claims in MDL 2179 against the COREXIT Defendants and other unaffiliated cross defendants. The Cross Claimants generally allege, among other things, that if they are found liable for damages resulting from the Deepwater Horizon explosion, oil spill and/or spill response, they are entitled to indemnity or contribution from the cross defendants.

In April and June 2011, in support of its defense of the claims against it, the COREXIT Defendants filed counterclaims against the Cross Claimants. In its counterclaims, the COREXIT Defendants generally allege that if they are found liable for damages resulting from the Deepwater Horizon explosion, oil spill and/or spill response, they are entitled to contribution or indemnity from the Cross Claimants.

In May 2016, the COREXIT Defendants were named in nine additional complaints filed by individuals alleging, among other things, business and economic loss resulting from the Deepwater Horizon oil spill ("B1" claims). In April 2017, the COREXIT Defendants were named in two additional complaints filed by individuals alleging, among other things, business and economic loss resulting from the Deepwater Horizon oil spill. The plaintiffs in these lawsuits are generally seeking awards of unspecified compensatory and punitive damages, and attorneys' fees and costs. These actions have been consolidated in MDL 2179.

On February 22, 2017, the Court dismissed the B3 Master Complaint and ordered that plaintiffs who had previously filed a claim that fell within the scope of the B3 Master Complaint and who had "opted out" of and not released their claims under the Medical Benefits Class Action Settlement either: (1) complete a sworn statement indicating, among other things, that they opted out of the Medical Benefits Class Action Settlement (to be completed by plaintiffs who previously filed an individual complaint); or (2) file an individual lawsuit attaching the sworn statement as an exhibit, by a deadline date set by the Court.

On July 10, 2018, the Court entered an order dismissing the "B1" claims against the COREXIT Defendants. In light of the Court's orders dismissing various B3 and "B1" claims in their entirety, for most plaintiffs the Court's November 28, 2012 grant of summary judgment for the COREXIT Defendants is now final and the deadline to appeal has passed. On October 23, 2018, a plaintiff filed a new B3 complaint against the COREXIT Defendants and other unaffiliated defendants generally alleging, among other things, negligence and gross negligence related to the use of COREXIT™ dispersant in connection with the Deepwater Horizon oil spill. The complaint was consolidated in MDL 2179. There currently remain three cases pending against the COREXIT Defendants relating to the Deepwater Horizon oil spill, all of which are expected to ultimately be dismissed pursuant to the Court's November 28, 2012 order granting the COREXIT Defendants' motion for summary judgment.

The Company believes the claims asserted against the COREXIT Defendants are without merit and intends to defend these lawsuits vigorously. The Company also believes that it has rights to contribution and/or indemnification (including legal expenses) from third parties. However, we cannot predict the outcome of these lawsuits, the involvement it might have in these matters in the future, or the potential for future litigation.

NOTE 8 — ACCUMULATED OTHER COMPREHENSIVE LOSS

Accumulated other comprehensive loss—Accumulated other comprehensive loss consisted of the following:

(in thousands)	Foreign Currency Translation	Defined Pension and Other Post-Retirement Benefits	Cash Flow Hedges	Accumulated Other Comprehensive Loss
December 31, 2018	$ (36,146)	$ (6,760)	$ —	$ (42,906)
Other comprehensive income (loss) before reclassifications, net of tax	1,090	(323)	—	767
Reclassification adjustment for net losses included in net income, net of tax	—	422	—	422
Other comprehensive income, net of tax	1,090	99	—	1,189
March 31, 2019	$ (35,056)	$ (6,661)	$ —	$ (41,717)
Other comprehensive income (loss) before reclassifications, net of tax	974	—	—	974
Reclassification adjustment for net losses included in net income, net of tax	—	68	—	68
Other comprehensive income (loss), net of tax	974	68	—	1,042
June 30, 2019	$ (34,082)	$ (6,593)	$ —	$ (40,675)

(in thousands)	Foreign Currency Translation	Defined Pension and Other Post-Retirement Benefits	Cash Flow Hedges	Accumulated Other Comprehensive Loss
December 31, 2019	$ (35,210)	$ (8,827)	$ —	$ (44,037)
Other comprehensive loss before reclassifications, net of tax	(11,052)	—	—	(11,052)
Reclassification adjustment for net losses included in net income, net of tax	—	99	—	99
Other comprehensive income (loss), net of tax	(11,052)	99	—	(10,953)
March 31, 2020	$ (46,262)	$ (8,728)	$ —	$ (54,990)
Other comprehensive income before reclassifications, net of tax	5,703	—	653	6,356
Reclassification adjustment for net losses included in net income, net of tax	—	99	—	99
Other comprehensive income, net of tax	5,703	99	653	6,455
June 30, 2020	$ (40,559)	$ (8,629)	$ 653	$ (48,535)

Reclassifications from accumulated other comprehensive loss—Reclassification adjustments from accumulated other comprehensive loss to net income (loss) related to defined pension and other post-retirement benefits consisted of the following:

	Three Months Ended June 30,		Six Months Ended June 30,		Affected line items on the condensed consolidated statements of income (loss)
(in thousands)	**2020**	**2019**	**2020**	**2019**	
Pensions and other post-retirement benefits:					
Amortization of actuarial loss and other	$ 132	$ 92	$ 264	$ 183	Other (income) expense, net
Settlement loss	—	—	—	486	Other (income) expense, net
Total before tax	132	92	264	669	Income (loss) before income taxes
Tax benefit	(33)	(24)	(66)	(179)	Provision for (benefit from) income taxes
Net of tax	$ 99	$ 68	$ 198	$ 490	Net income (loss)

NOTE 9 — EARNINGS PER SHARE

A reconciliation of the number of shares used for the basic and diluted earnings (loss) per share calculation was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(in thousands, except per share data)	**2020**	**2019**	**2020**	**2019**
Net income (loss) attributable to ChampionX	$ (109,645)	$ 22,937	$ (743,373)	$ 42,593
Weighted-average number of shares outstanding	115,149	77,425	96,313	77,394
Dilutive effect of stock-based compensation	—	207	—	242
Total shares and dilutive securities	115,149	77,632	96,313	77,636
Basic earnings (loss) per share attributable to ChampionX	$ (0.95)	$ 0.30	$ (7.72)	$ 0.55
Diluted earnings (loss) per share attributable to ChampionX	$ (0.95)	$ 0.30	$ (7.72)	$ 0.55

For all periods presented, the computation of diluted earnings (losses) per share excludes awards with an anti-dilutive impact. For periods in which we experience a net loss from continuing operations, all potential common shares have been excluded from the calculation of weighted-average shares outstanding, because inclusion would be anti-dilutive. The average number of awards excluded from diluted earnings (loss) per share that would potentially dilute earnings per share in the future were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(in thousands)	**2020**	**2019**	**2020**	**2019**
Potentially dilutive securities excluded as anti-dilutive	976	422	770	348

NOTE 10—REVENUE

Our revenue is generated primarily from product sales. Service revenue is generated from providing services to our customers. These services include laboratory and logistics services, chemical management services, troubleshooting, reporting, water treatment services, technical advisory assistance and field services. Lease revenue is derived from rental income of leased production equipment and is recognized ratably over the lease term. We do not track cost of goods sold separately for all of our revenue streams.

Within our Production & Automation Technologies and Drilling Technologies segments, substantially all of our performance obligations are recognized at a point in time and are primarily related to our product revenue derived from the sale of drilling and production equipment. Revenue is recognized when control transfers to the customer upon shipment or completion of installation, testing, or certification as required under the contract. Within our Production Chemical Technologies and Reservoir Chemical Technologies segments, revenue recognized from the sale of products and equipment is recognized at the point in time when the obligations in the contract with the customer are satisfied, which generally occurs with the transfer of the product or delivery of the equipment.

Disaggregation of Revenue

Revenue disaggregated by revenue type was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(in thousands)	**2020**	**2019**	**2020**	**2019**
Production Chemical Technologies:				
Product revenue	$ 119,467	$ —	$ 119,467	$ —
Service revenue	16,232	—	16,232	—
Lease and other revenue	303	—	303	—
Total Production Chemical Technologies revenue	$ 136,002	$ —	$ 136,002	$ —
Production & Automation Technologies:				
Product revenue	$ 82,350	$ 199,330	$ 250,873	$ 387,747
Service revenue	19,497	24,052	44,388	47,863
Lease and other revenue	12,894	12,437	24,959	23,168
Total Production & Automation Technologies revenue	$ 114,741	$ 235,819	$ 320,220	$ 458,778
Drilling Technologies				
Product revenue	$ 20,948	$ 70,340	$ 76,870	$ 147,875
Service revenue	—	11	33	11
Total Drilling Technologies revenue	$ 20,948	$ 70,351	$ 76,903	$ 147,886
Reservoir Chemical Technologies:				
Product revenue	$ 9,239	$ —	$ 9,239	$ —
Service revenue	67	—	67	—
Total Reservoir Chemical Technologies revenue	$ 9,306	$ —	$ 9,306	$ —
Corporate and other: [1]				
Product revenue	$ 16,867	$ —	$ 16,867	$ —
Service revenue	1,050	—	1,050	—
Total Corporate and other revenue	$ 17,917	$ —	$ 17,917	$ —
Total Revenue:				
Product revenue	$ 248,871	$ 269,670	$ 473,316	$ 535,622
Service revenue	36,846	24,063	61,770	47,874
Lease and other revenue	13,197	12,437	25,262	23,168
Total revenue	$ 298,914	$ 306,170	$ 560,348	$ 606,664

(1) Revenue generated from the Cross Supply and Product Transfer Agreement with Ecolab is recorded to Corporate. See Note 2—Merger Transaction for additional information on this arrangement.

Revenue disaggregated by geography was as follows:

(in thousands)	Three Months Ended June 30, 2020					
	Production Chemical Technologies	Production & Automation Technologies	Drilling Technologies	Reservoir Chemical Technologies	Corporate	Total
United States	$ 41,753	$ 83,153	$ 13,894	$ 4,275	$ 11,932	155,007
Canada	15,961	3,998	443	131	62	20,595
Middle East	28,148	10,262	82	2,887	2,436	43,815
Europe	17,144	1,318	1,904	273	1,227	21,866
Australia	1,884	12,313	23	11	—	14,231
Latin America	25,035	3,154	—	488	490	29,167
Asia-Pacific	3,692	1,295	4,170	273	1,770	11,200
Other	2,385	(752)	432	968	—	3,033
Total revenue	$ 136,002	$ 114,741	$ 20,948	$ 9,306	$ 17,917	$ 298,914

(in thousands)	Six Months Ended June 30, 2020					
	Production Chemical Technologies	Production & Automation Technologies	Drilling Technologies	Reservoir Chemical Technologies	Corporate	Total
United States	$ 41,753	$ 237,581	$ 54,834	$ 4,275	$ 11,932	350,375
Canada	15,961	17,122	5,271	131	62	38,547
Middle East	28,148	22,166	540	2,887	2,436	56,177
Europe	17,144	7,658	7,595	273	1,227	33,897
Australia	1,884	21,535	69	11	—	23,499
Latin America	25,035	10,714	22	488	490	36,749
Asia-Pacific	3,692	3,272	7,678	273	1,770	16,685
Other	2,385	172	894	968	—	4,419
Total revenue	$ 136,002	$ 320,220	$ 76,903	$ 9,306	$ 17,917	$ 560,348

(in thousands)	Three Months Ended June 30, 2019					
	Production Chemical Technologies	Production & Automation Technologies	Drilling Technologies	Reservoir Chemical Technologies	Corporate	Total
United States	$ —	$ 182,592	$ 54,461	$ —	$ —	$ 237,053
Canada	—	11,800	4,071	—	—	15,871
Middle East	—	14,016	423	—	—	14,439
Europe	—	5,069	8,022	—	—	13,091
Australia	—	8,025	—	—	—	8,025
Latin America	—	9,383	(5)	—	—	9,378
Asia-Pacific	—	4,679	3,188	—	—	7,867
Other	—	255	191	—	—	446
Total revenue	$ —	$ 235,819	$ 70,351	$ —	$ —	$ 306,170

(in thousands)	Six Months Ended June 30, 2019					
	Production Chemical Technologies	Production & Automation Technologies	Drilling Technologies	Reservoir Chemical Technologies	Corporate	Total
United States	$ —	$ 358,235	$ 110,176	$ —	$ —	$ 468,411
Canada	—	25,701	9,085	—	—	34,786
Middle East	—	27,410	633	—	—	28,043
Europe	—	9,854	20,196	—	—	30,050
Australia	—	14,007	—	—	—	14,007
Latin America	—	17,101	—	—	—	17,101
Asia-Pacific	—	6,068	7,343	—	—	13,411
Other	—	402	453	—	—	855
Total revenue	$ —	$ 458,778	$ 147,886	$ —	$ —	$ 606,664

Revenue is attributed to regions based on the location of our direct customer, which in some instances is an intermediary and not necessarily the end user.

Contract balances

Contract assets and contract liabilities from contracts with customers were as follows:

(in thousands)	June 30, 2020	December 31, 2019
Contract assets	$ 6	$ 285
Contract liabilities - current	16,369	6,148

NOTE 11—RESTRUCTURING AND OTHER RELATED CHARGES

Restructuring and other related charges as classified in our condensed consolidated statements of income (loss) were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(in thousands)	**2020**	**2019**	**2020**	**2019**
Segment restructuring charges:				
Production & Automation Technologies	$ 8,334	$ 660	$ 9,005	$ 1,070
Drilling Technologies	3,426	—	5,521	—
Corporate	368	—	368	—
Total	$ 12,128	$ 660	$ 14,894	$ 1,070
Statements of Income (Loss) classification:				
Cost of goods and services	$ 8,707	$ 319	$ 10,746	$ 398
Selling, general and administrative expense	3,421	341	4,148	672
Total	$ 12,128	$ 660	$ 14,894	$ 1,070

Restructuring and other related charges during the three and six months ended June 30, 2020 included the following programs, which were substantially completed at the end of the period:

Production & Automation Technologies. Production & Automation Technologies incurred restructuring charges of $8.3 million and $9.0 million during the three and six months ended June 30, 2020, respectively, related to various programs, primarily focused on facility closures and consolidations, exit of certain nonstrategic product lines, and workforce reductions.

Drilling Technologies. Drilling Technologies incurred restructuring charges of $3.4 million and $5.5 million during the three and six months ended June 30, 2020, respectively, primarily due to costs associated with employee severance and related benefits as a result of workforce reductions and facility closures to better align the cost base with the significantly lower demand environment.

The following table details our restructuring accrual activities during the six months ended June 30, 2020:

(in thousands)	**Restructuring Accrual Balance**
December 31, 2019	$ 130
Restructuring charges	7,543
Payments	(9,233)
Liabilities assumed in the Merger	4,843
Other, including foreign currency translation	(7)
June 30, 2020	$ 3,276

Our liability balance for restructuring and other related charges at June 30, 2020, reflects employee severance and related benefits initiated during the period as well as liabilities assumed in the Merger. Additional programs may be initiated during 2020 with related restructuring charges.

NOTE 12—EQUITY AND CASH INCENTIVE PROGRAMS

Stock-based compensation expense is reported within “Selling, general and administrative expense” in the condensed consolidated statements of income (loss). Stock-based compensation expense relating to all stock-based incentive plans was as follows:

(in thousands)	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Stock-based compensation expense	$ 5,433	$ 2,736	$ 7,862	$ 5,021
Tax benefit	(1,203)	(668)	(1,802)	(1,226)
Stock-based compensation expense, net of tax	$ 4,230	$ 2,068	$ 6,060	$ 3,795

A summary of activity relating to our share-based awards for the six months ended June 30, 2020, was as follows:

(in shares)	Stock-Settled Appreciation Rights	Performance Share Awards	Restricted Stock Units	Non-Qualified Stock Options
Outstanding at January 1, 2020	422,361	174,726	440,048	—
Granted	—	121,261	544,119	—
Replacement awards [(1)]	—	—	2,357,733	7,324,853
Forfeited	(7,030)	(5,011)	(23,046)	—
Exercised / vested	—	—	(156,911)	—
Outstanding at June 30, 2020	415,331	290,976	3,161,943	7,324,853

(1) In connection with the Merger, the Company entered into the Employee Matters Agreement dated December 18, 2019, which provided the terms in which certain Ecolab share-based awards held by legacy ChampionX employees were replaced with share-based awards of the Company on the merger date. The fair value of the replacement awards has been allocated between each employee's pre-combination and post-combination services. Amounts allocated to pre-combination services have been included as consideration transferred as part of the Merger. See Note 2—Merger Transaction for a summary of consideration transferred. Compensation costs of $15.8 million allocated to post-combination services will be recorded as stock-based compensation expense over each employees' remaining service period.

NOTE 13—FAIR VALUE MEASUREMENTS

Fair value is defined as the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants as of the measurement date. A hierarchy has been established for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring the most observable inputs be used when available. The hierarchy is broken down into three levels:

Level 1- Inputs are quoted prices in active markets that are accessible at the measurement date for identical assets or liabilities.

Level 2- Inputs include observable inputs other than quoted prices in active markets.

Level 3- Inputs are unobservable inputs for which there is little or no market data available.

The carrying amount and the estimated fair value for assets and liabilities measured on a recurring basis are as follows:

	June 30, 2020			
		Fair Value Measurements		
(in thousands)	Carrying Amount	Level 1	Level 2	Level 3
Assets				
Foreign currency forward contracts	$ 1,334	$ —	$ 1,334	$ —
Liabilities				
Foreign currency forward contracts	$ 1,414	$ —	$ 1,414	$ —

The carrying value of foreign currency forward contracts is at fair value, which is determined based on foreign currency exchange rates as of the balance sheet date and is classified within Level 2. For purposes of fair value disclosure above, derivative values are presented gross. See Note 14—Derivatives And Hedging Transactions for further discussion of gross versus net presentation of the Company's derivatives.

The carrying amounts of cash and cash equivalents, trade receivables, accounts payable, as well as amounts included in other current assets and other current liabilities that meet the definition of financial instruments, approximate fair value due to their short-term nature.

The fair value of our senior notes is based on Level 1 quoted market prices. The fair value of our term loan facilities are based on Level 2 quoted market prices for the same or similar debt instruments. The carrying amount and the estimated fair value of long-term debt, including current maturities, held by the Company were:

	June 30, 2020		December 31, 2019	
(in thousands)	**Carrying Amount**	**Fair Value**	**Carrying Amount**	**Fair Value**
2018 Term Loan Facility	$ 265,000	$ 253,904	$ 265,000	$ 266,161
2020 Term Loan Facility	$ 537,000	$ 528,274	$ —	$ —
6.375% Senior Notes due 2026	$ 300,000	$ 279,396	$ 300,000	$ 316,710

We consider the inputs for our long-lived asset and goodwill impairment calculations to be Level 3 inputs in the fair value hierarchy. See Note 5—Goodwill And Intangible Assets for further information.

NOTE 14—DERIVATIVES AND HEDGING TRANSACTIONS

The Company uses foreign currency forward contracts to manage risks associated with foreign currency exchange rates. The Company does not hold derivative financial instruments of a speculative nature or for trading purposes. Derivative contracts are recorded as assets and liabilities on the balance sheet at fair value. We evaluate hedge effectiveness at contract inception and thereafter on a quarterly basis. If a derivative is no longer expected to be effective, hedge accounting is discontinued. Changes in fair value are recognized immediately in earnings unless the derivative qualifies and is designated as a hedge. Changes in fair value attributable to changes in spot exchange rates for derivative contracts that have been designated as cash flow hedges are recognized in accumulated other comprehensive income (loss) and reclassified into earnings in the same period the hedged transaction affects earnings and are presented in the same income statement line as the earnings effect of the hedged item. Cash flows from derivatives are classified in the statement of cash flows in the same category as the cash flows from the items subject to designated hedge or undesignated (economic) hedge relationships.

The Company is exposed to credit risk in the event of nonperformance of counterparties for foreign currency forward exchange contracts. We monitor our exposure to credit risk by using major global banks and financial institutions as counterparties and monitoring their financial condition and credit profile. The Company does not anticipate nonperformance by any of these counterparties, and therefore, recording a valuation allowance against the Company's derivative balance is not considered necessary.

Derivative Positions Summary

Certain of the Company's derivative transactions are subject to master netting arrangements that allow the Company to settle with the same counterparties. These arrangements generally do not call for collateral and as of the applicable dates presented in the following table, no cash collateral had been received or pledged related to the underlying derivatives. We have elected to present our derivative balances on a gross basis on the condensed consolidated balance sheet.

The following table summarizes the gross fair value of the Company's outstanding derivatives and the lines in which they are presented on the condensed consolidated balance sheet. We did not have outstanding derivatives at December 31, 2019:

	June 30, 2020	
(in thousands)	**Derivative Assets**	**Derivative Liabilities**
Prepaid expenses and other current assets	$ 1,334	$ —
Accrued expenses and other current liabilities	—	1,414
	$ 1,334	$ 1,414

The following table summarizes the notional values of the Company's outstanding derivatives:

(in thousands)	**June 30, 2020**	**December 31, 2019**
Notional value of foreign currency forward contracts	$ 345,738	$ —

Cash Flow Hedges

The Company utilizes foreign currency forward contracts to hedge the effect of foreign currency exchange rate fluctuations on forecasted foreign currency transactions, primarily related to inventory purchases. These forward contracts are designated as cash flow hedges. The changes in fair value of these contracts attributable to changes in spot exchange rates are recorded in accumulated other comprehensive income (loss) ("AOCI") until the hedged items affect earnings, at which time the gain or loss is reclassified into the same line item in the condensed consolidated statements of income (loss) as the underlying exposure being hedged. The forward points are marked-to-market monthly and recognized in the same line item in the condensed consolidated statement of income as the underlying exposure being hedged.

Derivatives Not Designated as Hedging Instruments

The Company also uses foreign currency forward contracts to offset its exposure to the change in value of certain foreign currency denominated assets and liabilities, primarily receivables and payables, which are remeasured at the end of each period. Although the contracts are effective economic hedges, they are not designated as accounting hedges. Therefore, changes in the value of these derivatives are recognized immediately in earnings, thereby offsetting the current earnings effect of the related foreign currency denominated assets and liabilities.

Effect of Derivative Instruments on Income

The loss of all derivative instruments recognized is summarized below:

	Three Months Ended June 30,				Six Months Ended June 30,			
(in thousands)	**2020**		**2019**		**2020**		**2019**	
Loss reclassified from AOCI to income on cash flow hedges:								
Cost of goods and services	$	15	$	—	$	15	$	—
Loss on derivatives not designated as hedging instruments:								
Other (income) expense, net		711		—		711		—
Total loss of derivative instruments	$	726	$	—	$	726	$	—

NOTE 15 — SEGMENT INFORMATION

Upon completion of the Merger, the Company re-evaluated its reporting segments. Our determination of reporting segments was made on the basis of our strategic priorities within each segment and corresponds to the manner in which our chief operating decision maker reviews and evaluates operating performance to make decisions about resources to be allocated to the segment. In addition to our strategic priorities, segment reporting is also based on differences in the products and services we provide. As a result, we added two new reportable segments - Production Chemical Technologies and Reservoir Chemical Technologies. The legacy Apergy reportable segments remain unchanged.

Our reporting segments are:

- Production Chemical Technologies—provides oil and natural gas production and midstream markets with solutions to manage and control corrosion, oil and water separation, flow assurance, sour gas treatment and a host of water-related issues.

- Production & Automation Technologies—designs, manufactures, markets and services a full range of artificial lift equipment, end-to-end digital automation solutions, as well as other production equipment. Production & Automation Technologies’ products are sold under a collection of brands including Harbison-Fischer, Norris, Alberta Oil Tool, Oil Lift Technology, PCS Ferguson, Pro-Rod, Upco, Unbridled ESP, Norriseal-Wellmark, Quartzdyne, Spirit, Theta, Timberline and Windrock.

- Drilling Technologies—designs, manufactures and markets polycrystalline diamond cutters and bearings for use in oil and gas drill bits under the US Synthetic brand.

- Reservoir Chemical Technologies—manufactures specialty products that support well stimulation, construction (including drilling and cementing) and remediation needs in the oil and natural gas industry.

Business activities that do not meet the criteria of an operating segment have been combined into Corporate and Other. Corporate and Other includes (i) corporate and overhead expenses, and (ii) revenue and costs for activities that are not operating segments.

Segment revenue and segment operating profit were as follows:

(in thousands)	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Segment revenue:				
Production Chemical Technologies	$ 136,002	$ —	$ 136,002	$ —
Production & Automation Technologies	114,741	235,819	320,220	458,778
Drilling Technologies	20,948	70,351	76,903	147,886
Reservoir Chemical Technologies	9,306	—	9,306	—
Corporate and other [(1)]	17,917	—	17,917	—
Total revenue	$ 298,914	$ 306,170	$ 560,348	$ 606,664
Segment operating profit:				
Production Chemical Technologies	$ 9,922	$ —	$ 9,922	$ —
Production & Automation Technologies	(37,168)	19,868	(685,759)	32,932
Drilling Technologies	(3,811)	24,251	7,548	51,057
Reservoir Chemical Technologies	(2,811)	—	(2,811)	—
Total segment operating profit	(33,868)	44,119	(671,100)	83,989
Corporate and other [(1)]	64,871	4,722	79,061	8,558
Interest expense, net	11,262	10,109	20,301	20,636
Income before income taxes	$ (110,001)	$ 29,288	$ (770,462)	$ 54,795

(1) Corporate and other includes costs not directly attributable or allocated to our reporting segments such as corporate executive management and other administrative functions, and the results attributable to our noncontrolling interest. Additionally, the sales and expenses related to the Cross Supply Agreement with Ecolab are included within Corporate and other. See Note 2—Merger Transaction for further information.

Legacy ChampionX has an integrated supply chain function that serves the Production Chemical Technologies and Reservoir Chemical Technologies reportable segments. As such, asset information for these reportable segments has not been provided and is not available, since the Company does not produce or utilize such information.

NOTE 16—CASH FLOW INFORMATION

Supplemental cash flow information is as follows:

(in thousands)	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Non-cash information:		
Finance lease additions	$ 3,111	$ 3,018

Lease program

Our ESP leased asset program is reported in our Production & Automation Technologies segment. At the time of purchase, assets are recorded to inventory and are transferred to property, plant, and equipment when a customer contracts for an asset under our lease program. During the six months ended June 30, 2020 and June 30, 2019, we transferred $12.4 million and $40.4 million, respectively, of inventory into property, plant, and equipment as a result of assets entering our leased asset program.

Expenditures for assets that are placed into our lease asset program expected to be recovered through sale are reported in "Leased assets" in the operating section of our condensed consolidated statements of cash flows. All other capitalizable expenditures for assets that are placed into our lease asset program are classified as “Capital expenditures” in the investing section of our condensed consolidated statements of cash flows. During the six months ended June 30, 2020 and 2019, such expenditures were estimated to be $8.4 million and $11.2 million, respectively.

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

Management's discussion and analysis is our analysis of our financial performance, financial condition and significant trends that may affect our future performance. It should be read in conjunction with the condensed consolidated financial statements, and notes thereto, included elsewhere in this report. It contains forward-looking statements including, without limitation, statements relating to ChampionX's plans, strategies, objectives, expectations and intentions that are made pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are often identified by the words "believe," "anticipate," "expect," "may," "intend," "foresee," "guidance," "estimate," "potential," "outlook," "plan," "should," "would," "could," "target," "forecast" and similar expressions, including the negative thereof. We undertake no obligation to publicly update, revise or correct any of our forward-looking statements after the date they are made, whether as a result of new information, future events or otherwise, except to the extent required under the federal securities laws.
Readers are cautioned that such forward-looking statements should be read in conjunction with the disclosures under the heading "CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS."

EXECUTIVE OVERVIEW AND BUSINESS OUTLOOK

ChampionX is a global leader in chemistry solutions and highly engineered equipment and technologies that help companies drill for and produce oil and gas safely and efficiently around the world. ChampionX's products provide efficient functioning throughout the lifecycle of a well with a focus on the production phase of wells. Our Production Chemical Technologies segment provides chemistry solutions to maximize production from flowing oil and gas wells, and our Reservoir Chemical Technologies segment provides chemistry solutions used in drilling and completion activities. ChampionX's Production & Automation Technologies offerings consist of artificial lift equipment and solutions, including rod pumping systems, electric submersible pump systems, progressive cavity pumps and drive systems and plunger lifts, as well as a full automation and digital offering consisting of equipment and software for Industrial Internet of Things ("IIoT") solutions for downhole monitoring, wellsite productivity enhancement, and asset integrity management. ChampionX's Drilling Technologies offering provides market leading polycrystalline diamond cutters and bearings that result in cost effective and efficient drilling.

On June 3, 2020, the Company and Ecolab completed a Reverse Morris Trust transaction in which Ecolab transferred their upstream energy business to legacy ChampionX and, thereafter, distributed all of the shares of legacy ChampionX common stock to certain Ecolab stockholders. Immediately following the Distribution, a wholly owned subsidiary of the Company merged with and into legacy ChampionX, with legacy ChampionX continuing as the surviving company in the Merger and as a wholly owned subsidiary of the Company. The Merger constitutes a business combination, with the Company (formerly known as Apergy) treated as the accounting acquirer and legacy ChampionX treated as the acquired company for accounting purposes. In association with the completion of the Merger, the Company has changed its name from Apergy Corporation to ChampionX Corporation, and common shares began trading on the New York Stock Exchange under the symbol "CHX". See Note 2—Merger to our condensed consolidated financial statements included in Part 1, Item 1 of this Quarterly Report on Form 10-Q for more information.

In connection with the Merger, we reorganized our reportable segments. As a result, we have identified two new reportable segments, Production Chemical Technologies and Reservoir Chemical Technologies, which include the results of operations of legacy ChampionX. The legacy Apergy reportable segments remain unchanged. The results of operations of legacy ChampionX have been reflected in our accompanying condensed consolidated financial statements from the closing date of the Merger through June 30, 2020. Results for the periods prior to June 3, 2020 reflect the financial and operating results of Apergy and do not include the financial and operating results of legacy ChampionX. As such, our historical results of operations are not comparable from period to period and may not be comparable to our financial results of operations in future periods.

Basis of Presentation

We revised our previously issued financial statements for the three and six months ended June 30, 2019, for the correction of immaterial errors. Refer to Note 1—Basis of Presentation to our condensed consolidated financial statements included in Part 1, Item 1 of this Quarterly Report on Form 10-Q.

Business Environment

We focus on economic- and industry-specific drivers and key risk factors affecting our business segments as we formulate our strategic plans and make decisions related to allocating capital and human resources. Our business segments provide a broad range of technologies and products for the oil and gas drilling and production industry and, as a result, are substantially dependent upon activity levels in the oil and gas industry. Demand for our products, technologies and services is impacted by overall global demand for oil and gas, ongoing depletion rates of existing wells which produce oil and gas, and our customers' willingness to invest in the development and production of oil and gas resources. Our customers determine their operating and capital budgets based on current and future crude oil and natural gas prices, U.S. and worldwide rig count and U.S. well completions, among other factors. Crude oil and natural gas prices are impacted by supply and demand, which are influenced by geopolitical, macroeconomic and local events and have historically been subject to substantial volatility and cyclicality. Future higher crude oil and natural gas prices typically translate into higher exploration and production budgets. Rig count, footage drilled and exploration and production investment by oil and gas operators have often been used as leading indicators for the level of drilling and development activity in the oil and gas sector.

Market Conditions and Outlook

During the first half of 2020, certain unprecedented events caused the rapid decline of oil prices. Decisions by the Organization of Petroleum Exporting Countries ("OPEC") and other oil producing nations resulted in an oversupply of crude oil. Compounding this situation, demand for oil and gas commodities declined significantly as the world was impacted by the novel coronavirus ("COVID-19") outbreak, which resulted in a sharp decline in crude oil prices. In response to the significant reduction in oil prices, customer spending associated with drilling and exploration and production (E&P) activity deteriorated at a rapid pace due to reduced drilling activities, lower budgeted capital and operating expenditures and cost cutting initiatives.

Although oil prices have begun to rebound during the latter part of the second quarter, we expect market conditions to remain challenging throughout 2020, and potentially longer, as we believe it will take time for global oil demand to recover from the COVID-19 pandemic and for oil supplies to return to normal levels. From a geographic perspective, we expect North American markets, including the Permian Basin, to be the most challenging due to the significant amount of announced E&P capital expenditure reductions. We expect international markets to be more resilient, particularly in Australia and the Middle East, as the need for artificial lift in those regions is increasing and the international sales cycle is longer than the North American cycle.

Average crude oil and natural gas prices, rig counts and aggregate well completions are summarized below:

	2019					2020		
	Q1	**Q2**	**Q3**	**Q4**	**FY**	**Q1**	**Q2**	**YTD**
WTI Crude (per bbl) (a)	54.82	59.88	56.34	56.86	56.99	45.59	27.96	36.78
Brent Crude (per bbl) (a)	63.10	60.56	61.95	63.27	62.22	50.26	29.46	39.86
Henry Hub Natural Gas (per mmBtu) (a)	2.92	2.57	2.38	2.40	2.56	1.91	1.70	1.81
U.S. Rig Count (b)	1,043	989	920	820	941	785	392	589
Canada Rig Count (b)	183	82	132	139	134	196	25	111
International Rig Count (b)	1,030	1,051	1,059	1,056	1,049	1,074	834	954
Worldwide Rig Count	2,256	2,122	2,111	2,015	2,124	2,055	1,251	1,654
Aggregate U.S. Well Completions (a)	3,814	4,161	4,193	3,639	15,807	3,289	1,475	4,764

(a) Source: U.S. Energy Information Administration (EIA), as of July 15, 2020.
(b) Source: Baker Hughes Rig Count, as of July 15, 2020. Ukraine rig count initially reported in May 2019.

Response to the COVID-19 Pandemic

In response to impacts of the COVID-19 pandemic, we implemented a set of immediate actions to reduce operating costs and capital spending. These actions, which we began implementing during the second quarter and will continue during the third quarter of 2020, are expected to generate annualized operating cost savings of $135 million and include:

- reduction in total ChampionX headcount;
- company-wide salary reductions, including steeper reductions for executive management and the highest reduction for our chief executive officer; and
- facility rationalization and elimination of non-essential expenses.

Additionally, we are significantly reducing capital expenditures by $50 million as compared to spending in 2019 within the legacy Apergy businesses, including ESP leased assets within our Production & Automation Technologies segment, and in our Production Chemical Technologies and Reservoir Chemical Technologies segments by another $24 million despite significant investment required to support the information technology infrastructure separation from Ecolab. We are continuing to monitor market developments and will take additional restructuring actions should further declines in oilfield service activities occur.

Ensuring the health and safety of our employees is paramount. As our businesses are classified as critical infrastructure, our manufacturing and field locations continue to operate and support the vital oil and gas infrastructure around the world. In order to protect our employees during this period, we mobilized our crisis management team and have adopted a comprehensive response plan, which includes:

- taking precautions consistent with local, state, and national government health authority guidelines, including the Centers for Disease Control and Prevention and the World Health Organization;
- meetings between the crisis management team and executive management to ensure real-time understanding of developments as they occur such that our communications and responses are appropriate and timely;
- equipping our employees with additional personal protective equipment;
- introducing new employee screening procedures in our operations; and
- enacting social distancing procedures, including staggering shifts, implementing rotating work schedules, and modifying workspaces and break areas.

CRITICAL ACCOUNTING ESTIMATES

Refer to our “Critical Accounting Estimates” included in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2019, for a discussion of our critical accounting estimates, together with the following additional critical accounting estimate:

Determination of Fair Value in Business Combinations

Accounting for the acquisition of a business requires the allocation of the purchase price to the various assets acquired and liabilities assumed at their respective fair values. The determination of fair value requires the use of significant estimates and assumptions, and in making these determinations, management uses all available information. If necessary, we have up to one year after the acquisition closing date to finalize these fair value determinations under the applicable GAAP. For tangible and identifiable intangible assets acquired in a business combination, the determination of fair value utilizes several valuation methodologies including discounted cash flows which has assumptions with respect to the timing and amount of future revenue and expenses associated with an asset. The assumptions made in performing these valuations include, but are not limited to, discount rates, future revenues and operating costs, projections of capital costs, and other assumptions believed to be consistent with those used by principal market participants. Due to the specialized nature of these calculations, we engage third-party specialists to assist management in evaluating our assumptions as well as appropriately measuring the fair value of assets acquired and liabilities assumed.

CONSOLIDATED RESULTS OF OPERATIONS
THREE MONTHS ENDED JUNE 30, 2020 AND 2019

	Three Months Ended June 30,		Change	
(dollars in thousands)	**2020**	**2019**	**$**	**%**
Revenue	$ 298,914	$ 306,170	(7,256)	(2.4)
Cost of goods and services	266,684	197,410	69,274	35.1
Gross profit	32,230	108,760	(76,530)	(70.4)
Selling, general and administrative expense	130,657	66,687	63,970	95.9
Interest expense, net	11,262	10,109	1,153	11.4
Other (income) expense, net	312	2,676	(2,364)	*
Income (loss) before income taxes	(110,001)	29,288	(139,289)	*
Provision for (benefit from) income taxes	(954)	6,280	(7,234)	*
Net income (loss)	(109,047)	23,008	(132,055)	*
Net income attributable to noncontrolling interest	598	71	527	*
Net income (loss) attributable to ChampionX	$ (109,645)	$ 22,937	(132,582)	*
Gross profit margin	*10.8%*	*35.5%*		(2470) bps.
SG&A expense, percent of revenue	*43.7%*	*21.8%*		2190 bps.
Effective tax rate	*0.9%*	*21.4%*		(2050) bps.

* Not meaningful

Revenue. Revenue decreased $7.3 million, or 2.4%, in the second quarter of 2020 compared to prior year driven by a decrease in revenue of $49.4 million in our Drilling Technologies segment primarily due to a steep decline in U.S. land-based rig count and drilling activity in the first quarter of 2020. Additionally, there was a $121.1 million decrease in revenue in our Production & Automation Technologies segment driven by a decline in drilling and completion activities and related reduced customer spending in North America and internationally, which affected our artificial lift, digital products, and other production equipment offerings. These decreases in Drilling Technologies and Production & Automation Technologies were partially offset by the incremental revenues associated with the Merger of legacy ChampionX of $163.2 million.

Gross profit. Gross profit decreased $76.5 million, or 70.4%, in the second quarter of 2020 compared to the prior year mainly due to lower sales volume at both Production & Automation Technologies and Drilling Technologies, and an increase in depreciation expense of $22.8 million primarily due to a change in salvage value estimate for certain of our leased assets, and depreciation expense incurred on assets acquired related to the Merger. The decrease in gross profit in Drilling Technologies and Production & Automation Technologies is partially offset with gross profit of $26.9 million generated by legacy ChampionX subsequent to the acquisition date.

Selling, general and administrative expense. Selling, general and administrative expense increased $64.0 million, or 95.9%, in the second quarter of 2020 compared to the prior year primarily due to acquisition and integration costs of $58.5 million associated with the merger with legacy ChampionX. The increase also includes $24.7 million of selling, general and administrative expense generated by legacy ChampionX subsequent to the acquisition date. The increase in selling, general, and administrative expense was partially offset by cost savings resulting from restructuring actions taken in the second half of 2019.

Interest expense, net. Interest expense, net increased $1.2 million in the second quarter of 2020 compared to prior year primarily due to a draw on our revolving credit facility during the quarter in addition to incremental interest expense related to the term loan assumed as part of the Merger.

Provision for (benefit from) income taxes. Our provision for (benefit from) income taxes reflected effective tax rates of 0.9% and 21.4%, in the second quarter of 2020 and 2019, respectively. The effective tax rate was impacted by the effects of valuation allowances in loss jurisdictions and foreign branch earnings.

CONSOLIDATED RESULTS OF OPERATIONS
SIX MONTHS ENDED JUNE 30, 2020 AND 2019

	Six Months Ended June 30,		Change	
(dollars in thousands)	**2020**	**2019**	**$**	**%**
Revenue	$ 560,348	$ 606,664	(46,316)	(7.6)
Cost of goods and services	445,779	394,893	50,886	12.9
Gross profit	114,569	211,771	(97,202)	(45.9)
Selling, general and administrative expense	208,800	130,816	77,984	59.6
Goodwill impairment	616,271	—	616,271	*
Long-lived asset impairment	40,980	1,746	39,234	*
Interest expense, net	20,301	20,636	(335)	(1.6)
Other (income) expense, net	(1,321)	3,778	(5,099)	(135.0)
Income (loss) before income taxes	(770,462)	54,795	(825,257)	(1,506.1)
Provision for (benefit from) income taxes	(27,960)	11,849	(39,809)	(336.0)
Net income (loss)	(742,502)	42,946	(785,448)	(1,828.9)
Net income attributable to noncontrolling interest	871	353	518	*
Net income (loss) attributable to ChampionX	$ (743,373)	$ 42,593	(785,966)	(1,845.3)
Gross profit margin	*20.4%*	*34.9%*		-1450 bps.
SG&A expense, percent of revenue	*37.3%*	*21.6%*		1570 pts.
Effective tax rate	*3.6%*	*21.6%*		(1800) pts.

* Not meaningful

Revenue. Revenue for the first six months of 2020 decreased $46.3 million, or 7.6%, year-over-year. Drilling Technologies revenue decreased $71.0 million year-over-year due to lower volumes and pricing pressure. Production & Automation Technologies revenue decreased $138.6 million year-over-year, driven by lower volumes in North America and internationally, and the disposition of our pressure vessel manufacturing business in the second quarter of 2019. The decreases in Drilling Technologies and Production & Automation Technologies were partially offset by the incremental revenues associated with the Merger of legacy ChampionX of $163.2 million.

Gross profit. Gross profit for the first six months of 2020 decreased $97.2 million, or 45.9%, year-over year, reflecting lower sales volumes in our Production and Automation Technologies and Drilling Technologies segment, and an increase in depreciation expense of $22.8 million, primarily due to a change in salvage value estimate for certain of our leased assets and depreciation expense incurred on assets acquired related to the Merger. The decrease in gross profit in Drilling Technologies and Production & Automation Technologies is partially offset with gross profit of $26.9 million generated by legacy ChampionX subsequent to the acquisition date.

Selling, general and administrative expense. Selling, general and administrative expense for the first six months of 2020 increased $78.0 million, or 59.6%, year-over-year, primarily due to acquisition and integration costs of $69.6 million related to the Merger, an increase of $10.9 million for restructuring charges, and $4.3 million for professional fees incurred related to material weakness remediation. The increase also includes $24.7 million of selling, general and administrative expense generated by legacy ChampionX subsequent to the acquisition date. The increase in selling, general, and administrative expense was partially offset by cost savings from restructuring actions taken in the second half of 2019.

Interest expense, net. Interest expense, net in the first six months of 2020 decreased $0.3 million year-over-year due to the repayment of $55 million of the Company's term loan subsequent to June 30, 2019, partially offset by an increase in interest expense due to a draw on our revolving credit facility during the quarter as well as incremental interest expense related to the term loan assumed as part of the Merger.

Provision for (benefit from) income taxes. The effective tax rates for the first six months of 2020 and 2019 were 3.6% and 21.6% respectively. The tax benefit recognized during 2020 reflects the loss before income taxes, largely due to goodwill and intangible asset impairment charges recorded during the first quarter. The effective tax rate was primarily impacted by the tax effects of impairment of non-taxable goodwill of $560.1 million, recognized as a discrete item. Other items impacting the rate include the effects of valuation allowances in loss jurisdictions and foreign branch earnings.

SEGMENT RESULTS OF OPERATIONS
THREE MONTHS AND SIX MONTHS ENDED JUNE 30, 2020 AND 2019

Production Chemical Technologies

(dollars in thousands)		For the period June 3, 2020 through June 30, 2020[1]
Revenue	$	136,002
Operating profit		9,922
Operating profit margin		7.3%
Depreciation and amortization	$	6,957

(1) The results of operations of the Production Chemical Technologies segment have been reflected in the table above from the closing date of the Merger through June 30, 2020.

Revenue. Production Chemical Technologies revenue is primarily generated from providing E&P and other customers in the oil and natural gas production and midstream markets with solutions to manage and control corrosion, oil and water separation, flow assurance, sour gas treatment and a host of water-related issues. Revenue was $136.0 million for the period. Deteriorating market conditions during the second quarter of 2020 have significantly impacted customer demand; however, as Production Chemical Technologies mostly supports existing production, sales are somewhat less sensitive to changes in customers' capital and operating expenditure budgets related to the exploration for and development of new oil and natural gas reserves, which are more directly affected by trends in oil and natural gas prices.

Operating profit. Production Chemical Technologies generated operating profit of $9.9 million subsequent to the completion of the Merger, which includes depreciation and amortization expense of $7.0 million and an increase to cost of goods sold related to the step-up of inventory as part of the purchase price allocation of $5.5 million.

Production & Automation Technologies

(dollars in thousands)	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Change $	Change %
Revenue	$ 114,741	$ 235,819	(121,078)	(51.3)
Operating profit	(37,168)	19,868	(57,036)	(287.1)
Operating profit margin	(32.4)%	8.4%		(4080) bps.
Depreciation and amortization	$ 41,535	$ 27,697	13,838	50.0
Restructuring and other related charges	8,334	3,135	5,199	165.8

* Not meaningful

Revenue. Production & Automation Technologies revenue decreased $121.1 million, or 51.3%, as compared to the prior year, primarily due a decline in customer spending as a result of deteriorating market conditions during the second quarter of 2020. The decline in customer spending led to lower volumes and associated lower revenue in our artificial lift, digital products and other production equipment offerings in North America and international markets.

Operating profit. Production & Automation Technologies operating profit decreased $57.0 million in the second quarter of 2020 compared to the prior year primarily due to lower sales volume, an increase in depreciation expense of $13.8 million primarily attributed to a change in salvage value estimate for certain of our leased assets, and increased restructuring and other related charges of $5.2 million primarily due to restructuring activities initiated during 2020 to better align the segment's cost base with the significantly lower demand environment.

(dollars in thousands)	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019	Change $	Change %
Revenue	$ 320,220	$ 458,778	(138,558)	(30.2)
Operating profit	(685,759)	32,932	(718,691)	(2,182.3)
Operating profit margin	(214.2)%	7.2%		(22140) bps.
Depreciation and amortization	$ 69,107	$ 54,981	14,126	25.7
Goodwill impairment	616,271	—	616,271	*
Long Lived Asset Impairment	40,980	1,746	39,234	*
Restructuring and other related charges **	9,005	4,031	4,974	123.4

* Not meaningful
** Includes a $2.5 million loss on disposal during the six months ended June 30, 2019, related to our pressure vessel manufacturing business.

Revenue. Production & Automation Technologies revenue for the six months of 2020 decreased $138.6 million, or 30.2%, year-over-year, driven by lower volumes in North America and internationally due to deteriorating market conditions during the first half of 2020, and the disposition of our pressure vessel manufacturing business in the second quarter of 2019.

Operating profit. Production & Automation Technologies operating profit decreased $718.7 million year-over-year driven by goodwill and long-lived asset impairment charges of $616.3 million and $41.0 million, respectively, in the first quarter of 2020. Excluding impairment charges, operating profit decreased $63.2 million, primarily due to lower sales volume, an increase in depreciation expense of $14.1 million related to a change in salvage value estimate for certain of our leased assets, and increased restructuring expense and other related charges of $5.0 million.

Drilling Technologies

(dollars in thousands)	Three Months Ended June 30, 2020	2019	Change $	%
Revenue	$ 20,948	$ 70,351	(49,403)	(70.2)
Operating profit	(3,811)	24,251	(28,062)	(115.7)
Operating profit margin	(18.2)%	34.5%		(5270) bps.
Depreciation and amortization	$ 2,004	$ 2,326	(322)	(13.8)
Restructuring and other related charges	3,426	—	3,426	

Revenue. Drilling Technologies revenue decreased $49.4 million, or 70.2%, in the second quarter of 2020 compared to the prior year primarily due to a steep decline in U.S. land-based rig count and associated decline in customer spending on drilling activities, which negatively impacted sales volumes of our diamond cutters and diamond bearings products.

Operating profit. Drilling Technologies operating profit decreased $28.1 million in the second quarter of 2020 compared to the prior year period primarily due to lower revenue and restructuring charges of $3.4 million associated with employee severance and related benefits.

(dollars in thousands)	Six Months Ended June 30, 2020	2019	Change $	%
Revenue	$ 76,903	$ 147,886	(70,983)	(48.0)
Operating profit	7,548	51,057	(43,509)	(85.2)
Operating profit margin	9.8%	34.5%		(2470) bps.
Depreciation and amortization	$ 4,109	$ 4,835	(726)	(15.0)
Restructuring and other related charges	5,521	—	5,521	

Revenue. Drilling Technologies revenue decreased $71.0 million, or 48.0%, year-over-year primarily due to a steep decline in U.S. land-based rig count and associated decline in customer spending on drilling activities, which negatively impacted sales volumes of our diamond cutters and diamond bearings products.

Operating profit. Drilling Technologies operating profit decreased $43.5 million year-over-year due to lower revenue and restructuring charges of $5.5 million associated with employee severance and related benefits, partially offset by productivity savings.

Reservoir Chemical Technologies

(dollars in thousands)	For the period June 3, 2020 through June 30, 2020(1)
Revenue	$ 9,306
Operating loss	(2,811)
Operating loss margin	(30.2)%
Depreciation and amortization	$ 2,218

(1) The results of operations of the Reservoir Chemical Technologies segment have been reflected in the table above from the closing date of the Merger through June 30, 2020.

Revenue. Reservoir Chemical Technologies revenue is primarily comprised of the sale of specialty products that support well stimulation, construction (including drilling and cementing) and remediation needs to service and equipment companies that support global E&P companies. Revenue was $9.3 million for the period. Reservoir Chemical Technologies products are sensitive to changes in its customers' capital expenditure budgets as they relate closely to the exploration and development of new oil and natural gas reserves. This exploration and development activity is affected by trends in oil and natural gas prices and its customers' corresponding levels of drilling activity, capital investment and well development.

Operating profit. Reservoir Chemical Technologies generated operating loss of $2.8 million, subsequent to the completion of the Merger, which includes depreciation and amortization expense of $2.2 million and an increase in cost of goods sold related to the step-up of inventory as part of the purchase price allocation of $0.3 million.

CAPITAL RESOURCES AND LIQUIDITY

Overview

At June 30, 2020, we had cash and cash equivalent balances of $141.9 million for the primary purpose of working capital and operational support needs. During the second quarter, in order to ensure appropriate liquidity as a result of the industry downturn, the negative business impacts of COVID-19, and to have sufficient funds to extinguish merger-related transaction expenses, we borrowed $125 million against our revolving credit facility. As a result of ongoing robust cash generation throughout the quarter, the Company was able to fully repay the $125 million borrowing prior to June 30, 2020.

All of our cash held outside the United States could be repatriated; however, we have not provided for foreign withholding taxes on our undistributed foreign earnings from jurisdictions which impose such taxes since we have determined that such earnings are indefinitely reinvested in those jurisdictions.

Our primary source of cash is from operating activities. We have historically generated, and expect to continue to generate, positive cash flow from operations. Cash generated from operations is generally allocated to working capital requirements, investments in facilities and systems, acquisitions that create value with add-on capabilities that broaden our existing businesses and overall growth strategy, and debt repayments.

At June 30, 2020, we had a long-term debt balance of $1.1 billion, primarily consisting of our term loan due 2027 with a principal amount of $537.0 million, our senior notes due in 2026 with a principal amount of $300.0 million and our term loan due in 2025 with a principal amount of $265.0 million. We also have access to a revolving credit facility through 2023, which had an unused capacity of $359.1 million at June 30, 2020.

Outlook

We expect to generate our liquidity and capital resources through operations and, when needed, through our revolving credit facility. The volatility in credit, equity and commodity markets resulting from current market conditions can create uncertainty for our businesses. However, the Company believes, based on our current financial condition and current expectations of future market conditions, that we will meet our short- and long-term needs with a combination of cash on hand, cash generated from operations, our use of our revolving credit facility and access to capital markets.

Given the uncertainty created by the lack of visibility of future operating conditions in the current market environment and over the remainder of the year, we are restricting our capital expenditures to maintenance requirements only. We expect our capital expenditures combined with investment in leased assets in the net cash from operating activities section of our consolidated statement of cash flows to be between $30 to $35 million.

Cash Flows

(in thousands)	Six Months Ended June 30, 2020	2019
Cash provided by operating activities	$ 78,033	$ 59,301
Cash provided by (used in) investing activities	39,332	(22,407)
Cash used in financing activities	(9,970)	(54,489)
Effect of exchange rate changes on cash and cash equivalents	(790)	99
Net increase (decrease) in cash and cash equivalents	$ 106,605	$ (17,496)

Operating Activities

Cash provided by operating activities in the six months ended June 30, 2020 increased $18.7 million compared to 2019. The increase in cash provided by operating activities was primarily driven by increases from changes in our operating assets and liabilities in 2020 as compared to 2019, primarily due to an increase in cash received related to the collection of trade receivables and a reduction in our cash outflows for inventory procurement and cash outflows on leased assets due to strict adherence to cost and capital discipline. Partially offsetting the increase in cash provided by operating cash flows was lower net income, adjusted for non-cash items, and merger related acquisition and integration costs incurred during the period.

Expenditures for assets that are placed into our lease asset program expected to be recovered through sale are reported in "Leased assets" in the operating section of our condensed consolidated statements of cash flows. All other capitalizable expenditures for assets that are placed into our lease asset program are classified as “Capital expenditures” in the investing section of our condensed consolidated statements of cash flows.

Investing Activities

Cash provided by investing activities was $39.3 million for the six months ended June 30, 2020, and was primarily comprised of cash acquired in the merger with legacy ChampionX of $57.6 million and $1.1 million of cash proceeds on sale of fixed assets, partially offset by capital expenditures of $19.3 million.

Cash used in investing activities was $22.4 million for the six months ended June 30, 2019 and was primarily comprised of capital expenditures of $22.7 million, partially offset by $2.5 million of cash proceeds on sale of fixed assets.

Financing Activities

Cash used in financing activities of $10.0 million for the six months ended June 30, 2020, was primarily the result of $4.4 million in debt issuance costs related to the amendment of the credit agreement, as discussed in Note 6—Debt to our condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q, $2.8 million of payments of finance lease obligations, and a distribution of $2.2 million to one of our non-controlling interests. Net borrowings under our revolving credit facility totaled zero in 2020 as we borrowed and fully repaid the borrowing within the same period.

Cash used in financing activities of $54.5 million for the six months ended June 30, 2019, was primarily the result of $54.0 million of debt repayment on the principal balance of our term loan and payments totaling $2.7 million for finance lease obligations, partially offset by proceeds on long-term debt of $4.0 million. Net borrowings under our revolving credit facility totaled zero in 2019.

Long-term Debt

Senior Notes

Refer to Note 10—Debt, included in Part II, Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2019, for information related to our Senior Notes, which are fully and unconditionally guaranteed by certain 100-percent-owned subsidiaries (the “Guarantors”) of ChampionX on a joint and several basis. On June 18, 2020, the wholly-owned subsidiaries of legacy ChampionX that guarantee the 2018 Credit Facility and the 2020 Term Loan Facility, delivered a Supplemental Indenture to join as guarantors of the senior notes.

The Senior Notes indenture restricts the ability of the Guarantors to pay dividends or other distributions, make loans or advances, or sell, lease or otherwise transfer property and other assets to certain restricted subsidiaries or the Parent.

As part of the Senior Notes indenture, a guarantee of the senior notes by ChampionX or a Guarantor is subject to release in the following circumstances:

- the sale, exchange or transfer (by merger or otherwise) of (i) the capital stock of the Guarantor after which the Guarantor is no longer a restricted subsidiary or (ii) all or substantially all of the assets of such Guarantor made in a manner not in violation of the indenture;
- the release or discharge of the guarantee by, or direction obligation of, such Guarantor with respect to the Senior Credit Facilities or capital markets debt securities that resulted in the creation of such guarantee, except a discharge by or as a result of payment under such guarantee;
- the designation of the subsidiary as an unrestricted subsidiary under the indenture;
- the legal defeasance or covenant defeasance of the Senior Notes in accordance with the terms of the indenture;
- the merger or consolidation of any Guarantor with and into the Issuer or another Guarantor that is the surviving person in such merger or consolidation, or upon the liquidation of such Guarantor following the transfer of all its assets to the Parent or another Guarantor; or
- an amendment of the Senior Note indenture agreement.

The obligations of each Guarantor under its note guarantee are limited as necessary to prevent such note guarantee from constituting a fraudulent conveyance under applicable law.

The following summarized financial information presents the Parent and Guarantors (collectively and together with the Parent, the “Obligor Group”) on a combined basis:

Condensed Combined Statement of Loss of the Obligor Group

(dollars in thousands)	**Six Months Ended June 30, 2020**
Total Revenue	$ 504,274
Cost of goods and services	398,654
Selling, general and administrative expense	198,714
Goodwill impairment	396,017
Long-lived asset impairment	40,980
Loss before income taxes	(548,634)
Net loss	$ (524,901)

Condensed Combined Balance Sheets of the Obligor Group

(dollars in thousands)	June 30, 2020	December 31, 2019
Current assets:		
Current assets	$ 1,197,901	$ 419,692
Non-current assets:		
Goodwill	595,402	639,280
Advances due from affiliates	24,499	18,534
Other non-current assets	1,536,258	430,553
Total assets	$ 3,354,060	$ 1,508,059
Current liabilities:		
Current liabilities	$ 541,446	$ 173,372
Non-current liabilities:		
Advances due to affiliates	96,735	87,682
Other non-current liabilities	1,361,687	664,581
Total liabilities	$ 1,999,868	$ 925,635

Senior Secured Credit Facilities

In May 2018, we entered into a credit agreement ("credit agreement") governing the terms of our senior secured credit facilities, consisting of (i) a seven-year senior secured term loan B facility ("term loan facility") and (ii) a five-year senior secured revolving credit facility ("revolving credit facility," and together with the term loan facility, the "senior secured credit facilities"). Refer to Note 10—Debt included in Part II, Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2019, for additional information related to our senior secured credit facilities.

On February 14, 2020, we amended our credit agreement, which (i) provides for the incurrence of an additional $150 million of revolving commitments under the amended credit agreement, upon consummation of the Merger, (ii) permits the consummation of the Merger and the incurrence of a senior secured term loan facility in an aggregate amount up to $537 million by ChampionX, and (iii) continues to provide that all obligations under the amended agreement continue to be guaranteed by certain of our wholly-owned U.S. subsidiaries.

During the six months ended June 30, 2020, we made no payments on our term loan facilities.

Revolving Credit Facility

A summary of our revolving credit facility at June 30, 2020, was as follows:

(in millions) <u>**Description**</u>	**Amount**	**Debt Outstanding**	**Letters of Credit**	**Unused Capacity**	**Maturity**
Five-year revolving credit facility	$ 400.0	$ —	$ 40.9	$ 359.1	May 2023

Additionally, we have a letter of credit outside of the revolving credit facility of approximately $0.2 million. As of June 30, 2020, we were in compliance with all restrictive covenants under our revolving credit facility.

2020 Term Loan Facility

On June 3, 2020, legacy ChampionX entered into a term loan facility for $537.0 million ("2020 Term Loan Facility"). Proceeds from the 2020 Term Loan Facility were utilized to fund a cash payment of $527.4 million from legacy ChampionX to Ecolab upon the completion of the Merger. We assumed the 2020 Term Loan Facility upon completion of the Merger, which is fully and unconditionally guaranteed by the Company and certain of its wholly-owned domestic subsidiaries, which also guarantee the obligations under the 2018 Term Loan Facility. The 2020 Term Loan Facility matures at the earlier of (i) June 3, 2027 or (ii) January 30, 2026 in the event the Company's senior unsecured notes due May 1, 2026 remain outstanding. Amounts outstanding under the 2020 Term Loan Facility bear interest, at the option of the Company, at a rate equal to (a) LIBOR plus 5.0% for eurocurrency rate loans or (b) the highest of (i) the Federal Funds Rate plus 1/2 of 1%, (ii) the "prime rate" quoted by Bank of America, N.A., (iii) LIBOR plus 1.00% and (iv) 1.00%, plus 4.0%. The 2020 Term Loan Facility contains customary representations and warranties, covenants, and events of default for loan facilities of this type.

OFF-BALANCE SHEET ARRANGEMENTS

Information related to guarantees is incorporated herein by reference from Note 7—Commitments And Contingencies to our condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

RECENTLY ISSUED ACCOUNTING STANDARDS

See Note 3—New Accounting Standards to our condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We may be exposed to certain market risks arising from the use of financial instruments in the ordinary course of business. This risk arises primarily as a result of potential changes in the fair market value of financial instruments due to adverse fluctuations in commodity prices, foreign currency exchange rates, and interest rates as discussed below. We do not use derivative financial instruments where the objective is to generate profits solely from trading activities.

Commodity Price Risk

We use a variety of raw materials, primarily metals and semi-processed or finished components, that are generally available from various sources. Commodity pricing for metals, such as nickel, chrome, molybdenum, vanadium, manganese and steel scrap, fluctuate with the market. As a result, our earnings are exposed to commodity market price fluctuations. Although some cost increases may be recovered through increased prices to customers, we attempt to control such costs through fixed-price contracts with suppliers and various other programs, such as our global supply chain activities.

Foreign Currency Risk

We conduct operations around the world in a number of different currencies. Many of our foreign subsidiaries have designated the local currency as their functional currency. Our earnings are therefore subject to change due to fluctuations in foreign currency exchange rates when the earnings in foreign currencies are translated into U.S. dollars. We do not hedge this translation impact on earnings. When transactions are denominated in currencies other than our subsidiaries' respective functional currencies, both with external parties and intercompany relationships, these transactions result in increased exposure to foreign currency exchange effects. The Company uses foreign currency forward contracts to manage risks associated with foreign currency exchange rates. As of June 30, 2020, the amount of gain or loss in the fair value of derivative instruments that would have resulted from a 10 percent increase or decrease in the underlying price of the contracts was not material.

Interest Rate Risk

Our use of fixed- or variable-rate debt directly exposes us to interest rate risk. Fixed-rate debt, such as the senior notes, exposes us to changes in the fair value of our debt due to changes in market interest rates. Fixed-rate debt also exposes us to the risk that we may need to refinance maturing debt with new debt at higher rates, or that we may be obligated to pay rates higher than the current market rate. Variable-rate debt, such as our term loan or borrowings under our revolving credit facility, exposes us to short-term changes in market rates that impact our interest expense.

As of June 30, 2020, we had unhedged variable rate debt of $265.0 million related to our 2018 Term Loan Facility with an interest rate of 2.69%. A hypothetical 10% adverse movement in the interest rate, or 27 basis points, would result in an increase to interest expense of $0.7 million on an annualized basis.

We also had unhedged variable rate debt of $537.0 million related to our 2020 Term Loan Facility with an interest rate of 6.00%. A hypothetical 10% adverse movement in the interest rate, or 60 basis points, would result in an increase to interest expense of $1.9 million. As the 2020 Term Loan Facility was acquired as part of the Merger on June 3, 2020, we have calculated the interest rate sensitivity on the interest expense expected to be incurred for the period subsequent to the Merger date through December 31, 2020.

Fair Value of Financial Instruments

The fair value of our fixed rate long-term debt and variable rate debt is estimated based on quoted market prices or prices quoted from third-party financial institutions. We do not currently intend to enter into any interest rate hedging agreements, but will continue to monitor interest rate exposure. See Note 13—Fair Value Measurements to our condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q for further discussion of our financial instruments.

ITEM 4. CONTROLS AND PROCEDURES

With the participation of management, our principal executive officer and principal financial officer carried out an evaluation, pursuant to Rule 13a-15(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act) as of the end of the period covered by this report. Based upon that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were not effective as of June 30, 2020 because of the material weaknesses in internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) described below.

In conducting management's evaluation of the effectiveness of our disclosure controls and procedures as of June 30, 2020, we have excluded the legacy ChampionX business acquired on June 3, 2020, as discussed in the guidance of the SEC. The legacy ChampionX subsidiaries account for approximately 50% of our total assets as of June 30, 2020.

Notwithstanding these material weaknesses, our management, including our principal executive officer and principal financial officer, has concluded that the condensed consolidated financial statements included in this Quarterly Report on Form 10-Q are fairly stated in all material respects in accordance with GAAP for each of the periods presented.

Material Weaknesses in Internal Control Over Financial Reporting

> A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

Management identified a material weakness in the control environment component of internal control as the Company did not maintain a sufficient complement of personnel with the appropriate level of knowledge, experience and training in internal control over financial reporting commensurate with its financial reporting requirements to allow for the consistent execution of control activities at its Artificial Lift business within the Production and Automation Technologies ("PAT") segment. Further, management identified a material weakness in the risk assessment component of internal control as the Company did not appropriately design controls in response to the risk of misstatement at its Electrical Submersible Pump ("ESP") subsidiary, a subsidiary within the PAT segment and part of the Artificial Lift business, to ensure that the subsidiary had the proper resources to operate a complex business model, which was experiencing significant growth and turnover in personnel. These material weaknesses gave rise to the following additional control deficiencies at the Artificial Lift business, which management also determined constituted a material weakness:

- *Material weakness related to revenue recognition and accounts receivable at certain of the Company's subsidiaries within the Artificial Lift businesses within PAT:* The Company did not design or maintain effective controls within certain of its Artificial Lift businesses over the completeness, accuracy, occurrence and cut-off of revenue and within ESP over the valuation of accounts receivable. Specifically, controls were not designed or maintained to ensure (i) accuracy of the price and quantity, including the evidence of the existence of a customer contract during the revenue recognition process, and (ii) appropriate valuation of accounts receivable reserves in response to updated assessments of expected collectability. This material weakness resulted in audit adjustments to the consolidated financial statements as of and for the years ended December 31, 2019 and 2018. In addition, previously-issued interim financial statements have been revised to correct immaterial misstatements of selling, general and administrative expense and revenue for the quarters ended March 31, June 30, and September 30, 2019 and 2018. This material weakness could result in a misstatement of revenue and accounts receivable or the related disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected.

Additionally, the material weaknesses in control environment and risk assessment described above gave rise to the following additional control deficiencies at ESP, which were also determined to be material weaknesses:

- *Material weakness related to manual journal entries:* The Company did not maintain effective controls over the recording of manual journal entries. Specifically, controls were not operating effectively to ensure that journal entries were properly prepared with appropriate supporting documentation and/or were reviewed and approved appropriately to ensure the accuracy of journal entries. This material weakness did not result in any material misstatements to the Company's consolidated financial statements or disclosures, however, previously-issued interim financial statements have been revised to correct immaterial misstatements to cost of goods sold for the quarters ended June 30 and September 30, 2019. Additionally, this material weakness could result in a misstatement of accounts or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected.

- *Material weakness related to inventory and fixed assets:* The Company did not design and maintain effective controls over the completeness, accuracy, existence and presentation and disclosure of inventory and fixed assets. Specifically, controls were not designed or maintained to (a) properly account for asset disposals and active and terminated leases, and (b) properly account for transfers between inventory and leased assets. This material weakness did not result in any material misstatements to the Company's consolidated financial statements or disclosures, however, this material weakness resulted in audit adjustments to the consolidated financial statements as of and for the year ended December

31, 2019. In addition, previously-issued interim financial statements have been revised to correct immaterial misstatements to cost of goods sold, inventory and fixed assets for the quarters ended March 31, June 30 and September 30, 2019. Additionally, this material weakness could result in a misstatement of the aforementioned account balances or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected.

In addition, management identified a material weakness related to the granting of access to system capabilities to authorized users within the general ledger system across the Company. Specifically, the Company did not design and maintain effective controls over user roles, which defines the actions an individual can perform within the system. As a result, there was a lack of segregation of duties as personnel had the ability to both prepare and post journal entries. This material weakness did not result in a material misstatement. However, this material weakness could result in a material misstatement to the accounts or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected.

Remediation Activities

In order to address the material weaknesses in internal control over financial reporting described above, management, with direction from the Audit Committee, is in the process of developing and implementing remediation plans to address control deficiencies that led to these material weaknesses. Specifically, management has:

- Initiated personnel changes at ESP and within the Artificial Lift business;
- Engaged third party experts to assist management in assessing current processes and designing improved processes and controls at ESP and within the Artificial Lift business; and
- Assessed the ability to automate business processes and controls; and
- Reviewed business processes surrounding revenue recognition, accounts receivable, manual journal entries, inventory and fixed assets, and the performance of the risk assessment to identify and begin the implementation of enhanced procedures and related internal controls at ESP.

In addition, management's planned actions to further address the material weaknesses include:

- Enhance and augment business process policies and procedure documentation for greater transparency, scalability, and sustainability;
- Establish training and education programs for business personnel regarding updated policies, procedures, and control activities.
- Complete implementation of enhanced policies, procedures, and related internal controls to standardize business processes.

Management will continue to review and make necessary changes to the overall design of the Company's internal control environment within the Artificial Lift business, as well as policies and procedures to improve the overall effectiveness of internal control over financial reporting. Management believes the measures described above and others that will be implemented will remediate the material weaknesses identified and will strengthen the Company's internal control over financial reporting. The weaknesses will not be considered remediated, however, until the applicable controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively. Management expects these remedial actions and other remedial actions related to these material weaknesses to be effectively implemented in 2020.

Changes in Internal Control Over Financial Reporting

Except as described above, there were no changes in internal control over financial reporting identified in the evaluation for the quarter ended June 30, 2020, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are involved in various pending or potential legal actions in the ordinary course of our business. Management is unable to predict the ultimate outcome of these actions because of the inherent uncertainty of litigation. However, management believes the most probable, ultimate resolution of these matters will not have a material adverse effect on our condensed consolidated financial position, results of operations or cash flows. See Note 7—Commitments and Contingencies to our condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

ITEM 1A. RISK FACTORS

On June 3, 2020, we completed the Merger. Primarily as a result of the Merger, the following are supplements and updates to the risk factors in Part I, Item 1A "Risk Factors," in our Annual Report on Form 10-K for the year ended December 31, 2019. In addition to other information in this Quarterly Report on Form 10-Q, you should carefully consider the following risk factors. Each of these risk factors could materially and adversely affect our business, results of operations and financial condition, as well as affect the value of an investment in our common stock.

Risks Related to Our Business

Trends in crude oil and natural gas prices may affect the drilling and production activity, profitability and financial stability of our customers and therefore the demand for, and profitability of our products and services, which could have a material adverse effect on our business, results of operations and financial condition.

The oil and gas industry is cyclical in nature and experiences periodic downturns of varying length and severity. The oil and gas industry experienced a significant downturn in 2015 and 2016 as a result of a sharp decline in crude oil prices. Crude oil prices slightly recovered in late 2016 and into 2017, but experienced a volatile decline again during late 2018. Price volatility continued throughout 2019 and, partially due to the emergence of the COVID-19 pandemic and failure of OPEC and other major producers to agree on production cuts, has become more extreme in 2020. Demand for our products and services is sensitive to the level of capital spending by oil and natural gas companies and the corresponding drilling and production activity. The level of drilling and production activity is directly affected by trends in crude oil and natural gas prices, which are influenced by numerous factors affecting the supply and demand for oil and gas, including:

- worldwide economic activity including disruption to global trade;
- the level of exploration and production activity;
- the cost of and access to capital;
- environmental regulation;
- federal, state and foreign policies and regulations regarding current and future exploration and development of oil and gas;
- the ability and/or desire of OPEC and other major producers to set and maintain production levels and influence pricing;
- the cost of exploring and producing oil and gas;
- the pace of adoption and cost of developing alternative energy sources;
- the availability, expiration date and price of onshore and offshore leases;
- the discovery rate of new oil and gas reserves in onshore and offshore areas;
- the success of drilling for oil and gas in unconventional resource plays such as shale formations;
- the depletion rate of existing wells in productions;
- takeaway capacity within producing basins;
- alternative opportunities to invest in onshore exploration and production opportunities;
- domestic and global political and economic uncertainty, socio-political unrest and instability, terrorism or hostilities;
- the recent COVID-19 pandemic or other health pandemics and epidemics;
- technological advances; and
- weather conditions.

Many of these factors are beyond our control. For example, in March 2020, members of OPEC and Russia considered extending their previously agreed oil production cuts and potentially making additional oil production cuts. However, these negotiations were unsuccessful. As a result, Saudi Arabia announced a significant reduction in its export prices and Russia announced the expiration of all agreed oil production cuts between members of OPEC and Russia. Following these announcements, and also as a result of the increased global scale and severity of the COVID-19 outbreak during this period, global oil and natural gas prices declined sharply. While a deal to cut production has since been announced by OPEC and its allies, the situation has resulted in a significant downturn in the industry and continued volatility in oil prices, even resulting in a negative oil futures price on one recent day. To the extent that the outbreak of COVID-19 continues to negatively impact demand and OPEC members and other oil exporting nations fail to implement production cuts or other actions that are sufficient to support and stabilize commodity prices, we expect risks related to an excess supply of oil and natural gas for a sustained period.

We expect continued volatility in both crude oil and natural gas prices (including that such prices could remain at current levels or decline further for an extended period of time), as well as in the level of drilling and production related activities. Our ability to regulate our operating activities in response to lower oilfield service activity levels during periodic industry downturns will be important to our business, results of operations and prospects. However, a significant further decline and/or extended continuation of the recent downturn in the industry could result in the reduction in demand for our products and services and could have a material adverse effect on our business, results of operations, financial condition and cash flows.

We might be unable to successfully compete with other companies in our industry.

The markets in which we operate are highly competitive. The principal competitive factors in our markets are customer service, product quality and performance, price, breadth of product offering, market expertise and innovation. In some of our product and service offerings, we compete with the oil and gas industry’s largest oilfield service providers. These large national and multi-national companies may have longer operating histories, greater brand recognition, and a stronger presence in geographic markets than us. They may also have more robust capabilities. In addition, we compete with many smaller companies capable of effectively competing on a regional or local basis. Our competitors may be able to respond more quickly to new or emerging technologies and services and changes in customer requirements. Many contracts are awarded on a bid basis, which further increases competition based on price. As a result of the competitive environment in which we operate, we may lose market share, be unable to maintain or increase prices for our products and services, or be unable to develop new business opportunities, which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

If we are unable to develop new products and technologies, our competitive position may be impaired, which could materially and adversely affect our sales and market share.

The markets in which we operate are characterized by changing technologies and the introduction of new products and services. As a result, our success is dependent upon our ability to develop or acquire new products and services on a cost-effective basis, to introduce them into the marketplace in a timely manner, and to protect and maintain critical intellectual property assets related to these developments. Difficulties or delays in research, development or production of new products and technologies, or failure to gain market acceptance of new products and technologies, may significantly reduce future revenue and materially and adversely affect our competitive position. While we intend to continue to commit financial resources and effort to the development of new products and services our ability to do so may be impacted by prolonged industry downturn and/or we may not be able to successfully differentiate our products and services from those of our competitors. Our customers may not consider our proposed products and services to be of value to them or may not view them as superior to our competitors’ products and services. In addition, our competitors or customers may develop new technologies which address similar or improved solutions to our existing technologies.

Further, we may not be able to adapt to evolving markets and technologies, develop new products, achieve and maintain technological advantages or protect technological advantages through intellectual property rights. If we do not successfully compete through the development and introduction of new products and technologies, our business, results of operations, financial condition and cash flows could be materially adversely affected.

We could lose customers or generate lower revenue, operating profits and cash flows if there are significant increases in the cost of raw materials or if we are unable to obtain raw materials.

We purchase raw materials, sub-assemblies and components for use in manufacturing operations, which exposes us to volatility in prices for certain commodities. Significant price increases for these commodities could adversely affect our operating profits. While we will generally attempt to mitigate the impact of increased raw material prices by endeavoring to make strategic purchasing decisions, broadening our supplier base and passing along increased costs to customers, there may be a time delay between the increased raw material prices and the ability to increase the prices of products. Additionally, we may be unable to increase the prices of products due to the terms of existing contracts, a competitor’s pricing pressure or other factors. The inability to obtain necessary raw materials on acceptable terms could affect our ability to meet customer commitments and satisfy market demand for certain products. Certain of our product lines depend on a limited number of third-party suppliers and vendors. The ability of these third parties to deliver raw materials may be affected by events beyond our control. In addition, public health threats, such as COVID-19, severe influenza and other highly communicable viruses or diseases could limit access to vendors and their facilities, or the ability to transport raw materials from our vendors, which would adversely affect our ability to obtain necessary raw materials for certain of our products. A significant price increase in raw materials, or their unavailability, may result in a loss of customers and adversely impact our business, results of operations, financial condition and cash flows.

Federal, state and local legislative and regulatory initiatives relating to oil and gas development and the potential for related litigation could result in increased costs and additional operating restrictions or delays for our customers, which could reduce demand for our products and negatively impact our business, financial condition and results of operations.

Environmental laws and regulations could limit our customers’ exploration and production activities. Although we do not directly engage in drilling or hydraulic fracturing activities, we provide products and services to operators in the oil and gas industry. There has been significant growth in opposition to oil and gas development both in the United States and globally. This opposition is focused on attempting to limit or stop hydrocarbon development in certain areas. Examples of such opposition include: (i) efforts to reduce access to public and private lands, (ii) delaying or canceling permits for drilling or pipeline construction, (iii) limiting or banning industry techniques such as hydraulic fracturing, and/or adding restrictions on the use of water and associated disposal, (iv) delaying or denying air-quality permits, and (v) advocating for increased regulations, punitive taxation, or citizen ballot initiatives or moratoriums on industry activity.

In addition, various state and local governments have implemented, or are considering, increased regulatory oversight of oil and gas development through additional permitting requirements, operational restrictions, including on the time, place and manner of drilling activities, disclosure requirements and temporary or permanent bans on hydraulic fracturing or other facets of crude oil and natural gas exploration and development in certain areas such as environmentally sensitive watersheds. Increased regulation and opposition to oil and gas activities could increase the potential for litigation concerning these activities, and could include companies who provide products and services used in hydrocarbon development, such as us.

The adoption of new laws or regulations at the federal, state, or local levels imposing reporting obligations, or otherwise limiting or delaying hydrocarbon development, could make it more difficult for our customers to complete oil and gas wells, increase our customers’ costs of compliance and doing business, and otherwise adversely affect the oil and gas activities they pursue. Such developments could negatively impact demand for our products and services. In addition, heightened political, regulatory and public scrutiny, including lawsuits, could expose us or our customers to increased legal and regulatory proceedings, which could be time-consuming, costly, or result in substantial legal liability or significant reputational harm. We could be directly affected by adverse litigation or indirectly affected if the cost of compliance or the risks of liability limit the ability or willingness of our customers to operate. Such costs and scrutiny could directly or indirectly, through reduced demand for our products and services, have a material adverse effect on our business, results of operations, financial condition and cash flows.

We and our customers are subject to extensive environmental and health and safety laws and regulations that may increase our costs, limit the demand for our products and services or restrict our operations.

Our operations and the operations of our customers are subject to numerous and complex federal, state, local and foreign laws and regulations relating to the protection of human health, safety and the environment. These laws and regulations may adversely affect us by limiting or curtailing our customers’ exploration, drilling and production activities, impacting the products and services we design, market and sell and the facilities where we manufacture our products. For example, our operations and the operations of our customers are subject to numerous and complex laws and regulations that, among other things: may regulate the management and disposal of hazardous and non-hazardous wastes; may require acquisition of environmental permits related to our operations; may restrict the types, quantities and concentrations of various materials that can be released into the environment; may limit or prohibit operational activities in certain ecologically sensitive and other protected areas; may regulate specific health and safety criteria addressing worker protection; may require compliance with operational and equipment standards; may impose testing, reporting and record-keeping requirements; and may require remedial measures to mitigate pollution from former and ongoing operations. Sanctions for noncompliance with such laws and regulations may include revocation of permits, corrective action orders, administrative or civil penalties, criminal prosecution and the imposition of injunctions to prohibit certain activities or force future compliance.

Some environmental laws and regulations provide for joint and several strict liability for remediation of spills and releases of hazardous substances. In addition, we or our customers may be subject to claims alleging personal injury or property damage as a result of alleged exposure to hazardous substances, as well as damage to natural resources. These laws and regulations may expose us or our customers to liability for the conduct of or conditions caused by others, or for our acts or for the acts of our customers that were in compliance with all applicable laws and regulations at the time such acts were performed. Any of these laws and regulations could result in claims, fines or expenditures that could be material to our business, results of operations, financial condition and cash flows.

Environmental laws and regulations, and the interpretation and enforcement thereof, frequently change, and have tended to become more stringent over time. New laws and regulations may have a material adverse effect on our customers by limiting or curtailing their exploration, drilling and production activities, which may adversely affect our operations by limiting demand for our products and services. Additionally, the implementation of new laws and regulations may have a material adverse effect on our operating results by requiring us to modify our operations or products or shut down some or all of our facilities.

Numerous proposals have been made, and are likely to continue to be made, at various levels of government to monitor and limit emissions of greenhouse gases ("GHG"). Past sessions of the U.S. Congress considered, but did not enact, legislation to address climate change. The EPA and other federal agencies previously issued regulations that aim to reduce GHG emissions; however, the current administration has generally indicated an interest in scaling back or rescinding regulations addressing GHG emissions, including those affecting the U.S. oil and gas industry. It is difficult to predict the extent to which such policies will be implemented or the outcome of any related litigation. Any regulation of GHG emissions could result in increased compliance costs or additional operating restrictions for us and/or our customers and limit or curtail exploration, drilling and production activities of our customers, which could directly or indirectly, through reduced demand for our products and services, adversely affect our business, results of operations, financial condition and cash flows.

Our growth and results of operations may be adversely affected if we are unable to complete third party acquisitions on acceptable terms and integrate such acquisitions.

Over time, it is expected that we will acquire value creating, add-on capabilities that broaden our existing technological, geographic and cost position, thereby complementing our businesses. However, there can be no assurance that we will be able to find suitable opportunities to purchase or to acquire such capabilities on acceptable terms. If we are unsuccessful in our acquisition efforts, our revenue growth could be adversely affected. In addition, we will face the risk that a completed acquisition may underperform relative to expectations. We may not achieve the synergies originally anticipated, may become exposed to unexpected liabilities, or may not be able to sufficiently integrate completed acquisitions into our then current business and growth model. These factors could potentially have an adverse impact on our business, results of operations, financial condition and cash flows.

Our products are used in operations that are subject to potential hazards inherent in the oil and gas industry and, as a result, we are exposed to potential liabilities that may affect our financial condition and reputation.

Our products are used in potentially hazardous drilling, completion and production applications in the oil and gas industry where an accident or a failure of a product can potentially have catastrophic consequences. Risks inherent in these applications, such as equipment malfunctions and failures, equipment misuse and defects, explosions, blowouts and uncontrollable flows of oil, natural gas or well fluids can cause personal injury, loss of life, suspension of operations, damage to formations, damage to facilities, business interruption and damage to or destruction of property, surface and drinking water resources, equipment and the environment. While we currently maintain insurance protection against some of these risks and seek to obtain indemnity agreements from our customers requiring them to hold us harmless from some of these risks, our current insurance and contractual indemnity protection may not be sufficient or effective enough to protect us under all circumstances or against all risks. The occurrence of a significant event not fully insured or indemnified against, or the failure of a customer to meet its indemnification obligations to us could adversely affect our business, results of operations, financial condition and cash flows.

Our industry is undergoing continuing consolidation that may impact our results of operations.

The oil and gas industry continues to experience consolidation and as a result, some of our largest customers have consolidated and are using their size and purchasing power to seek economies of scale and pricing concessions. This consolidation may result in reduced capital spending by some of our customers or the acquisition of one or more of our primary customers, which may lead to decreased demand for our products and services. There is no assurance that we will be able to maintain our level of sales to a customer that has consolidated, or replace that revenue with increased business activity with other customers. As a result, the acquisition of one or more of our primary customers may have a significant adverse impact on our business, results of operations, financial condition and cash flows. We are unable to predict what effect consolidations in the industry may have on prices, capital spending by our customers, our selling strategies, our competitive position, our ability to retain customers or our ability to negotiate favorable agreements with our customers.

We are subject to information technology, cybersecurity and privacy risks.

We depend on various information technologies and other products and services to store and process information and otherwise support our business activities. We also manufacture and sell hardware and software to provide monitoring, controls and optimization of customer critical assets in oil and gas production and distribution. In addition, certain of our customer offerings include digital components, such as remote monitoring of certain customer operations. We also provide services to maintain these systems. Additionally, our operations rely upon partners, vendors and other third-party providers of information technology and other products and services. If any of these information technologies, products or services are damaged, cease to properly function, are breached due to employee error, malfeasance, system errors, or other vulnerabilities, or are subject to cybersecurity attacks, such as those involving unauthorized access, malicious software and/or other intrusions, we and our partners, vendors or other third parties could experience: (i) production downtimes, (ii) operational delays, (iii) the compromising of confidential, proprietary or otherwise protected information, including personal and customer data, (iv) destruction, corruption, or theft of data, (v) security breaches, (vi) other manipulation, disruption, misappropriation or improper use of our systems or networks, (vii) financial losses from remedial actions, (viii) loss of business or potential liability, (ix) adverse media coverage, and (x) legal claims or legal proceedings, including regulatory investigations and actions, and/or damage to our reputation. While we attempt to mitigate these risks by employing a number of measures, including employee training, technical security controls and maintenance of backup and protective systems, the Company’s and our customers’, partners’, vendors’ and other third- parties’ systems, networks, products and services remain potentially vulnerable to known or unknown cybersecurity attacks and other threats, any of which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

We are subject to risks relating to existing international operations and expansion into new geographical markets.

We continue to focus on expanding sales globally as part of our overall growth strategy and expect sales from outside the United States to continue to represent a significant portion of our revenue. Our international operations and global expansion strategy are subject to general risks related to such operations, including:

- political, social and economic instability and disruptions;
- government export controls, economic sanctions, embargoes or trade restrictions;
- the imposition of duties and tariffs and other trade barriers;
- limitations on ownership and on repatriation or dividend of earnings;
- transportation delays and interruptions;
- labor unrest and current and changing regulatory environments;
- increased compliance costs, including costs associated with disclosure requirements and related due diligence;
- difficulties in staffing and managing multi-national operations;
- limitations on our ability to enforce legal rights and remedies;
- access to or control of networks and confidential information due to local government controls and vulnerability of local networks to cyber risks; and
- fluctuations in foreign currency exchange rates.

If we are unable to successfully manage the risks associated with expanding our global business or adequately manage operational risks of our existing international operations, these risks could have a material adverse effect on our growth strategy into new geographical markets, our reputation, our business, results of operations, financial condition and cash flows.

Our reputation, ability to do business and results of operations may be impaired by violations of, anti-bribery, trade control, trade sanctions, anti-corruption and similar laws.

Our operations require us to comply with a number of U.S. and international laws and regulations, including those governing payments to government officials, bribery, fraud, anti-kickback and false claims, competition, export and import compliance, money laundering and data privacy. In particular, our international operations are subject to the regulations imposed by the Foreign Corrupt Practices Act and the United Kingdom Bribery Act 2010 as well as anti-bribery and anti-corruption laws of various jurisdictions in which we operate. While we strive to maintain high standards, we cannot provide assurance that our internal controls and compliance systems will always protect us from acts committed by our employees, agents or business partners that would violate such U.S. or international laws or regulations. Any such violations of law or improper actions could subject us to civil or criminal investigations in the United States or other jurisdictions, could lead to substantial civil or criminal, monetary and non-monetary penalties and related shareholder lawsuits, could lead to increased costs of compliance and could damage our reputation, business, results of operations, financial condition and cash flows.

Dependence on joint ventures and other local partners could adversely affect our profits.

We conduct some operations through joint ventures in which unaffiliated third parties may control or have significant influence on the operations of the joint venture. As with any joint venture arrangement, differences in views among the joint venture participants may result in delayed decisions, the joint venture operating in a manner that is contrary to our preference or in failures to agree on major issues. These factors could have a material adverse effect on the business and results of operations of our joint ventures and, in turn, our business and consolidated results of operations.

In addition to joint ventures, we rely on local third-party partners in a number of foreign jurisdictions to provide various services in support of our product sales, including installation, field service, technical support, and the provision of equipment and personnel. If a local partner is unable to deliver its services according to the negotiated terms for any reason including, but not limited to, a dispute with us, the deterioration of its financial condition or a loss of personnel, we may be unable to engage an alternative partner or subcontractors to perform the same services, or on terms substantially similar to those with our existing partners. The failure to do so may cause us to breach the terms of existing contracts, impede our ability to complete orders, and/or result in damage to our customer relationships in that jurisdiction, any of which may damage our reputation and have a material adverse effect on our business in the impacted jurisdiction.

Tariffs and other trade measures could adversely affect our results of operations, financial position and cash flows.

In 2020, the U.S. government continued to impose tariffs on steel and aluminum and a broad range of other products imported into the United States. In response to the tariffs imposed by the U.S. government, the European Union, Canada, Mexico, India and China announced tariffs on U.S. goods and services. These tariffs have increased our material input costs, and any further trade restrictions, retaliatory trade measures and additional tariffs could result in higher input costs for our products. We may not be able to fully mitigate the impact of these increased costs or pass price increases on to our customers. While tariffs and other retaliatory trade measures imposed by other countries on U.S. goods have not yet had a significant impact on our business or results of operations, we cannot predict further developments, and such existing or future tariffs could have a material adverse effect on our results of operations, financial position and cash flows.

Changes in domestic and foreign governmental laws, regulations and policies, risks associated with emerging markets, changes in statutory tax rates and laws, and unanticipated outcomes with respect to tax audits could adversely affect our business, profitability and reputation.

Our domestic and international sales and operations are subject to risks associated with changes in laws, regulations and policies (including environmental and employment regulations, export/import laws, tax policies such as export subsidy programs and research and experimentation credits, carbon emission regulations and other similar programs). Failure to comply with any of the foregoing laws, regulations and policies could result in civil and criminal, monetary and non-monetary penalties, as well as damage to our reputation. In addition, we cannot provide assurance that costs of complying with new and evolving regulatory reporting requirements and current or future laws, including environmental protection, employment, data security, data privacy and health and safety laws, will not exceed our estimates. In addition, we have made investments in certain countries, and we may in the future invest in other countries, which may carry high levels of currency, political, compliance, or economic risk. While these risks or the impact of these risks are difficult to predict, any one or more of them could adversely affect our business, results of operations and reputation.

We are subject to taxation in a number of jurisdictions. Accordingly, our effective tax rate is impacted by changes in the mix among earnings in countries with differing statutory tax rates. A material change in the statutory tax rate or interpretation of local law in a jurisdiction in which we have significant operations could adversely impact our effective tax rate and impact our financial results. For example, the U.S. bill commonly referred to as the Tax Cuts and Jobs Act (the “Tax Reform Act”), which was enacted on December 22, 2017, significantly changed U.S. tax law by, among other things, imposing a repatriation tax on deemed repatriated earnings of foreign subsidiaries and imposing limitations on the ability to deduct interest expense.

Our tax returns are subject to audit and taxing authorities could challenge our operating structure, taxable presence, application of treaty benefits or transfer pricing policies. If changes in statutory tax rates or laws or audits result in assessments different from amounts estimated, then our business, results of operations, financial condition and cash flows may be adversely affected. In addition, changes in tax laws could have an adverse effect on our customers, resulting in lower demand for our products and services.

Failure to attract, retain and develop personnel for key management could have an adverse effect on our results of operations, financial condition and cash flows.

Our growth, profitability and effectiveness in conducting our operations and executing our strategic plans depend in part on our ability to attract, retain and develop qualified personnel, align them with appropriate opportunities for key management positions and support for strategic initiatives. Additionally, during periods of increased investment in the oil and gas industry, competition to hire may increase and the availability of qualified personnel may be reduced. If we are unsuccessful in our efforts to attract and retain qualified personnel, our business, results of operations, financial condition, cash flows, market share and competitive position could be adversely affected. Additionally, we could miss opportunities for growth and efficiencies.

The credit risks of our customer base could result in losses.

Many of our customers are oil and gas companies that have faced or may in the future face liquidity constraints during adverse commodity price environments. These customers impact our overall exposure to credit risk as they are also affected by prolonged changes in economic and industry conditions such as the current downturn in the oil and gas industry as a result of the lower crude oil and nature gas price environment. If a significant number of our customers experience a prolonged business declines, disruptions, or bankruptcies, we may incur increased exposure to credit risk and losses from bad debts.

The loss of one or more significant customers could have an adverse impact on our financial results.

Our customers represent a combination of some of the largest operators in the oil and gas drilling and production markets, including major integrated, large, medium and small independents, and foreign national oil and gas companies, as well as oilfield equipment and service providers. In 2019, Apergy's top 10 customers represented approximately 41% of total revenue. No customer accounted for net sales equal to 10 percent or more of Apergy's total revenues for the years ended December 31, 2019, 2018 and 2017. In 2019, legacy ChampionX's top 10 customers represented approximately 43% of legacy ChampionX combined net sales. No customer accounted for net sales equal to 10 percent or more of legacy ChampionX's total revenues for the years ended December 31, 2019, 2018 and 2017.

While we are not dependent on any one customer or group of customers, the loss of one or more of our significant customers could have an adverse effect on our business, results of operations, financial condition and cash flows.

The inability to protect or obtain patent and other intellectual property rights could adversely affect our revenue, operating profits and cash flows.

We own patents, trademarks, licenses and other intellectual property related to our products and services, and we continuously invest in research and development that may result in innovations and intellectual property rights. We employ various measures to develop, maintain and protect our innovations and intellectual property rights. These measures may not be effective in capturing intellectual property rights, and they may not prevent our intellectual property from being challenged, invalidated, circumvented, infringed, misappropriated or otherwise violated, particularly in countries where intellectual property rights are not highly developed or protected. Unauthorized use of our intellectual property rights and any potential litigation we may initiate or have initiated against us in respect of our intellectual property rights could adversely impact our competitive position and have a negative impact on our business, results of operations, financial condition and cash flows.

A deterioration in our future expected profitability or cash flows could result in an impairment of our recorded goodwill and intangible assets.

We have significant goodwill and intangible assets recorded on our consolidated balance sheet. The valuation and classification of these assets and the assignment of useful lives to intangible assets involve significant judgments and the use of estimates. Impairment testing of goodwill and intangible assets requires significant use of judgment and assumptions, particularly as it relates to the determination of fair market value. A decrease in the long-term economic outlook and future cash flows of our business could significantly impact asset values and potentially result in the impairment of intangible assets, including goodwill. In the first quarter ended March 31, 2020, we performed an impairment assessment triggered by the substantial decline in oil prices and COVID-19 pandemic. We recorded an impairment of goodwill and long-lived assets in our Production & Automation Technologies segment in the first quarter of 2020 of $616 million. The value of our business could continue to be unfavorably impacted by steep declines in revenue and order rates as drilling and production activities are reduced due to, but not necessarily limited to, sustained unfavorable crude oil prices and lower U.S. rig counts. Accordingly, sustained future economic declines could result in additional impairment charges that could have a material adverse effect on our results of operations.

Our exposure to exchange rate fluctuations on cross-border transactions and the translation of local currency results into U.S. dollars could negatively impact our results of operations.

A portion of our business is transacted and/or denominated in foreign currencies, and fluctuations in currency exchange rates could have a significant impact on our results of operations, financial condition and cash flows, which are presented in U.S. dollars. Cross-border transactions, both with external parties and intercompany relationships, result in increased exposure to foreign exchange effects. Although the impact of foreign currency fluctuations on our results of operations has historically not been material, significant changes in currency exchange rates, could negatively affect our results of operations. Additionally, a future strengthening of the U.S. dollar potentially exposes us to competitive threats from lower cost producers in other countries and could result in unfavorable translation effects as the results of foreign locations are translated into U.S. dollars for reporting purposes.

Effective January 31, 2020, the United Kingdom has formally left the European Union (commonly referred to as “Brexit”). The United Kingdom's relationship with the European Union will no longer be governed by the European Union Treaties, but instead by the terms of the Withdrawal Agreement agreed between the United Kingdom and the European Union in late 2019. The Withdrawal Agreement provides for a “transition” period, which commenced the moment the United Kingdom left the European Union and is currently set to end on December 31, 2020. At the end of the transition period, there may be significant changes to the United Kingdom’s business environment. While the effects of Brexit will depend on any agreements the United Kingdom makes to retain access to European Union markets or the failure to reach such agreements, the uncertainties created by Brexit, any resolution between the United Kingdom and European Union countries or the failure to reach any such resolutions, could adversely affect our relationships with customers, suppliers and could harm our business and financial results due to fluctuations in the value of the British pound versus the U.S. dollar, the Euro and other currencies. In addition, Brexit could result in delayed deliveries, which may adversely affect our internal supply chain and our ability to perform under customer contracts.

Natural disasters and unusual weather conditions could have an adverse impact on our business.

Our business could be materially and adversely affected by natural disasters or severe weather conditions. Hurricanes, tropical storms, flash floods, blizzards, cold weather and other natural disasters or severe weather conditions could result in evacuation of personnel, curtailment of services, damage to equipment and facilities, interruption in transportation of products and materials and loss of productivity. For example, certain of our manufactured products and components are manufactured at a single facility, and disruptions in operations or damage to any such facilities could reduce our ability to manufacture our products and satisfy customer demand. If our customers are unable to operate or are required to reduce operations due to severe weather conditions, our business could be adversely affected as a result of curtailed deliveries of our products and services. Our headquarters and certain manufacturing facilities are located in the U.S. Gulf Coast and this region is also home to many of our customers and suppliers. Hurricanes or other severe weather events impacting the Gulf Coast could materially and adversely affect our operations, our ability to obtain raw materials at reasonable cost, or at all, and our customers in the region.

A chemical spill or release could materially and adversely affect our business.

As a manufacturer and supplier of chemical products, there is a potential for chemicals to be accidentally spilled, released or discharged, either in liquid or gaseous form, during production, transportation, storage or use. Such a release could result in environmental contamination as well as a human or animal health hazard, and result in significant remediation costs for us and potential disruption for, and damage to, our manufacturing facilities, customers, communities, and other stakeholders. Accordingly, such a release could have a material adverse effect on our business, financial condition, results of operations or cash flows.

War, terrorism or civil unrest could harm our business.

Due to the unsettled political conditions in many natural gas and oil-producing countries, our operations, revenue and profits are subject to adverse consequences of war, terrorism, civil unrest, strikes, currency controls, and governmental actions. These risks could result in the loss of our personnel or assets. cause us to evacuate our personnel from certain countries, cause us to increase spending on security worldwide, cause us to cease operating in certain countries, disrupt financial and commercial markets, including the supply of and pricing for oil and natural gas, and generate political and economic instability in some of the geographic areas in which we operate. Areas where we operate that have significant risks include, but are not limited to, the Middle East, North Africa, West Africa, the Caspian Sea region, Indonesia, Mexico, Russia, and Venezuela. In addition, any possible reprisals as a consequence of military or other action, such as acts of terrorism in the United States or elsewhere, could have a material adverse effect on our business, consolidated results of operations and consolidated financial condition.

Our indebtedness could adversely affect our financial condition and operating flexibility.

Our ability to make payments on and to refinance our indebtedness, as well as any future indebtedness that we may incur, will depend upon the level of cash flows generated by our operations, our ability to sell assets, availability under our revolving credit facility and our ability to access the capital markets and/or other sources of financing. Our ability to generate cash is subject to general economic, industry, financial, competitive, legislative, regulatory and other factors that are beyond our control. If we are not able to repay or refinance our indebtedness as it becomes due, we may be forced to sell assets or take other disadvantageous actions, including (i) reducing financing in the future for working capital, capital expenditures, acquisitions and general corporate purposes or (ii) dedicating an unsustainable level of cash flow from operations to the payment of principal and interest on the indebtedness. In addition, our ability to withstand competitive pressures and to react to changes in the oil and gas industry could be impaired.

Disruptions in the capital and credit markets, continued low commodity prices, our debt level and other factors may restrict our ability to raise capital on favorable terms, or at all.

Disruptions in the capital and credit markets, in particular with respect to companies in the energy sector, could limit our ability to access these markets or may significantly increase our cost to borrow. Continued low commodity prices, among other factors, have caused some lenders to increase interest rates, enact tighter lending standards which we may not satisfy as a result of our debt level or otherwise, refuse to refinance existing debt at maturity on favorable terms, or at all, and in certain instances have reduced or ceased to provide funding to borrowers. If we are unable to access the capital and credit markets on favorable terms or at all, it could adversely affect our business, financial condition and results of operations.

The COVID-19 pandemic and related economic repercussions have had, and are expected to continue to have, a significant impact on our business, and depending on the duration of the pandemic and its effect on the oil and gas industry, could have a material adverse effect on our business, liquidity, consolidated results of operations and consolidated financial condition.

The ongoing COVID-19 pandemic has resulted in a significant reduction in demand for oil and gas commodities as various jurisdictions have attempted to implement or have implemented measures designed to contain the spread of the virus, including travel restrictions, stay-at-home or shelter-in-place orders and shutdowns of non-essential business. Oil demand has significantly deteriorated as a result of the virus outbreak and corresponding preventative measures taken around the world to mitigate the spread of the virus. Compounding this situation, the members of OPEC+ were unable to agree on the need to maintain and extend compliance with previously agreed upon production cuts. Consequently, in March 2020 Russia and Saudi Arabia announced that each party would increase oil production and reduce the prices at which they make oil available to market, resulting in an oversupply of oil in the market. In an attempt to stabilize global oil markets, OPEC+ reached an agreement to cut production beginning in the second quarter of 2020, however, the organization recently announced that such production cuts would be relaxed in the third quarter of 2020. Due to the uncertainty of the ongoing COVID-19 pandemic, production cuts may not be sufficient to support and stabilize commodity prices, and there is no assurance that any production cuts will be extended.

While the full impact of the COVID-19 pandemic is not yet known, potential risk associated with the COVID-19 outbreak could adversely impact our business, results of operations, financial condition and cash flows and include, but are not limited to:

- disruptions to our supply chain resulting from limited access to vendors or vendors’ limited access to their facilities or our ability to transport raw materials from our vendors, adversely affecting the price of and our ability to obtain materials essential to our products and our business. A significant price increase in raw materials, or their unavailability, could result in a loss of customers and revenue;
- reduction in revenues as a result of lower demand for our products as upstream oil and gas companies across the industry reduce their drilling activities, lower budgeted capital expenditures and institute additional capital discipline measures;
- liquidity challenges, including impacts related to delayed customer payments and payment defaults associated with customer liquidity issues and bankruptcies, and if a significant number of our customers experience a prolonged business decline or disruption we may incur increased exposure to credit risk and bad debts;
- a credit rating downgrade of our corporate debt if COVID-19 and the current oil market have a significant impact on our long-term profitability which could result in higher borrowing costs or reduced availability of sources of financing;
- additional costs associated with the reduction of our global workforce to adjust to market conditions, including severance payments, retention issues, and increased expenses if we are unable to hire employees when market conditions improve;
- workforce availability resulting from reductions to adjust to market conditions or due to restrictions that we and our customers impose, including limiting worksite access and facility shutdowns, to ensure the safety of employees and others, which could adversely affect our ability to timely fulfill customer orders and service requests;
- the continuation of the measures taken by various governments to try to contain the virus, such as travel bans and restrictions, quarantines, shelter in place orders, and shutdowns;
- costs associated with rationalization of our portfolio of real estate facilities, including possible exit of leases and facility closures to align with expected activity and workforce capacity;
- additional asset impairments, including an impairment of the carrying value of our goodwill, along with other accounting charges as demand for our services and products decreases;
- operational challenges and efforts to mitigate the spread of the virus, including logistical challenges, remote work arrangements, employee productivity, and staggered work shifts to protect the health and well-being of our employees, which could increase expenses and adversely impact our ability to timely fulfill customer orders and service requests and/or maintain effective internal controls and compliance oversight activity;

- increase in cyber and other security-related risks that are associated with employees operating in a remote work arrangement;
- compliance with financial covenants in our credit agreement if we experience a significant and prolonged decrease in our earnings before income tax, depreciation and amortization which would cause amounts borrowed to become due and payable; and
- disruption of the U.S. and global economic and financial markets limiting our ability to access capital markets or other sources of financing.

Certain of our subsidiaries are defendants in pending lawsuits alleging negligence and injury resulting from the use of COREXIT™ dispersant in response to the Deepwater Horizon oil spill, which could expose us to monetary damages or settlement costs.

As described in Note 7 - Commitments and Contingencies to our condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q, certain of our subsidiaries (collectively the "COREXIT Defendants") are among the defendants in a number of class action and individual plaintiff lawsuits arising from the use of COREXIT™ dispersant in response to the Deepwater Horizon oil spill, which could expose the ChampionX Business to monetary damages or settlement costs. The plaintiffs in these matters have claimed damages under products liability, tort and other theories.

There currently remain three cases pending against the COREXIT Defendants. It is expected that they will be dismissed pursuant to a November 28, 2012 order granting the COREXIT Defendants' motion for summary judgment. We cannot predict whether there will be an appeal of the dismissal, the involvement we might have in these matters in the future or the potential for future litigation. However, although we believe we have rights to contribution and/or indemnification from third parties in connection with these lawsuits, if an appeal by plaintiffs in these lawsuits is brought and won, these suits could have a material adverse effect on us and our financial condition, results of operations or cash flows.

The COREXIT Defendants continue to sell the COREXIT™ oil dispersant product and previously sold product remains in the inventories of individual customers and oil spill response organizations. We cannot predict the potential for future litigation with respect to such sales or inventory. However, if one or more of such lawsuits are brought and won, these suits could have a material adverse impact on our financial results.

Restrictions imposed by our debt instruments may limit the ability of our subsidiaries to operate their business and to finance their future operations or capital needs or to engage in other business activities.

The terms of our debt instruments restrict certain of our subsidiaries from engaging in specified types of transactions. These covenants restrict the ability of the Company and our restricted subsidiaries, among other things, to:

- incur or guarantee additional indebtedness;
- pay dividends on capital stock or redeem, repurchase or retire capital stock or indebtedness, as applicable;
- make investments, loans, advances and acquisitions;
- create restrictions on the payment of dividends or other amounts by such restricted subsidiaries or subsidiaries, as the case may be;
- engage in transactions with our affiliates;
- sell assets, including capital stock of subsidiaries;
- consolidate or merge; and
- create liens.

In addition, the debt instruments contain certain financial maintenance covenants. Our ability to comply with these restrictions can be affected by events beyond our control, and we may not be able to maintain compliance with them. A breach of any of these covenants would be an event of default.

In the event of a default under any of the debt instruments, the lenders could elect to declare all amounts outstanding under such debt instruments to be immediately due and payable, or in the case of our revolving credit facility, may terminate their commitments to lend additional money. If the indebtedness under any of our debt instruments were to be accelerated, our assets may not be sufficient to repay such indebtedness in full. In addition, our senior secured credit facilities are secured by substantially all of our and our domestic subsidiaries' assets. If an event of default occurs under our debt instruments, the lenders could exercise their rights under the related security documents, and an event of default may be triggered under other debt instruments. Any acceleration of amounts due under our debt instruments or the substantial exercise by the lenders of their rights under the security documents would have a material adverse effect on us.

We have identified material weaknesses in internal control over financial reporting and, as a result, our internal control over financial reporting and disclosure controls and procedures are not effective.

We have identified material weaknesses in our internal control over financial reporting as a result of which our management concluded that our internal control over financial reporting and our disclosure controls and procedures were not effective as of June 30, 2020. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. These material weaknesses relate to (a) the ineffective control environment due to a lack of a sufficient complement of personnel with the appropriate level of knowledge, experience and training at our Artificial Lift business, (b) ineffective risk assessment component of internal control related to our ESP subsidiary (which is part of the Artificial Lift business) as controls were not appropriately designed to ensure that the subsidiary, which was experiencing significant growth and turnover of personnel, had the proper resources to operate a complex business model, (c) a lack of controls designed and maintained within certain of the Artificial Lift businesses over the completeness, accuracy, occurrence or cut-off of revenue and within ESP over the valuation of accounts receivable, (d) a lack of controls maintained to ensure that journal entries were properly prepared with appropriate supporting documentation or were reviewed and approved appropriately to ensure the accuracy of journal entries at ESP, (e) a lack of controls designed and maintained over the completeness, accuracy, and existence or presentation and disclosure of inventory and fixed assets at ESP, and (f) a lack of controls designed and maintained over user roles within the general ledger system across the Company, which defines the actions an individual can perform within the system.

Our management is currently in the process of implementing a remediation plan to address these material weaknesses. We expect to incur significant additional expenses in connection with implementing remedial measures. If these remedial measures are insufficient to address the material weaknesses, or if additional material weaknesses or significant deficiencies in our internal control over financial reporting are identified or subsequently arise, our consolidated financial statements may contain material misstatements, and we may be required to restate our financial results, which could have a material adverse effect on our financial condition, results of operations or cash flows, restrict the ability to access the capital markets, require significant resources to correct the material weaknesses or deficiencies, subject us to fines, penalties or judgments, harm our reputation or otherwise cause a decline in investor confidence and cause a decline in the market price of our stock.

If securities or industry analysts who cover us, our business or our market publish a negative report or change their recommendations regarding our stock adversely, our stock price and trading volume could decline.

The trading market for our common stock is influenced by the research and reports that industry or securities analysts publish about us, our business, our market or our competitors. If any of the analysts who cover us or may cover us in the future publish a negative report or change their recommendation regarding our stock adversely, or provide more favorable relative recommendations about our competitors, our stock price would likely decline.

Risks Related to the Merger

We may not realize the anticipated cost synergies and growth opportunities from the Merger.

We expect to realize cost synergies, growth opportunities and other financial and operating benefits as a result of the Merger. Our success in realizing these benefits, and the timing of this realization, depends on the successful integration of the business operations of legacy ChampionX with Apergy. Even if we are able to integrate legacy ChampionX successfully, we cannot predict with certainty if or when these cost synergies, growth opportunities and benefits will occur, or the extent to which they will actually be achieved. For example, the benefits from the Merger may be offset by costs incurred in integrating the companies or in otherwise consummating the Merger. Realization of any benefits and synergies could be affected by the factors described in other risk factors and a number of factors beyond our control, including, without limitation, general economic conditions, further consolidation in the industry in which we operate, increased operating costs and regulatory developments.

The integration of legacy ChampionX with Apergy following the Merger may present significant challenges.

There is a significant degree of difficulty inherent in the process of integrating legacy ChampionX with Apergy. These difficulties include:

- the integration of legacy ChampionX with our current businesses while carrying on the ongoing operations of all businesses;
- managing a significantly larger company than before the consummation of the Merger;
- coordinating geographically separate organizations;
- integrating the business cultures of each of legacy ChampionX and Apergy, which may prove to be incompatible;
- creating uniform standards, controls, procedures, policies and information systems and controlling the costs associated with such matters;

- ability to ensure the effectiveness of internal control over financial reporting;
- integrating certain information technology, purchasing, accounting, finance, sales, billing, human resources, payroll and regulatory compliance systems; and
- the potential difficulty in retaining key officers and personnel.

The process of integrating operations could cause an interruption of, or loss of momentum in, the Company’s activities. Members of senior management may be required to devote considerable amounts of time to this integration process, which will decrease the time they will have to manage business operations, serve the business, or develop new products or strategies. If our senior management is not able to effectively manage the integration process, or if any significant business activities are interrupted as a result of the integration process, our business could suffer.

The successful or cost-effective integration of legacy ChampionX with Apergy cannot be assured. The failure to do so could have a material adverse effect on our business, financial condition or results of operations.

The Distribution could result in significant tax liability, and we may be obligated to indemnify Ecolab for any such tax liability imposed on Ecolab.

Prior to the Distribution, Ecolab received an opinion of its counsel (the “Distribution Tax Opinion”), substantially to the effect that the contribution of Ecolab’s upstream energy business to legacy ChampionX (the “Contribution”) and the Distribution, taken together, will qualify as a transaction described in Sections 355 and 368(a)(1)(D) of the Internal Revenue Code (the “Code”), and an opinion from KPMG LLP (“KPMG”), that addressed the tax treatment of certain aspects of the Contribution, Distribution and the Merger (the “KPMG Tax Opinion”). Except for taxable income or gain possibly arising as a result of certain internal restructuring transactions undertaken in its separation of the upstream energy business (the “Separation”), and with respect to any “intercompany transaction” required to be taken into account by Ecolab under the Treasury Regulations related to consolidated federal income tax returns, Ecolab will not recognize any gain or loss. None of Ecolab, legacy ChampionX or the Company has requested or intends to request any ruling from the Internal Revenue Service (“IRS”) as to the U.S. federal income tax consequences of the Contribution, the Separation, the Distribution or the Merger. Neither the Distribution Tax Opinion nor the KPMG Tax Opinion are binding on the IRS (or any applicable foreign taxing authorities) or the courts, and the IRS (or any applicable foreign taxing authorities) or the courts may not agree with the conclusions reached therein. There can be no assurance that the IRS (or any applicable foreign taxing authorities) will not successfully assert that the Distribution, or certain internal restructuring transactions undertaken in the Separation, are taxable transactions, and that a court will not sustain such assertion, which could result in tax being incurred by Ecolab.

If the Contribution and Distribution, taken together, were determined not to qualify as a transaction described in Sections 355 and 368(a)(1)(D) of the Code, for U.S. federal income tax purposes, Ecolab would generally recognize gain with respect to the transfer of ChampionX common stock in the Distribution if the value of ChampionX stock transferred exceeds Ecolab’s tax basis in such ChampionX stock.

Even if the Contribution and Distribution, taken together, otherwise qualify as a transaction described in Sections 355 and 368(a)(1)(D) of the Code, the Distribution will nonetheless be taxable to Ecolab pursuant to Section 355(e) of the Code if one or more persons acquire a 50% or greater interest (measured by vote or value) in the stock of Ecolab or legacy ChampionX, directly or indirectly (including through acquisitions of the stock of the Company after the Merger), as part of a plan or series of related transactions that includes the Distribution. For purposes of this test, the Merger will be treated as part of a plan that includes the Distribution, but it is expected that the Merger, standing alone, will not cause the Distribution to be taxable to Ecolab under Section 355(e) of the Code because holders of legacy ChampionX common stock own more than 50% of the common stock of the Company following the Merger. However, if the IRS were to determine that other acquisitions of Ecolab stock, either before or after the Distribution, or the Company’s stock after the Merger, are part of a plan or series of related transactions that includes the Distribution, such determination could result in the recognition of gain by Ecolab for U.S. federal income tax purposes, and the amount of taxes on such gain could be substantial.

Under the Tax Matters Agreement, we may be obligated, in certain cases, to indemnify Ecolab against taxes and certain tax-related losses of the Contribution, Separation, Distribution or Merger (collectively, the “Transactions”) that arise as a result of our actions, or failure to act. Any such indemnification obligation would likely be substantial and would likely have a material adverse effect on us.

The Merger could result in significant tax liability to Dover, and we may be obligated to indemnify Dover for any such tax liability imposed on Dover.

Under the tax matters agreement, dated May 9, 2018, which we refer to as the Dover Tax Matters Agreement, by and between Dover Corporation, which we refer to as Dover, and us, we would potentially be required to indemnify Dover against taxes incurred by Dover that arise as a result of our taking or failing to take, as the case may be, certain actions that result in the distribution of Apergy by Dover, which we refer to as the Apergy Distribution, failing to meet the requirements of a tax-free distribution under Section 355 of the Code. The Dover Tax Matters Agreement required that, prior to entering into the Merger Agreement, we obtain a tax opinion, acceptable to Dover, that the Merger would not cause the Apergy Distribution to fail to meet the requirements of a tax-free distribution under Section 355 of the Code and for Dover to consent to our entering into and consummating the Merger. On December 18, 2019, we obtained a tax opinion acceptable to Dover from our tax counsel, Weil, Gotshal & Manges LLP, and Dover provided us with their consent to entering into and consummating the Merger and all actions related thereto. Notwithstanding our receipt of the tax opinion of Weil, Gotshal & Manges LLP, or Dover's consent, we must continue to indemnify Dover against certain tax-related losses under the Dover Tax Matters Agreement. The tax opinion of Weil, Gotshal & Manges LLP is not binding on the IRS or the courts, and the IRS or the courts may not agree with the conclusions reached therein. There can be no assurance that the IRS will not successfully assert that the Merger causes the Apergy Distribution to fail to meet requirements of a tax-free distribution under Section 355 of the Code and that a court will not sustain such assertion which could result in tax being incurred by Dover that must be indemnified by us.

Under the Tax Matters Agreement, we are restricted from taking certain actions that could adversely affect the intended tax treatment of the Transactions, and such restrictions could significantly impair our ability to implement strategic initiatives that otherwise would be beneficial.

The Tax Matters Agreement generally restricts us from taking certain actions after the Distribution that could adversely affect the intended tax treatment of the Transactions. Failure to adhere to these restrictions could result in tax being imposed on Ecolab for which we could bear responsibility and for which we could be obligated to indemnify Ecolab. Any such indemnification obligation would likely be substantial and would likely have a material adverse effect on us. In addition, even if we are not responsible for tax liabilities of Ecolab under the Tax Matters Agreement, legacy ChampionX nonetheless could be liable under applicable tax law for such liabilities if Ecolab were to fail to pay such taxes. Because of these provisions in the Tax Matters Agreement, we are restricted from taking certain actions, particularly for the two (or, in certain cases three) years following the Merger, including (among other things) the ability to freely issue stock, to make acquisitions and to raise additional equity capital. These restrictions could have a material adverse effect on our liquidity and financial condition, and otherwise could impair our ability to implement strategic initiatives. Also, our indemnity obligation to Ecolab might discourage, delay or prevent a change of control that our shareholders may consider favorable.

The legacy ChampionX business may be negatively impacted if we are unable to provide benefits and services, or access to equivalent financial strength and resources, to legacy ChampionX that historically have been provided by Ecolab.

The legacy ChampionX business has historically received benefits and services from Ecolab and has benefited from Ecolab's financial strength and corporate support services. After the Transactions, legacy ChampionX as a subsidiary of the Company, no longer benefits from Ecolab's services, financial strength or business relationships to the extent not otherwise addressed in the other transaction documents contemplated by the Separation Agreement, referred to as the Transaction Documents. While Ecolab has agreed to provide certain transition services to legacy ChampionX for a period of time following the consummation of the Transactions, it cannot be assured that we will be able to adequately replace or provide resources formerly provided by Ecolab or replace them at the same or lower cost. If we are not able to replace the resources provided by Ecolab or are unable to replace them without incurring significant additional costs, or are delayed in replacing the resources provided by Ecolab, our results of operations may be negatively impacted.

The Separation Agreement limits our ability to engage in certain activities competitive with Ecolab.

The Separation Agreement includes non-compete provisions pursuant to which the legacy ChampionX business is restricted from competing in the water and downstream fields of use for three years following the Distribution subject to certain exceptions set forth in the Separation Agreement. In addition, Ecolab may have the ability to terminate certain rights, including patent licenses, if legacy ChampionX businesses begin to compete in the downstream or water fields of use even after the expiration of the non-compete period. These restrictions may limit our ability to engage in certain activities, may potentially lead to disputes and may materially and adversely affect our business, financial condition and results of operations.

<u>Risks Related to Our Common Stock</u>

Certain shareholders could attempt to influence changes within the Company which could adversely affect our operations, financial condition and the value of our common stock.

Our shareholders may from time-to-time seek to acquire a controlling stake in the Company, engage in proxy solicitations, advance shareholder proposals or otherwise attempt to effect changes. Campaigns by shareholders to effect changes at publicly-traded companies are sometimes led by investors seeking to increase short-term shareholder value through actions such as financial restructuring, increased debt, special dividends, stock repurchases or sales of assets or the entire company. Responding to proxy contests and other actions by activist shareholders can be costly and time-consuming, and could disrupt our operations and divert the attention of our Board of Directors and senior management from the pursuit of our business strategies. These actions could adversely affect our operations, financial condition and the value of our common stock.

Anti-takeover provisions contained in our certificate of incorporation and bylaws, as well as provisions of Delaware law, could impair a takeover attempt.

Our certificate of incorporation, bylaws and Delaware law contain provisions that could have the effect of rendering more difficult or discouraging an acquisition deemed undesirable by our Board of Directors. Our corporate governance documents include provisions:

- authorizing blank check preferred stock, which could be issued with voting, liquidation, dividend and other rights superior to our common stock;
- limiting the liability of, and providing indemnification to, our directors and officers;
- limiting the ability of our shareholders to call and bring business before special meetings and to take action by written consent in lieu of a meeting;
- requiring advance notice of shareholder proposals for business to be conducted at meetings of our shareholders and for nominations of candidates for election to our Board of Directors;
- controlling the procedures for the conduct and scheduling of our Board of Directors and shareholder meetings;
- providing our Board of Directors with the express power to postpone previously scheduled annual meetings and to cancel previously scheduled special meetings;
- restricting the forum for certain litigation brought against us to Delaware; and
- providing our Board of Directors with the exclusive right to determine the number of directors on the Board of Directors and the filling of any vacancies or newly created seats on the Board of Directors.

These provisions, alone or together, could delay hostile takeovers and changes in control of the Company or changes in our management.

As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation Law, which generally prevents certain interested shareholders, including a person who beneficially owns 15% or more of our outstanding common stock, from engaging in certain business combinations with us within three years after the person becomes an interested shareholder unless certain approvals are obtained. Any provision of our certificate of incorporation or bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our shareholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

Our certificate of incorporation provides that the Court of Chancery of the State of Delaware shall be the exclusive forum for certain disputes between us and our shareholders, which could limit shareholders' ability to obtain a favorable judicial forum for disputes with us. If this exclusive forum provision is found to be inapplicable or unenforceable, we may not achieve the intended benefits of such provision.

Our certificate of incorporation provides that, unless our Board of Directors otherwise determines, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for each of the following: (1) any derivative action or proceeding brought on behalf of the Company, (2) any action asserting a claim for breach of a fiduciary duty owed by any director, officer, or shareholder, creditor or constituent of the Company to us or our shareholders, (3) any action asserting a claim against the Company or any director or officer of the Company arising pursuant to any provision of the DGCL, our certificate of incorporation or our bylaws or (4) any action against the Company or any director or officer of the Company asserting a claim governed by the internal affairs doctrine.

This forum selection provision may limit a shareholder's ability to bring a claim in a judicial forum that it finds favorable or cost-efficient for disputes with the Company or any director, officer, employee or agent of the Company, which may discourage such lawsuits, or increase the costs to a shareholder of bringing such lawsuits, against us and such persons.

The enforceability of forum selection provisions in other companies' certificates of incorporation, bylaws or similar governing documents has been challenged in legal proceedings, and it is possible that in connection with any action a court could find the forum selection provision contained in our certificate of incorporation to be inapplicable or unenforceable in such action. If a court were to find this forum selection provision inapplicable or unenforceable, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely impact our operating or financial condition or performance.

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

(a) None.

(b) None.

(c) None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Iran Threat Reduction and Syria Human Rights Act of 2012

Under the Iran Threat Reduction and Syria Human Rights Act of 2012, which added Section 13(r) of the Securities Exchange Act of 1934, the Company is required to disclose in its periodic reports if it or any of its affiliates knowingly engaged in certain activities, transactions or dealings relating to Iran or with entities or individuals designated pursuant to certain Executive Orders. Disclosure is required even where the activities are conducted outside the U.S. by non-U.S. affiliates in compliance with applicable law, and even if the activities are not covered or prohibited by U.S. law.

As authorized by the U.S. Treasury's Office of Foreign Assets Control (OFAC), a non-U.S. subsidiary of the Company which is part of legacy ChampionX completed sales of products used for process and water treatment applications in upstream oil and gas production related to the operation of and production from the Rhum gas field off the Scottish coast (Rhum) totaling $0.06 million during the period from June 3, 2020 to June 30, 2020. The net profit before taxes associated with these sales for each period were nominal. Rhum is jointly owned by Serica Energy plc and Iranian Oil Company (U.K.) Limited. Our non-U.S. subsidiary intends to continue the Rhum-related activities, consistent with a specific license obtained from OFAC by its customers, and such activities may require additional disclosure pursuant to the abovementioned statute.

ITEM 6. EXHIBITS

Information required by this item is incorporated herein by reference from the section entitled "Exhibit Index" of this Quarterly Report on Form 10-Q for the period ended June 30, 2020.

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.

CHAMPIONX CORPORATION
(Registrant)

/s/ ANTOINE MARCOS
Antoine Marcos
Vice President, Corporate Controller and Chief Accounting Officer
(Principal Accounting Officer and a Duly Authorized Officer)

Date: August 7, 2020

EXHIBIT INDEX

Exhibit No.	Exhibit Description
2.1	Tax Matters Agreement, dated as of June 3, 2020, by and among Ecolab Inc., ChampionX Holding Inc. and ChampionX Corporation (incorporated by reference to Exhibit 2.4 to ChampionX's Current Report on Form 8-K filed June 4, 2020)
2.2	Transition Services Agreement, dated as of June 3, 2020, by and among Ecolab Inc. and ChampionX Holding Inc. (incorporated by reference to Exhibit 2.5 to ChampionX's Current Report on Form 8-K filed June 4, 2020)
2.3	Intellectual Property Matters Agreement, dated as of June 3, 2020, by and among Ecolab Inc. and ChampionX Holding Inc. (incorporated by reference to Exhibit 2.6 to ChampionX's Current Report on Form 8-K filed June 4, 2020)
2.4	Master Cross Supply and Product Transfer Agreement, dated as of June 3, 2020, by and among Ecolab Inc. and ChampionX LLC (incorporated by reference to Exhibit 2.7 to ChampionX's Current Report on Form 8-K filed June 4, 2020)
3.1	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Company (incorporated by reference to Exhibit 3.1 to ChampionX's Current Report on Form 8-K filed June 4, 2020)
3.2	Amendment to Amended and Restated By-Laws of the Company (incorporated by reference to Exhibit 3.2 to ChampionX's Current Report on Form 8-K filed June 4, 2020)
4.1*	Supplemental Indenture, dated as of June 18, 2020, among the Guarantors named therein and Wells Fargo Bank, National Association, as Trustee
10.1	Credit Agreement, dated June 3, 2020, among ChampionX Holding Inc., as borrower, the lenders party thereto and Bank of America, N.A., as administrative agent (incorporated by reference to Exhibit 10.2 to ChampionX's Current Report on Form 8-K filed June 4, 2020)
10.2*	Amendment No. 2, dated June 24, 2020, amending that certain Credit Agreement dated as of May 9, 2018, by and among ChampionX, as borrower, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent
10.3†*	ChampionX Corporation Amended and Restated 2018 Equity and Cash Incentive Plan
22.1*	List of Issuer and Subsidiary Guarantors of Guaranteed Securities
31.1*	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2*	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1**	Certification of Chief Executive Officer Under Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. 1350.
32.2**	Certification of Chief Financial Officer Under Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. 1350.
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	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

† Denotes management contract or compensatory plan or arrangement

SUPPLEMENTAL INDENTURE
DELIVERED BY SUBSEQUENT GUARANTORS

SUPPLEMENTAL INDENTURE (this "Supplemental Indenture"), dated as of June 18, 2020, among ChampionX Holding Inc., a Delaware corporation ("ChampionX Holding"), ChampionX U.S. 3 Inc., a Delaware corporation ("ChampionX U.S. 3"), ChampionX USA Inc., a Delaware corporation ("ChampionX USA"), ChampionX U.S. 5, LLC, a Delaware limited liability company ("ChampionX U.S. 5"), and ChampionX, LLC, a Delaware limited liability company ("ChampionX LLC" and, together with ChampionX Holding, ChampionX U.S. 3, ChampionX USA and ChampionX U.S. 5, each a "Guaranteeing Subsidiary" and, together the "Guaranteeing Subsidiaries"), each a subsidiary of ChampionX Corporation (formerly known as Apergy Corporation) (the "Issuer"), and Wells Fargo Bank, National Association, as trustee under the Indenture referred to below (the "Trustee").

W I T N E S S E T H

WHEREAS, the Issuer has heretofore executed and delivered to the Trustee an indenture (the "Indenture"), dated as of May 3, 2018 providing for the issuance of 6.375% Senior Notes due 2026 (the "Notes");

WHEREAS, the Indenture provides that under certain circumstances Guaranteeing Subsidiaries shall execute and deliver to the Trustee a supplemental indenture pursuant to which the Guaranteeing Subsidiaries shall unconditionally guarantee all of the Issuer's Obligations under the Notes and the Indenture on the terms and conditions set forth herein and under the Indenture (the "Guarantee"); and

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee is authorized to execute and deliver this Supplemental Indenture.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, each of the Guaranteeing Subsidiaries and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes as follows:

1. CAPITALIZED TERMS. Capitalized terms used herein without definition shall have the meanings assigned to them in the Indenture.

2. AGREEMENT TO GUARANTEE. Each Guaranteeing Subsidiary hereby agrees to provide an unconditional Guarantee on the terms and subject to the conditions set forth in the Indenture including but not limited to Article Twelve thereof.

3. NO RECOURSE AGAINST OTHERS. No past, present or future director, officer, employee, incorporator, stockholder or agent of any Guaranteeing Subsidiary, as such, shall have any liability for any obligations of the Issuer or any Guaranteeing Subsidiary under the Notes, any Guarantees, the Indenture or this Supplemental Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of the Notes by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Notes. Such waiver may not be effective to waive liabilities under the federal securities laws and it is the view of the SEC that such a waiver is against public policy.

4. GOVERNING LAW. THIS SUPPLEMENTAL INDENTURE SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK. THE PARTIES HERETO AGREE TO SUBMIT TO THE JURISDICTION OF ANY UNITED STATES FEDERAL OR STATE COURT LOCATED IN THE BOROUGH OF MANHATTAN, IN THE CITY OF NEW YORK IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS SUPPLEMENTAL INDENTURE.

5. COUNTERPARTS. The parties may sign any number of copies of this Supplemental Indenture. Each signed copy shall be an original, but all of them together represent the same agreement. The exchange of copies of the Supplemental Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of the Supplemental Indenture as to the parties hereto and may be used in lieu of the original Supplemental Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes

6. EFFECT OF HEADINGS. The Section headings herein are for convenience or reference only and are not intended to be considered a part hereof and shall not affect the construction hereof.

7. THE TRUSTEE. The Trustee shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or for or in respect of the recitals contained herein, all of which recitals are made solely by each Guaranteeing Subsidiary.

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed, all as of the date first above written.

ChampionX Holding Inc.,

By: /s/ Deric Bryant
Name: Deric Bryant
Title: President

ChampionX U.S. 3 Inc.,

By: /s/ Deric Bryant
Name: Deric Bryant
Title: President

ChampionX USA Inc.,

By: /s/ Deric Bryant
Name: Deric Bryant
Title: President

ChampionX U.S. 5, LLC,

By: /s/ Deric Bryant
Name: Deric Bryant
Title: President

ChampionX, LLC,

By: /s/ Deric Bryant
Name: Deric Bryant
Title: Chief Operating Officer
and President, Chemical Technologies

[*Signature Page to Supplemental Indenture*]

WELLS FARGO BANK, NATIONAL ASSOCIATION, as Trustee

By: /s/ Alexander Pabon
Name: Alexander Pabon
Title: Assistant Vice President

[*Signature Page to Supplemental Indenture*]

SECOND AMENDMENT TO CREDIT AGREEMENT

SECOND AMENDMENT TO CREDIT AGREEMENT, dated as of June 24, 2020 (this "Amendment"), by and among ChampionX Corporation (f/k/a Apergy Corporation), a Delaware corporation (the "Borrower"), each Revolving Lender, each Issuing Bank, the other Lenders party hereto and JPMorgan Chase Bank, N.A., as the administrative agent (in such capacity, the "Administrative Agent").

RECITALS

WHEREAS, the Borrower is a party to that certain Credit Agreement, dated as of May 9, 2018 (as amended by the First Amendment dated as of February 14, 2020, and as further amended, restated, amended and restated, supplemented or otherwise modified from time to time prior to the date hereof, the "Existing Credit Agreement", and as amended or otherwise modified by this Amendment, the "Credit Agreement"), among the Borrower, the lenders from time to time party thereto (the "Lenders"), the Issuing Banks from time to time party thereto and the Administrative Agent;

WHEREAS, Section 9.02(b) of the Existing Credit Agreement permits the Borrower, the Administrative Agent and the requisite Lenders to amend the Existing Credit Agreement and states that any waiver, amendment or other modification of the Existing Credit Agreement that by its terms affects the rights or duties under the Existing Credit Agreement of the Lenders of one or more Classes (but not the Lenders of any other Class) may be effected by an agreement or agreements in writing entered into by the Borrower and the requisite number or percentage in interest of each affected Class of Lenders that would be required to consent thereto if such Class of Lenders were the only Class of Lenders under the Existing Credit at the time;

WHEREAS, the Borrower has requested that the Administrative Agent, the Lenders constituting the Required Lenders and each Revolving Lender and the Issuing Banks agree to amend the Existing Credit Agreement as set forth herein; and

WHEREAS, subject to the terms and conditions set forth herein, the Administrative Agent, the Lenders party hereto which constitute the Required Lenders and each Revolving Lender and the Issuing Banks are willing to agree to such amendments to the Existing Credit Agreement.

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

ARTICLE I

DEFINITIONS

SECTION 1.1 Certain Definitions. Capitalized terms used (including in the preamble and recitals hereto) but not defined herein shall have the meanings assigned to such terms in the Credit Agreement.

ARTICLE II

AMENDMENTS TO CREDIT AGREEMENT

SECTION 2.1 As of the Second Amendment Effective Date, the Existing Credit Agreement is amended as follows:

(a) Section 1.01 of the Existing Credit Agreement is hereby amended by amending and restating the definitions of "Calculation Date", "CDOR Screen Rate", "Exchange Rate" and "Permitted Foreign Currency" by adding the double-underlined text (indicated textually in the same manner as the following example: double-underlined text) and deleting the stricken text (indicated textually in the same manner as the following example: ~~stricken text~~) as set forth below:

"Calculation Date" means (a) (i) with respect to Revolving Loans, the last Business Day of each calendar quarter or (ii) with respect to Letters of Credit, the first Business Day of each calendar month, (b) each date ~~(with such date to be reasonably determined by the Administrative Agent) that is on or about the date of (i) a Borrowing Request or an Interest Election Request with respect to any~~of (i) a Borrowing, conversion or continuation of Revolving ~~Loan~~Loans or (ii) with respect to Letters of Credit the issuance, amendment, renewal or extension of a Letter of Credit and (c) if an Event of Default has occurred and is continuing, any Business Day as determined by the Administrative Agent in its sole discretion.

"CDOR Screen Rate" means, for the relevant Interest Period, ~~the Canadian deposit offered rate which, in turn means on any day~~ the annual rate of interest ~~determined with reference~~equal to the ~~arithmetic~~ average ~~of the discount rate quotations of all institutions listed in respect of the relevant Interest Period for CAD Dollar-denominated~~rate applicable to Canadian dollar Canadian bankers' acceptances ~~displayed and identified as such~~for the applicable period that appears on the "Reuters Screen CDOR Page" as defined in the International Swap Dealer Association, Inc. definitions, as modified and amended from time to time~~, as of 10:00~~ (or, in the event such rate does not appear on such page or screen, on any successor or substitute page or screen that displays such rate, or on the appropriate page of such other information service that publishes such rate from time to time, as selected by the Administrative Agent in its reasonable discretion), rounded to the nearest 1/100th of 1% (with .005% being rounded up), as of 10:15 a.m. Toronto local time on the first day of such Interest Period and, if such day is not a business day, then on the immediately preceding ~~business day~~Business Day (as adjusted by Administrative Agent after 10:~~00~~15 a.m. Toronto local time to reflect any error in the posted rate of interest or in the posted average annual rate of interest). If the CDOR Screen Rate shall be less than zero, the CDOR Screen Rate shall be deemed to be zero for purposes of this Agreement.

"Exchange Rate" means, on any day, ~~with respect to the applicable Permitted Foreign Currency~~, ~~the rate at which such currency may be exchanged into dollars, as set forth at approximately 11:00 a.m., London time, on such day on the Reuters World Currency Page "FX=" for such currency. In the event that such rate does not appear on any Reuters World Currency Page, then the Exchange Rate shall be determined by reference to such other publicly available service for displaying exchange rates as may be agreed upon by the Administrative Agent and the Borrower or, in the absence of such agreement, such Exchange Rate shall instead be the arithmetic average of the spot rates of exchange of the Administrative Agent in the market where its foreign currency exchange operations in respect of such currency are then being conducted, at or about 10:00 a.m., Local Time, on such date for the purchase of dollars for delivery two Business Days later; provided that if at the time of any such determination, for any reason, no such spot rate is being quoted, the Administrative Agent, after consultation with the Borrower, may use any reasonable method it deems appropriate to determine such rate, and such determination shall be presumed correct absent manifest error.~~the rate of exchange for the purchase of dollars with the relevant foreign currency last provided (either by publication or otherwise provided to the Administrative Agent) by Reuters on the Business Day (New York City time) immediately preceding the date of determination or if such service ceases to be available or ceases to provide a rate of exchange for the purchase of dollars with the relevant foreign currency, as provided by such other publicly available information service which provides that rate of exchange at such time in place of Reuters chosen by the Administrative Agent in its sole discretion (or if such service ceases to be available or ceases to provide such rate of exchange, the equivalent of such amount in dollars as determined by the Administrative Agent using any method of determination it deems appropriate in its sole discretion).

"Permitted Foreign Currency" means, (a) with respect to any Revolving Loan, Euros, Pounds Sterling, Canadian Dollars and any other foreign currency requested by the Borrower from time to time and ~~in which~~agreed to by each Revolving Lender ~~has agreed, in accordance with its policies and procedures in effect at such time, to lend Revolving Loans~~and the Administrative Agent, and (b) with respect to any Letter of

Credit, (i) Euros, Pounds Sterling, Canadian Dollars~~,~~ and Australian Dollars and (ii) any other foreign currency requested by the Borrower ~~from time to time and in~~ which ~~each~~an Issuing Bank ~~and Revolving Lender~~ has ~~agreed,~~approved in accordance with its policies and procedures in effect at such time~~, to issue Letters of Credit (in the case of Issuing Banks) or to lend Revolving Loans (in the case of Revolving Lenders)~~ and which such currency has been approved by the Administrative Agent (it being understood that such other foreign currency shall be a Permitted Foreign Currency solely with respect to such Issuing Bank).

(b) Section 2.05(e) of the Existing Credit Agreement is hereby amended and restated by adding the double-underlined text (indicated textually in the same manner as the following example: double-underlined text) and deleting the stricken text (indicated textually in the same manner as the following example: ~~stricken text~~) as set forth below:

(e) Reimbursement. If an Issuing Bank shall make any LC Disbursement in respect of a Letter of Credit, then the Borrower shall reimburse such LC Disbursement by paying to the Administrative Agent an amount equal to such LC Disbursement not later than (i) if the Borrower shall have received notice of such LC Disbursement prior to 12:00 noon, Local Time, on any Business Day, then 5:00 p.m., Local Time, on such Business Day, or (ii) otherwise, 10:00 a.m., Local Time, on the Business Day immediately following the day that the Borrower receives such notice; provided that, unless the Borrower has notified the applicable Issuing Bank that it will reimburse such LC Disbursement by the required date and time, the Borrower shall, subject to the conditions to borrowing set forth herein, be deemed to have requested, and the Borrower does hereby request in such event that such payment be financed with an ABR Revolving Borrowing in an equivalent amount and, to the extent so financed, the Borrower's obligation to make such payment shall be discharged and replaced by the resulting ABR Revolving Borrowing. In the case of any such reimbursement in dollars with respect to a Letter of Credit denominated in a Permitted Foreign Currency, the applicable Issuing Bank shall notify the Borrower of the Dollar Equivalent (or, with respect to a Letter of Credit denominated in a Permitted Foreign Currency under clause (b)(ii) of the definition thereof the dollar equivalent as determined below) of the amount of the draft so paid promptly following the determination thereof. If the Borrower fails to reimburse any LC Disbursement by the time specified above in this paragraph, then the Administrative Agent shall notify each Revolving Lender, as the case may be, of the applicable LC Disbursement, the currency and amount of the payment then due from the Borrower in respect thereof (in the case of a Letter of Credit denominated in any currency other than dollars or a Permitted Foreign Currency under clause (a) of the definition thereof, such amount shall be expressed in dollars based on (i) if such LC Disbursement is made in dollars, the amount thereof and (ii) if such LC Disbursement is made in such Permitted Foreign Currency, the actual cost in dollars incurred by the applicable Issuing Bank to fund the LC Disbursement, in each case as notified to the Administrative Agent by the applicable Issuing Bank) and such Revolving Lender's Applicable Percentage thereof, as applicable. Promptly following receipt of such notice, each Revolving Lender shall pay to the Administrative Agent its Applicable Percentage of the amount then due from the Borrower in the applicable currency ~~of the applicable LC Disbursement~~, in the same manner as provided in Section 2.06 with respect to Loans made by such Lender (and Section 2.06 shall apply, *mutatis mutandis*, to the payment obligations of the Revolving Lenders under this paragraph), and the Administrative Agent shall promptly remit to the applicable Issuing Bank the amounts so received by it from the applicable Revolving Lenders. Promptly following receipt by the Administrative Agent of any payment from the Borrower pursuant to this paragraph, the Administrative Agent shall distribute such payment to the applicable Issuing Bank or, to the extent that Revolving Lenders have made payments pursuant to this paragraph to reimburse such Issuing Bank, then to such Revolving Lenders and such Issuing Bank as their interests may appear. Any payment made by a Revolving Lender pursuant to this paragraph to reimburse an Issuing Bank for any LC Disbursement (other than the funding of an ABR Revolving Borrowing as contemplated above) shall not constitute a Loan and shall not relieve the Borrower of its obligation to reimburse such LC Disbursement.

ARTICLE III

CONDITIONS TO EFFECTIVENESS

SECTION 3.1 The effectiveness of this Amendment (including the amendments contained in Article II) (the date of such effectiveness, the "Second Amendment Effective Date") is subject to (a) the due execution of this Amendment by the Borrower, each Revolving Lender, the Lenders constituting the Required Lenders, each Issuing Bank and the Administrative Agent and (b) receipt by the Administrative Agent of all fees and other amounts due and payable on or prior to the Second Amendment Effective Date, including, to the extent invoiced at least one Business Day prior to the Second Amendment Effective Date, reimbursement or payment of all reasonable out-of-pocket expenses (including fees, charges and disbursements of counsel) required to be reimbursed or paid under the Existing Credit Agreement.

ARTICLE IV

REPRESENTATIONS AND WARRANTIES

SECTION 4.1 To induce the other parties hereto to enter into this Amendment, the Borrower represents and warrants to each of the Lenders party hereto that, as of the Second Amendment Effective Date:

(a) it (i) is a Person duly organized, validly existing and, to the extent that such concept is applicable in the relevant jurisdiction, in good standing under the laws of the jurisdiction of its organization and (ii) has all requisite power and authority to execute, deliver and perform its obligations under each Loan Document to which it is a party;

(b) (i) the execution, delivery and performance by it of this Amendment has been duly authorized by all necessary corporate or other organizational action, and (ii) the execution, delivery and performance by it of this Amendment will not (x) result in any creation or imposition of any Lien upon any asset now owned or hereafter acquired by it (other than as permitted by the Loan Documents), (y) violate any Requirement of Law applicable to it and (z) violate or result (alone or with notice or lapse of time or both) in a default under any indenture, agreement or other instrument binding upon the Borrower or any Loan Party or their respective assets, or give rise to a right thereunder to require any payment, repurchase or redemption to be made by the Borrower or any Loan Party or give rise to a right of, or result in, termination, cancelation or acceleration of any obligation thereunder, except with respect to any violation, default, payment, repurchase, redemption, termination, cancellation or acceleration that would not reasonably be expected to have a Material Adverse Effect;

(c) the execution, delivery and performance by it of this Amendment, will not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority, except such as have been obtained or made and are in full force and effect and except (i) filings necessary to perfect Liens created under the Loan Documents, (ii) consents, approvals, registrations or filings which have been obtained or made and are in full force and effect or (iii) where failure to obtain such consent or approval, or make such registration or filing, in the aggregate, could not reasonably be expected to have a Material Adverse Effect;

(d) this Amendment has been duly executed and delivered by it and constitutes its legal, valid and binding obligation, enforceable against it in accordance with its terms, subject to general principles of equity, regardless of whether considered in a proceeding in equity or at law and an implied covenant of good faith and fair dealing;

(e) the representations and warranties of each Loan Party set forth in the Loan Documents are true and correct in all material respects (or, in the case of representations and warranties qualified as to materiality, in all respects) on and as of the Second Amendment Effective Date, except in the case of any such representation and warranty that expressly relates to a prior date, in which case such representation and warranty shall be true and correct in all material respects (or in all respects, as applicable) as of such earlier date; and

(f) no Event of Default has occurred and is continuing.

ARTICLE V

EFFECTS ON LOAN DOCUMENTS

SECTION 5.1 On and after the Second Amendment Effective Date, each reference in the Credit Agreement to "this Agreement", "hereunder", "hereof", "herein" or words of like import referring to the Credit Agreement, and each reference in the other Loan Documents to "the Credit Agreement", "thereunder", "thereof" or words of like import referring to the Credit Agreement shall, in each case, mean and be a reference to the Credit Agreement.

SECTION 5.2 Except as specifically amended or otherwise modified herein or contemplated hereby, the Credit Agreement and each of the other Loan Documents, as specifically amended by this Amendment, are and shall continue to be in full force and effect in all respects. Without limiting the generality of the foregoing, all of the Collateral described in the Security Documents shall continue to secure the payment of all Obligations. This Amendment shall not constitute a novation of any Obligations existing prior to the date hereof and shall merely amend or otherwise modify such Obligations to the extent set forth herein.

SECTION 5.3 The execution, delivery and effectiveness of this Amendment shall not, except as expressly provided herein, operate as a waiver of any right, power or remedy of any Lender or the Administrative Agent under any of the Loan Documents, nor constitute a waiver of any provision of any of the Loan Documents. On and after the Second Amendment Effective Date, this Amendment shall constitute a Loan Document. This Amendment and the Credit Agreement shall not constitute a novation of the Existing Credit Agreement or any other Loan Document.

ARTICLE VI

MISCELLANEOUS

SECTION 6.1 Amendments; Severability.

(a) This Amendment may not be amended nor may any provision hereof be waived except in accordance with the provisions of Section 9.02 of the Credit Agreement.

(b) To the extent any provision of this Amendment is prohibited by or invalid under the applicable law of any jurisdiction, such provision shall be ineffective only to the extent of such prohibition or invalidity and only in such jurisdiction, without prohibiting or invalidating such provision in any other jurisdiction or the remaining provisions of this Amendment in any jurisdiction.

SECTION 6.2 Governing Law; Jurisdiction; Waiver of Jury Trial. This Amendment shall be construed in accordance with and governed by the laws of the State of New York. The provisions of Sections 9.09 and 9.10 of the Credit Agreement are incorporated herein by reference, *mutatis mutandis*.

SECTION 6.3 Headings. Article and Section headings used herein are for convenience of reference only, are not part of this Amendment and are not to affect the construction of, or to be taken into consideration in interpreting, this Amendment.

SECTION 6.4 Counterparts. This Amendment may be executed in two or more counterparts, each of which shall constitute an original but all of which, when taken together, shall constitute but one contract, and shall become effective as provided in Section 10.01 of the Credit Agreement. 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, electronic delivery, the electronic matching of assignment terms and contract formations on electronic platforms approved by the Administrative Agent, or the keeping of records in electronic form, 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, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act; *provided* that nothing herein shall require the Administrative Agent to accept Electronic Signatures in any form or format without its prior written consent. 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 and the Loan Parties, electronic images of this Amendment or any other Loan Documents (in each case, including with respect to any signature pages thereto) shall have the same legal effect, validity and enforceability as any paper original, and (ii) waive any argument, defense or right to contest the validity or enforceability of this Amendment based solely on the lack of paper original copies of this Amendment, including with respect to any signature pages thereto.

[Remainder of page intentionally left blank.]

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

CHAMPIONX CORPORATION

By: /s/ Jay A. Nutt
Name: Jay A. Nutt
Title: Senior Vice President and Chief Financial Officer

ADMINISTRATIVE AGENT

JPMORGAN CHASE BANK, N.A.,
as Administrative Agent

By: /s/ Arina Mavilian
Name: Arina Mavilian
Title: Authorized Signatory

LENDERS

JPMORGAN CHASE BANK, N.A., as a Lender and Issuing Bank

By: /s/ Arina Mavilian
Name: Arina Mavilian
Title: Authorized Signatory

BANK OF AMERICA, N.A., as Lender and Issuing Bank

By: /s/ Tyler Ellis
Name: Tyler Ellis
Title: Director

LENDERS

HSBC Bank USA, N.A., as a Lender and Issuing Bank

By: /s/ Shaun R. Kleinman
Name: Shaun R. Kleinman
Title: Senior Vice President

Mizuho Bank, Ltd., as Lender and Issuing Bank

By: /s/ Edward Sacks
Name: Edward Sacks
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

LENDERS

WELLS FARGO BANK, NATIONAL ASSOCIATION, as a Lender and Issuing Bank

By: /s/ Michael Janak
Name: Michael Janak
Title: Managing Director

LENDERS

Citibank, N.A., as a Lender and Issuing Bank

By: /s/ Ivan Davey
Name: Ivan Davey
Title: Vice President

U.S. Bank National Association, as Lender

By: /s/ Steven L. Sawyer
Name: Steven L. Sawyer
Title: Senior Vice President

Goldman Sachs Bank USA, as Lender

By: /s/ Jamie Minieri
Name: Jamie Minieri
Title: Authorized Signatory

CHAMPIONX CORPORATION
AMENDED AND RESTATED 2018 EQUITY AND CASH INCENTIVE PLAN
(Effective as of March 24, 2020)

A. PURPOSE AND SCOPE OF THE PLAN

1. *Purposes.* The Amended and Restated 2018 Equity and Cash Incentive Plan is intended to promote the long-term success of ChampionX Corporation by providing salaried officers and other key employees of ChampionX Corporation and its Affiliates, on whom major responsibility for the present and future success of ChampionX Corporation rests, with long-range and medium-range inducement to remain with the organization and to encourage them to increase their efforts to make ChampionX Corporation successful. The Plan is also intended to attract and retain individuals of outstanding ability to serve as non-employee directors of ChampionX Corporation by providing them the opportunity to acquire a proprietary interest, or to increase their proprietary interest, in ChampionX Corporation. In addition, the Plan provides for the issuance of Replacement Awards in connection with certain transactions as provided in Paragraph 3.

2. *Definitions.*

"Affiliate" shall mean any Subsidiary or any corporation, trade or business (including without limitation, a partnership or limited liability company) that is directly or indirectly controlled (whether by ownership of stock, assets or an equivalent ownership interest or voting interest) by the Corporation or one of its Affiliates, and any other entity in which the Corporation or any of its Affiliates has a material equity interest and that is designated as an Affiliate by the Committee.

"Award" shall mean any award under this Plan of any Option, SSAR, Cash Performance Award, Restricted Stock, Restricted Stock Unit, Performance Shares, Deferred Stock Unit, or Directors' Shares. With respect to Replacement Awards, the term also includes any memorandum or summary of terms that may be specified by the Committee, together with any award agreement under any Predecessor Plan that may be referred to therein.

"Award Agreement" shall mean, with respect to each Award, a written or electronic agreement or communication between the Corporation and a Participant setting forth the terms and conditions of the Award. An Award Agreement may be required, as a condition of its effectiveness, to be executed by the Participant, including by electronic signature or other electronic indication of acceptance.

"Board" shall mean the Board of Directors of the Corporation as in office from time to time.

"Cash Performance Award" shall mean an Award of the right to receive cash at the end of a Performance Period subject to the achievement, or the level of performance, of one or more Performance Targets within such Performance Period, as provided in Paragraph 20.

"Cause" shall mean a Participant (a) engages in conduct that constitutes willful misconduct, dishonesty, or gross negligence in the performance of his or her duties and results in material detriment to the Corporation or an Affiliate; (b) breaches his or her fiduciary duties to the Corporation or an Affiliate; (c) willfully fails to carry out the lawful and ethical directions of the person(s) to whom he or she reports, which failure is not promptly corrected after notification; (d) engages in conduct that is demonstrably and materially injurious to the Corporation or an Affiliate, or that materially harms the reputation, good will, or business of the Corporation or an Affiliate; (e) engages in conduct that is reported in the general or trade press or otherwise achieves general notoriety and that is scandalous, immoral or illegal and materially harms the reputation, good will, or business of the Corporation or an Affiliate; (f) is convicted of, or enters a plea of guilty or nolo contendere (or similar plea) to, a crime that constitutes a felony, or a crime that constitutes a misdemeanor involving moral turpitude, dishonesty or fraud; (g) is found liable in any Securities and Exchange Commission or other civil or criminal securities law action, or any cease and desist order applicable to him or her is entered (regardless of whether or not the Participant admits or denies liability); (h) uses, without authorization, confidential or proprietary information of the Corporation or an Affiliate or information which the Corporation or Affiliate is obligated not to use or disclose, or discloses such information without authorization and such disclosure results in material detriment to the Corporation or an Affiliate; (i) breaches any written or electronic agreement with the Corporation or an Affiliate not to disclose any information pertaining to the Corporation or an Affiliate or their customers, suppliers and businesses and such breach results in material detriment to the Corporation or an Affiliate; (j) materially breaches any agreement relating to non-solicitation, non-competition, or the ownership or protection of the intellectual property of the Corporation or an Affiliate; or (k) breaches any of the Corporation's or an Affiliate's policies applicable to him or her, whether currently in effect or adopted after the Effective Date of the Plan, and such breach, in the Committee's judgment, could result in material detriment to the Corporation or an Affiliate.

"CEO" shall mean the Chief Executive Officer of the Corporation.

"Change in Control" shall mean Change in Control as defined in Paragraph 36.

"Code" shall mean the Internal Revenue Code of 1986, as amended from time to time. Any reference to any section of the Code shall also be deemed to include a reference to any successor provisions thereto and the Treasury regulations and any guidance promulgated thereunder.

"Committee" shall mean the Compensation Committee of the Board or other committee of the Board duly appointed to administer the Plan and having such powers as shall be specified by the Board. If no committee of the Board has been appointed to administer the Plan, the members of the Board that meet the qualifications below for membership on the Committee shall exercise all of the powers of the Committee granted herein, and, in any event, such members of the Board may in their discretion exercise any or all of such powers. All members of the Committee administering the Plan shall comply in all respects with any qualifications required by law, including specifically being a "non-employee director" for purposes of the rules promulgated under the Exchange Act and satisfying any other independence requirement under applicable exchange rules, law or regulations.

"Common Stock" shall mean the common stock of the Corporation, par value $0.01 per share. "Corporation" shall mean ChampionX Corporation, a Delaware corporation, or any successor corporation.

"Deferred Stock Unit" shall mean a bookkeeping entry representing a right granted to a Non-Employee Director pursuant to Paragraph 35 of the Plan to receive a deferred payment of Directors' Shares to be issued and delivered at the end of the deferral period elected by the Non-Employee Director.

"Directors' Shares" shall mean the shares of Common Stock issuable to each eligible Non-Employee Director as provided in Paragraph 33.

"Disability" or "Disabled" shall mean the permanent and total disability of the Participant within the meaning of Section 22(e)(3) and 409A(a)(2)(C)(i) of the Code, except as otherwise determined by the Committee from time to time or as provided in an Award Agreement. The determination of a Participant's Disability shall be made by the Committee in its sole discretion.

"Dividend Equivalents" shall mean a credit to a bookkeeping account established in the name of a Participant, made at the discretion of the Committee or as otherwise provided by the Plan, representing the right of a Participant to receive an amount equal to the cash dividends paid on one share of Common Stock for each share of Common Stock represented by an Award held by such Participant.

Dividend Equivalents (i) may only be awarded in connection with an Award other than an Option, SSAR or Cash Performance Award, (ii) shall be accumulated and become payable only if, and to the extent, the Award vests, and (iii) shall be paid at or after the vesting date of the Award.

"Dover Employee Matters Agreement" shall mean the Employee Matters Agreement, dated as of May 9, 2018, by and between Dover Corporation and Apergy Corporation.

"Dover Replacement Awards" shall mean Awards to employees of the Corporation or any Affiliate that are issued under the Plan in accordance with the terms of the Dover Employee Matters Agreement in substitution of an

Option, SSAR, Restricted Stock, Restricted Stock Unit, or Performance Share that was granted by Dover Corporation to such employees under a Predecessor Plan prior to the spin-off of the Corporation by Dover Corporation.

"Ecolab Employee Matters Agreement" shall mean the Employee Matters Agreement, dated as of December 18, 2019, by and among Ecolab Inc., ChampionX Holding Inc., and Apergy Corporation.

"Ecolab Replacement Awards" shall mean Awards to employees of the Corporation or any Affiliate that are issued under the Plan in accordance with the terms of the Ecolab Employee Matters Agreement in substitution of a stock option, restricted stock unit, or performance stock unit that was granted by Ecolab Inc. to such employees under a Predecessor Plan.

"Effective Date" shall mean the Effective Date of the Plan as specified in Paragraph 55. "Exchange Act" shall mean the Securities Exchange Act of 1934, as amended from time to time.

"Fair Market Value" with respect to any share of Common Stock as of any date of reference, shall be determined in good faith by the Committee on the basis of such considerations as the Committee deems appropriate from time to time, including, but not limited to, such factors as the closing price for a share of Common Stock on such day (or, if such day is not a trading day, on the next trading day) on the principal United States exchange on which the Common Stock then regularly trades, the average of the closing bid and asked prices for a share of Common Stock on such exchange on the date of reference, or the average of the high and low sales price of a share of Common Stock on such exchange on the date of reference. In the case of an Award subject to Section 409A of the Code, "Fair Market Value" shall be determined in accordance with Section 409A of the Code to the extent necessary to exempt an Award from the application of Section 409A.

"ISO" shall mean any Option intended to be, and designated as, an incentive stock option within the meaning of Section 422 of the Code.

"Normal Retirement" shall mean (i) the termination of a Participant's employment with the Corporation and its Affiliates if, at the time of such termination of employment, the Participant has attained age sixty five (65), and (ii) the Participant complies with the

non-competition restrictions in Paragraph 43. In the event that the stock or assets of a business unit of the Corporation or an Affiliate that employs a Participant is sold, a Participant who has attained age sixty five (65) and remains employed by such business unit in good standing through the date of such sale, shall be treated as having terminated employment with the Corporation and its Affiliates in a Normal Retirement on the date of such sale, provided that the Participant complies with the non-compete restrictions in Paragraph 43.

"Non-Employee Director" shall mean a member of the Board who is not an employee of the Corporation or an Affiliate. "Non-Qualified Stock Option" shall mean any Option that is not an ISO.

"Option" shall mean a right granted to a Participant to purchase Common Stock pursuant to Paragraph 6. An Option may be either an ISO or a Non-Qualified Stock Option.

"Participant" shall mean any employee of the Corporation or an Affiliate who is a salaried officer or other key employee, including salaried officers who are also members of the Board, and any Non-Employee Director.

"Performance Criteria" shall mean the business criteria listed on Exhibit A hereto (or such other business or other performance criteria determined appropriate by the Committee) on which Performance Targets shall be established.

"Performance Period" shall mean the period established by the Committee for measuring whether and to what extent any Performance Targets established in connection with an Award have been met. With respect to a Cash Performance Award and a Performance Share Award, a Performance Period shall be not less than three (3) full fiscal years of the Corporation, including the year in which an Award is made and may be shorter in the case of other Awards but not less than one full fiscal year.

“Performance Share” shall mean a bookkeeping entry representing a right granted to a Participant pursuant to an Award made under Paragraph 24 of the Plan to receive shares of Common Stock to be issued and delivered at the end of a Performance Period, subject to the achievement, or the level of performance, of one or more Performance Targets within such period.

“Performance Targets” shall mean the performance targets established by the Committee in connection with any Award based on one or more of the Performance Criteria that must be met in order for payment to be made with respect to such Award.

“Plan” shall mean the ChampionX Corporation Amended and Restated 2018 Equity and Cash Incentive Plan, as set forth herein, and as amended from time to time, and which was formerly known as the Apergy Corporation 2018 Equity and Cash Incentive Plan.

“Predecessor Plan” shall mean the Dover Corporation 2012 Equity and Cash Incentive Plan, the Dover Corporation 2005 Equity and Cash Incentive Plan, and the Ecolab Inc. 2010 Stock Incentive Plan, as applicable, in each case, as amended from time to time.

“Replacement Awards” shall mean Dover Replacement Awards and Ecolab Replacement Awards.

“Restricted Period” shall mean the period of time during which the Restricted Stock or Restricted Stock Units are subject to Restrictions pursuant to Paragraph 14.

“Restricted Stock” shall mean shares of Common Stock that are subject to an Award to a Participant under Paragraph 13 and may be subject to certain Restrictions or risks of forfeiture specified in the Award.

“Restricted Stock Unit” shall mean a bookkeeping entry representing a right granted to a Participant pursuant to an Award made under Paragraph 13 of the Plan to receive shares of Common Stock to be issued and delivered at the end of a specified period subject to any Restrictions or risks of forfeiture specified in the Award.

“Restrictions” shall mean the restrictions to which Restricted Stock or Restricted Stock Units are subject under the provisions of Paragraph 14, including any Performance Targets established by the Committee.

“Section 16 Person” shall mean those officers, directors, or other persons subject to Section 16 of the Exchange Act. “Securities Act” shall mean the Securities Act of 1933, as amended from time to time.

“SSAR” shall mean the right granted to a Participant under Paragraph 6 to be paid an amount measured by the appreciation in the Fair Market Value of Common Stock from the date of grant to the date of surrender of the Award, with payment to be made solely in shares of Common Stock as specified in the Award Agreement or as determined by the Committee.

“Subsidiary” shall mean any present or future corporation that is or would be a “subsidiary corporation” with respect to the Corporation as defined in Section 424 of the Code.

3. *Replacement Awards.*

(a) *Dover Replacement Awards.* The Corporation was authorized to issue Dover Replacement Awards to Participants in the Predecessor Plans in connection with the adjustment and replacement by the Corporation of certain Options, SSARs, or Restricted Stock Units previously granted by Dover Corporation under the Predecessor Plans. Notwithstanding any other provision of the Plan to the contrary, the number of shares of Common Stock subject to a Dover Replacement Award and the other terms and conditions of each Dover Replacement Award, including the Option exercise or SSAR base price, shall be determined in accordance with the terms of the Dover Employee Matters Agreement.

(b) *Ecolab Replacement Awards*. The Corporation is authorized to issue Ecolab Replacement Awards to Participants in the Predecessor Plans in connection with the adjustment and replacement by the Corporation of certain stock options, restricted stock units, and performance stock units previously granted by Ecolab Inc. under the Predecessor Plans. Notwithstanding any other provision of the Plan to the contrary, the number of shares of Common Stock subject to an Ecolab Replacement Award and the other terms and conditions of each Ecolab Replacement Award, including the Option exercise or SSAR base price, shall be determined in accordance with the terms of the Ecolab Employee Matters Agreement.

4. *Administration*.

(a) *Administration by Committee.* The Plan shall be administered and interpreted by the Committee.

(b) *Powers*. The Committee will have sole and complete authority and discretion to administer all aspects of the Plan, including but not limited to: (i) selecting the Participants to whom Awards may be granted under the Plan and the time or times at which such Awards shall be made; (ii) granting Awards; (iii) determining the type and number of shares of Common Stock to which an Award may relate and the amount of cash to be subject to Cash Performance Awards; (iv) determining the terms and conditions pursuant to which Awards will be made (which need not be identical), including, without limitation, the exercise or base price of an Option or SSAR Award, Performance Targets, Performance Periods, forfeiture restrictions, exercisability conditions, and all other matters to be determined in connection with an Award; (v) determining whether and to what extent Performance Targets or other objectives or conditions applicable to Awards have been met; (vi) prescribing the form of Award Agreements, which need not be identical; (vii) determining whether and under what circumstances and in what form an Award may be settled; and (viii) making all other decisions and determinations as may be required or appropriate under the terms of the Plan or an Award Agreement as the Committee may deem necessary or advisable for the administration of the Plan.

(c) *Authority*. The Committee shall have the discretionary authority to adopt, alter, repeal and interpret and construe such administrative rules, guidelines and practices governing this Plan, Awards and the Award Agreements, to make Replacement Awards, and perform all acts, including the delegation of its administrative responsibilities, as it shall, from time to time, deem advisable; to construe and interpret the terms and provisions of this Plan and any Award issued under this Plan and any Award Agreements relating thereto; to resolve any doubtful or disputed terms; and to otherwise supervise the administration of this Plan. The Committee may correct any defect, supply any omission or reconcile any inconsistency in this Plan or in any Award Agreement relating thereto in the manner and to the extent it shall deem necessary to effectuate the purposes and intent of this Plan. The Committee may adopt sub-plans or supplements to, or alternative versions of, the Plan, Awards, or Award Agreements, or alternative forms of payment or settlement, as the Committee deems necessary or desirable to comply with the laws of, or to accommodate the laws, regulations, tax or accounting effectiveness, accounting principles, foreign exchange rules, or customs of, foreign jurisdictions whose citizens or residents may be granted Awards. The Committee may impose any limitations and restrictions that it deems necessary to comply with the laws of such foreign jurisdictions and modify the terms and conditions of any Award granted to Participants outside the United States.

(d) *Effect of Actions*. Any decision, interpretation or other action made or taken in good faith by or at the direction of the Corporation, the Board or the Committee (or any of its members) arising out of or in connection with this Plan shall be within the absolute discretion of all and each of them, as the case may be, and shall be final, binding and conclusive on the Corporation and all employees and Participants and their respective heirs, executors, administrators, successors and assigns and any persons claiming rights under this Plan or an Award. A Participant or other person claiming rights under this Plan may contest a decision or action by the Committee with respect to an Award or such other person only on the ground that such decision or action was arbitrary, capricious, or unlawful, and any review of such decision or action by the Board or otherwise shall be limited to determining whether the Committee's decision or action was arbitrary, capricious or unlawful.

(e) *Legal Counsel.* The Corporation, the Board or the Committee may consult with legal counsel, who may be counsel for the Corporation or other counsel, with respect to its obligations or duties hereunder, or with respect to any action or proceeding or any question of law, and shall not be liable with respect to any action taken or omitted by it in good faith pursuant to the advice of such counsel.

(f) *Delegation to CEO and President*. The Committee may delegate all or a portion of its authority, power and functions (other than the power to grant awards to Section 16 Persons or Covered Executives) to the CEO to the extent permitted under Delaware corporate law. To the extent and within the guidelines established by the Committee, the CEO shall have the authority to exercise all of the authority and powers granted to the Committee under this Paragraph 4, including the authority to grant Awards, without the further approval of the Committee. The CEO may delegate all or a portion of the authority delegated to him or her hereunder to the President of the Corporation to the extent permitted under Delaware law.

(g) *Indemnification*. The Committee, its members, the CEO, and any employee of the Corporation or an Affiliate to whom authority or administrative responsibilities has been delegated shall not be liable for any action or determination made in good faith with respect to this Plan. To the maximum extent permitted by applicable law, no officer of the Corporation or Affiliate or member or former member of the Committee shall be liable for any action or determination made in good faith with respect to this Plan or any Award granted under it. To the maximum extent permitted by applicable law or the Certificate of Incorporation or By-Laws of the Corporation (or if applicable, of an Affiliate), each officer and Committee member or former officer or member of the Committee shall be indemnified and held harmless by the Corporation (or if applicable, an Affiliate) against any cost or expense (including reasonable fees of counsel reasonably acceptable to the Corporation) or liability (including any sum paid in settlement of a claim with the approval of the Corporation), and shall be advanced amounts necessary to pay the foregoing at the earliest time and to the fullest extent permitted, arising out of any act or omission to act in connection with this Plan, except to the extent arising out of such Committee member's, officer's, or former member's or former officer's own fraud or bad faith. Such indemnification shall be in addition to any rights of indemnification the officers, directors or Committee members or former officers, directors or Committee members may have under applicable law or under the Certificate of Incorporation or By-Laws of the Corporation or any Affiliate.

5. *Shares*.

(a) *Shares Available for Grant.* An aggregate maximum of 18,225,000 shares of Common Stock will be reserved for issuance upon exercise of Options granted under the Plan, the exercise of SSARs granted under the Plan, and for Awards of Restricted Stock, Restricted Stock Units, Performance Shares, Directors' Shares, and Deferred Stock Units. This maximum share reserve is subject to appropriate adjustment resulting from future stock splits, stock dividends, recapitalizations, reorganizations, and other similar changes to be computed in the same manner as that provided for in Paragraph 5(b) below. The number of shares of Common Stock available for issuance under the Plan shall be reduced (i) by one share for each share of Common Stock issued pursuant to the exercise of Options or SSARs, and (ii) by three (3) shares for each share of Common Stock issued pursuant to Restricted Stock, Restricted Stock Unit, Performance Share, Directors' Shares, and Deferred Stock Unit Awards. If any Option or SSAR granted under the Plan expires, terminates, or is canceled for any reason without having been exercised in full, or if any Award of Restricted Stock, Restricted Stock Unit, Performance Shares, Directors' Shares, or Deferred Stock Unit is forfeited or canceled for any reason, the number of shares underlying such unexercised Option or SSAR and the number of forfeited or canceled shares under such other Awards will again be available under the Plan in an amount corresponding to the reduction in such share reserve previously made in accordance with the rules described above in this Paragraph 5(a). Awards that are settled in cash shall not be counted against the aggregate maximum number of shares reserved for issuance under the Plan. Awards that are settled in Common Stock shall be counted against the aggregate maximum number of shares reserved for issuance under the Plan, inclusive of any shares not delivered as a result of any net share exercise, tender of shares to the Corporation to pay the exercise price, attestation to the ownership of shares owned by the Participant, or withholding of any shares to satisfy tax withholding obligations. The shares of Common Stock available under this Plan may be either authorized and unissued Common Stock or Common Stock held in or acquired for the treasury of the Corporation.

(b) *Effect of Stock Dividends, Merger, Recapitalization or Reorganization or Similar Events*. In the event of any change in the Common Stock through merger, consolidation, reorganization, reincorporation, recapitalization, reclassification, stock dividend, stock split, reverse stock split, split-up, split-off, spin-off, combination of shares, exchange of shares or similar change in the capital structure of the Corporation, if all or substantially all the assets of the Corporation are transferred to any other corporation in a reorganization, or in the event of payment of a dividend or distribution to the stockholders of the Corporation in a form other than Common Stock (excepting normal cash dividends) that has a material effect on the Fair Market Value of shares of Common Stock, appropriate adjustments shall be made by the Committee in the number and class of shares subject to the Plan, in the ISO share limit set forth in Paragraph 6(e), the number of shares subject to any outstanding Awards, and in the exercise or base price per share under any outstanding Option or SSAR. The adjustments to be made pursuant to this Paragraph 5(b) shall meet the requirements of Section 409A of the Code and the regulations thereunder.

B. OPTION AND SSAR GRANTS

6. *Stock Options and SSARs*. Options may be granted under the terms of the Plan and shall be designated as either Non-Qualified Stock Options or ISOs. SSARs may also be granted under the terms of the Plan. SSARs shall be granted separately from Options and the exercise of an SSAR shall not be linked in any way to the exercise of an Option and shall not affect any Option Award then outstanding. Option grants and SSARs shall contain such terms and conditions as the Committee may from time to time determine, subject to the following limitations:

(a) *Exercise Price*. The price at which shares of Common Stock may be purchased upon exercise of an Option shall be fixed by the Committee and may be equal to or more than (but not less than) the Fair Market Value of a share of the Common Stock as of the date the Option is granted; provided that this sentence shall not apply to Replacement Awards.

(b) *Base Price*. The base price of an SSAR shall be fixed by the Committee and may be equal to or more than (but not less than) the Fair Market Value of a share of the Common Stock as of the date the SSAR is granted; provided that this sentence shall not apply to Replacement Awards.

(c) *Term*. The term of each Option or SSAR will be for such period as the Committee shall determine as set forth in the Option or SSAR Award Agreement, but in no event shall the term of an Option or SSAR be greater than ten (10) years from the date of grant.

(d) *Rights of Participant*. A recipient of an Option or SSAR Award shall have no rights as a shareholder with respect to any shares issuable or transferable upon exercise thereof until the date of issuance of such shares. Except as specifically set forth in Paragraph 5(b) above, no adjustment shall be made for dividends or other distributions of cash or other property on or with respect to shares of Common Stock covered by Options or SSARs paid or payable to Participants of record prior to such issuance.

(e) *ISO Limits*. The aggregate Fair Market Value (determined on the date of grant) of Common Stock with respect to which a Participant is granted ISOs (including ISOs granted under the Predecessor Plans) which first become exercisable during any given calendar year shall not exceed $100,000. In no event shall more than 1,000,000 shares of Common Stock be available for issuance pursuant to the exercise of ISOs granted under the Plan.

7. *Exercise*. An Option or SSAR Award granted under the Plan shall be exercisable during the term of the Option or SSAR subject to such terms and conditions as the Committee shall determine and are specified in the Award Agreement, not inconsistent with the terms of the Plan. Except as otherwise provided herein, no Option or SSAR may be exercised prior to the third anniversary of the date of grant. The Committee may adopt alternative vesting and exercise rules to comply with the provisions of foreign laws. In addition, the Committee may condition the exercise of an Option or SSAR upon the attainment by the Corporation or any Affiliate, business unit or division or by the Participant of any Performance Targets set by the Committee.

(a) *Option*. To exercise an Option, the Participant must give notice to the Corporation of the number of shares to be purchased accompanied by payment of the full purchase price of such shares as set forth in Paragraph 8, pursuant to such electronic or other procedures as may be specified by the Corporation or its plan administrator from time to time. The date when the Corporation has actually received both such notice and payment shall be deemed the date of exercise of the Option with respect to the shares being purchased and the shares shall be issued as soon as practicable thereafter.

(b) *SSAR*. To exercise a SSAR, the SSAR Participant must give notice to the Corporation of the number of SSARs being exercised as provided in the SSAR Award Agreement pursuant to such electronic or other procedures as may be specified by the Corporation or its plan administrator from time to time. No payment shall be required to exercise an SSAR. The date of actual receipt by the Corporation of such notice shall be deemed to be the date of exercise of the SSAR and the shares issued in settlement of such exercise therefor shall be issued as soon as practicable thereafter. Upon the exercise of an SSAR, the SSAR Participant shall be entitled to receive from the Corporation for each SSAR being exercised that number of whole shares of Common Stock having a Fair Market Value on the date of exercise of the SSAR equal in value to the excess of (A) the Fair Market Value of a share of Common Stock on the exercise date over (B) the sum of (i) the base price of the SSAR being exercised, plus (ii) unless the Participant elects to pay such tax in cash, any amount of tax that must be withheld in connection with such exercise. Fractional shares of Common Stock shall be disregarded upon exercise of an SSAR unless otherwise determined by the Committee. The Committee may provide for SSARs to be settled in cash to the extent the Committee determines to be advisable or appropriate under foreign laws or customs.

(c) *Automatic Exercise/Surrender*. The Corporation may, in its discretion, provide in an Option or SSAR Award or adopt procedures that an Option or SSAR outstanding on the last business day of the term of such Option or SSAR (“Automatic Exercise Date”) that has a “Specified Minimum Value” shall be automatically and without further action by the Participant (or in the event of the Participant’s death, the Participant’s personal representative or estate), be exercised on the Automatic Exercise Date. Payment of the exercise price of such Option may be made pursuant to such procedures as may be approved by the Corporation from time to time and the Corporation shall deduct or withhold an amount sufficient to satisfy all taxes associated with such exercise in accordance with Paragraph 39. For purposes of this Paragraph 7(c), the term “Specified Minimum Value” means that the Fair Market Value per share of Common Stock exceeds the exercise or base price, as applicable, of a share subject to an expiring Option or SSAR by at least $0.50 cents per share or such other amount as the Corporation shall determine from time to time. The Corporation may elect to discontinue the automatic exercise of Options and SSARs pursuant to this Paragraph 7(c) at any time upon notice to a Participant or to apply the automatic exercise feature only to certain groups of Participants. The automatic exercise of an Option or SSAR pursuant to this Paragraph 7(c) shall apply only to an Option or SSAR Award that has been timely accepted by a Participant under procedures specified by the Corporation from time to time.

8. *Payment of Exercise Price*. Payment of the Option exercise price must be made in full pursuant to any of the following procedures or such other electronic or other procedures as may be specified by the Committee or its plan administrator from time to time: (i) in cash, by check or cash equivalent, (ii) by delivery to the Corporation of unencumbered shares of Common Stock owned by the Participant having a Fair Market Value not less than the exercise price, (iii) by attestation to the Corporation by the Participant of ownership of shares of Common Stock having a Fair Market Value not less than the exercise price accompanied by a request and authorization to the Corporation to deliver to the Participant upon exercise only the number of whole shares by which the number of shares covered by the Option being exercised exceeds the number of shares stated in such attestation; (iv) by delivery to the Corporation by a broker of cash equal to the exercise price of the Option upon an undertaking by the Participant to cause the Corporation to deliver to the broker some or all of the shares being acquired upon the exercise of the Option (a “Cashless Exercise”), (v) by a “net exercise” arrangement pursuant to which the Corporation will reduce the number of shares of Common Stock issued upon exercise of the Option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price and the Participant shall deliver to the Corporation a cash or other payment to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued; (vi) by such other consideration as may be approved by the Committee from time to time to the extent permitted by applicable law, or (vii) by any combination of the foregoing. The Committee may at any time or from time to time grant Options which permit only some of the foregoing forms of consideration to be used in payment of the exercise price or which otherwise restrict the use of one or more forms of consideration. Any shares transferred to the Corporation will be added to the Corporation’s treasury shares or canceled and become authorized and unissued shares of Common Stock but such shares shall not increase the shares reserved for issuance under the Plan in Paragraph 5(a) above. The number of shares of Common Stock covered by, and available for exercise under, a Participant’s Options shall be reduced by (A) shares covered by an attestation used for netting in accordance with clause (iii) above; (B) shares used to pay the exercise price pursuant to a “net exercise” in accordance with clause (v) above; (C) shares delivered to the Participant as a result of any exercise, and (D) shares withheld to satisfy tax withholding obligations.

9. *Transfers*. The Options and SSARs granted under the Plan may not be sold, transferred, hypothecated, pledged, or otherwise disposed of by any Participant except by will or by the laws of descent and distribution, or as otherwise provided herein. The Option or SSARs of any person to acquire stock and all rights thereunder shall terminate immediately if the Participant attempts to or does sell, assign, transfer, pledge, hypothecate or otherwise dispose of the Option or SSAR or any rights thereunder to any other person except as permitted herein. Notwithstanding the foregoing, a Participant may transfer any Non-Qualified Stock Option (but not ISOs or SSARs) granted under this Plan to members of the Participant's immediate family (defined as a spouse, children and/or grandchildren), or to one or more trusts for the benefit of such family members if the instrument evidencing such Option expressly so provides and the Participant does not receive any consideration for the transfer; provided that any such transferred Option shall continue to be subject to the same terms and conditions that were applicable to such Option immediately prior to its transfer (except that such transferred Option shall not be further transferred by the transferee during the transferee's lifetime).

10. *Effect of Death, Disability or Retirement*. If a Participant dies or becomes Disabled while employed by the Corporation, all Options or SSARs held by such Participant shall become immediately exercisable and the Participant or such Participant's estate or the legatees or distributees of such Participant's estate or of the Options or SSARs, as the case may be, shall have the right, on or before the earlier of the respective expiration date of an Option and SSAR or sixty (60) months following the date of such death or Disability, to exercise any or all Options or SSARs held by such Participant as of such date of death or Disability. If a Participant's employment terminates as the result of a Normal Retirement, the Participant shall have the right, on or before the earlier of the expiration date of the Option or SSAR and sixty (60) months following the date of such Normal Retirement, to purchase or acquire shares under any Options or SSARs which at the date of his or her Normal Retirement are, or within sixty (60) months following the date of Normal Retirement become, exercisable.

11. *Voluntary or Involuntary Termination*. If a Participant's employment with the Corporation is voluntarily or involuntarily terminated for any reason, other than for reasons or in circumstances specified in Paragraph 10 above or for Cause, the Participant shall have the right at any time on or before the earlier of the expiration date of the Option or SSAR or three (3) months following the effective date of such termination of employment, to exercise, and acquire shares under, any Options or SSARs which at such termination are exercisable.

12. *Termination for Cause*. If a Participant's employment with the Corporation is terminated for Cause, the Option or SSAR shall be canceled and the Participant shall have no further rights to exercise any such Option or SSAR and all of such Participant's rights thereunder shall terminate as of the effective date of such termination of employment.

C. RESTRICTED STOCK AND RESTRICTED STOCK UNIT AWARDS

13. *Grant*. Subject to the provisions and as part of the Plan, the Committee shall have the discretion and authority to make Restricted Stock Awards and Restricted Stock Unit Awards to Participants at such times, and in such amounts, as the Committee may determine in its discretion. Subject to the provisions of the Plan, grants of Restricted Stock and Restricted Stock Units shall contain such terms and conditions as the Committee may determine at the time of Award.

14. *Restrictions; Restricted Period*. At the time of each grant, the Committee may adopt such time based vesting schedules, not less than one (1) year and not longer than five (5) years from the date of the Award, and such other forfeiture conditions and Restrictions, as it may deem appropriate with respect to Awards of Restricted Stock and Restricted Stock Units, to apply during a Restricted Period as may be specified by the Committee. The Committee may in its discretion condition the vesting of Restricted Stock Awards and Restricted Stock Units upon the attainment of Performance Targets established by the Committee. No more than 5% of the aggregate number of the shares reserved for issuance under the Plan (as adjusted pursuant to Paragraph 5(b)) may be awarded as Restricted Stock Awards or Restricted Stock Unit Awards having a vesting period more rapid than annual pro rata vesting over a period of three (3) years.

15. *Issuance of Shares*.

(a) *Restricted Stock*. Shares in respect of Restricted Stock Awards shall be registered in the name of the Participant and, in the discretion of the Committee, held either in book entry form or in certificate form and deposited with the Secretary of the Corporation. A Participant shall be required to have delivered a stock power endorsed by the Participant in blank relating to the Restricted Stock covered by an Award. Upon lapse of the applicable Restrictions, as determined by the Committee, the Corporation shall deliver such shares of Common Stock to the Participant in settlement of the Restricted Stock Award. To the extent that the shares of Restricted Stock are forfeited, such shares automatically shall be transferred back to the Corporation. The Corporation will stamp any stock certificates delivered to the Participant with an appropriate legend or notations if the shares are not registered under the Securities Act, or are otherwise not free to be transferred by the Participant and will issue appropriate stop-order instructions to the transfer agent for the Common Stock, if and to the extent such stamping or instructions may then be required by the Securities Act or by any rule or regulation of the Securities and Exchange Commission issued pursuant to the Securities Act.

(b) *Restricted Stock Units*. Restricted Stock Units shall be credited as a bookkeeping entry in the name of the Participant to an account maintained by the Corporation. No shares of Common Stock will be issued to the Participant in respect of Restricted Stock Units on the date of an Award. Shares of Common Stock shall be issuable to the Participant only upon the lapse of such Restrictions as determined by the Committee. Upon such lapse and determination, the Corporation shall deliver such shares of Common Stock to the Participant in settlement of the Restricted Stock Unit Award. To the extent that a Restricted Stock Unit Award is forfeited, no shares of Common Stock shall be issued to a Participant.

16. *Dividend Equivalents and Voting Rights*. Dividend Equivalents shall not be paid on a Restricted Stock Award or Restricted Stock Unit Award during the Restricted Period. In the discretion of the Committee, Dividend Equivalents may be credited to a bookkeeping account for a Participant for distribution to Participant on or after a Restricted Stock Award or Restricted Stock Unit Award vests (such Dividend Equivalents to the extent subject to Section 409A shall be payable upon fixed dates or events in accordance with the requirements of Section 409A of the Code). An employee who receives an award of Restricted Stock shall not be entitled, during the Restricted Period, to exercise voting rights with respect to such Restricted Stock.

17. *Nontransferability.* Shares of Restricted Stock or Restricted Stock Units may not be sold, assigned, transferred, pledged or otherwise encumbered and shall not be subject to execution, attachment, garnishment or other similar legal process, except as otherwise provided in the applicable Award Agreement. Upon any attempt to sell, transfer, assign, pledge, or otherwise encumber or dispose of the Restricted Stock or Restricted Stock Units contrary to the provisions of the Award Agreement or the Plan, the Restricted Stock or Restricted Stock Unit and any related Dividend Equivalents shall immediately be forfeited to the Corporation.

18. *Termination of Employment.*

(a) *Death, Disability, Special Circumstances.* In the case of a Participant's Disability, death, or special circumstances as determined by the Committee, any purely temporal restrictions remaining with respect to Restricted Stock or Restricted Stock Unit Awards as of the date of such Disability, death, or such special circumstances, shall lapse and, if any Performance Targets are applicable, the Restricted Stock or Restricted Stock Unit Awards shall continue to vest as if the Participant's employment had not terminated until the prescribed time for determining attainment of Performance Targets has passed and the appropriate determination of attainment of Performance Targets has been made.

(b) *Normal Retirement.* If the Participant's employment with the Corporation (or an Affiliate) terminates as a result of Normal Retirement, subject to compliance with the non-competition provisions of Paragraph 43 below applicable to Normal Retirement, the Restricted Stock and Restricted Stock Unit Awards shall continue to vest as if the Participant's employment had not terminated until the earlier of (i) sixty (60) months from the date of termination, and (ii) such time as the remaining temporal restrictions lapse. If, on the date of such Normal Retirement, the Participant holds one or more performance-based Restricted Stock or Restricted Stock Unit Awards, the oldest outstanding performance-based Restricted Stock or Restricted Stock Unit Award shall remain outstanding and the Participant shall be entitled to receive on the regular payment date for such performance-based Restricted Stock or Restricted Stock Unit Award the same number of shares that the Participant would have earned had such Participant been an employee of the Corporation as of such payment date, subject to the satisfaction of the applicable Performance Targets and certification by the Committee of the attainment of such Performance Targets and the amount of the payment to the extent required by Paragraphs 30-31. With respect to any other performance-based Restricted Stock or Restricted Stock Unit Awards outstanding on the date of Normal Retirement, the Committee, or if the Committee delegates to the CEO such authority, the CEO, shall determine in its sole discretion whether the Participant is eligible to receive any shares with respect to such awards and, if so, the amount thereof, in which event such payment shall be made on the regular payment date for such performance-based Restricted Stock or Restricted Stock Unit Award following the date of the Participant's Normal Retirement. Any such payment to a Participant shall be subject to the satisfaction of the applicable Performance Targets and certification by the Committee of the attainment of such Performance Targets and the amount of the payment. Except as provided in this Paragraph 18(b), if the Participant is the subject of Normal Retirement, all performance-based Restricted Stock and Restricted Stock Unit Awards held by such Participant shall be canceled and all of the Participant's awards thereunder shall terminate as of the effective date of such Normal Retirement.

(c) *Other.* If a Participant's employment with the Corporation voluntarily or involuntarily terminates for any other reason during the Restricted Period, the Restricted Stock and Restricted Stock Unit Awards shall be forfeited on the date of such termination of employment.

19. *Cancellation.* The Committee may at any time, with due consideration to the effect on the Participant of Section 409A of the Code, require the cancellation of any Award of Restricted Stock or Restricted Stock Units in consideration of a cash payment or alternative Award under the Plan equal to the Fair Market Value of the canceled Award of Restricted Stock or Restricted Stock Units.

D. CASH PERFORMANCE AWARDS

20. *Awards and Period of Contingency*. The Committee may, concurrently with, or independently of, the granting of another Award under the Plan, in its sole discretion, grant to a Participant the opportunity to earn a Cash Performance Award payment, conditional upon the satisfaction of objective pre-established Performance Targets with respect to Performance Criteria as set forth in Paragraphs 28-31 below during a specified Performance Period. The Performance Period shall be not less than three (3) fiscal years of the Corporation, including the year in which the Cash Performance Award is made. The Corporation shall make a payment in respect of any Cash Performance Award only if the Committee shall have certified that the applicable Performance Targets have been satisfied for a Performance Period except as provided in Paragraphs 30-31. The aggregate maximum cash payout for any business unit within the Corporation or an Affiliate or the Corporation as a whole shall not exceed a fixed percentage of the value created at the relevant business unit during the Performance Period, determined using such criteria as may be specified by the Committee, such percentages and dollar amounts to be determined by the Committee annually when Performance Targets and Performance Criteria are established. Cash Performance Awards shall be paid within two and one-half months following the end of the calendar year in which the relevant Performance Period ends. Cash Performance Awards may not be transferred by a Participant except by will or the laws of descent and distribution.

21. *Effect of Death or Disability*. If a Participant dies or becomes Disabled while employed by the Corporation (or an Affiliate), then, the Participant (or the Participant's estate or the legatees or distributees of the Participant's estate, as the case may be) shall be entitled to receive on the payment date following the end of the Performance Period, the cash payment that the Participant would have earned had the Participant then been an employee of the Corporation, multiplied by a fraction, the numerator of which is the number of months the Participant was employed by the Corporation during the Performance Period and the denominator of which is the number of months of the Performance Period (treating fractional months as whole months in each case). Except as provided in Paragraphs 30-31, such payment shall be subject to satisfaction of the applicable Performance Targets and certification by the Committee of the attainment of such Performance Targets.

22. *Effect of Normal Retirement.* If a Participant's employment with the Corporation (or an Affiliate) terminates as a result of Normal Retirement and on the date of such Normal Retirement the Participant holds one or more Cash Performance Awards, the oldest outstanding Cash Performance Award shall remain outstanding and the Participant shall be entitled to receive on the regular payment date for such Cash Performance Award the same payment that the Participant would have earned had such Participant been an employee of the Corporation as of such date, subject to the satisfaction of the applicable Performance Targets and certification by the Committee of the attainment of such

Performance Targets and the amount of the payment to the extent required by Paragraphs 30-31. With respect to any other Cash Performance Awards outstanding on the date of Normal Retirement, the Committee, or if the Committee delegates to the CEO such authority, the CEO, shall determine in its sole discretion whether the Participant is eligible to receive any payment with respect to such awards and, if so, the amount thereof, in which event such payment shall be made on the regular payment date for such Cash Performance Awards following the date of the Participant's Normal Retirement. Any such payment to a Participant shall be subject to the satisfaction of the applicable Performance Targets and certification by the Committee of the attainment of such Performance Targets and the amount of the payment. Except as provided in this Paragraph 22, if the Participant is the subject of Normal Retirement, all Cash Performance Awards held by such Participant shall be canceled and all of the Participant's awards thereunder shall terminate as of the effective date of such Normal Retirement.

23. *Effect of Other Terminations of Employment*.

(a) *General Termination*. If a Participant's employment with the Corporation is terminated for any other reason, whether voluntary, involuntary, or for Cause other than a termination described in Paragraphs 21-22 above or in Paragraph 23(b) below, then his or her outstanding Cash Performance Awards shall be canceled and all of the Participant's rights under any such award shall terminate as of the effective date of the termination of such employment.

(b) *Pre-Payment Termination*. If, after the end of a Performance Period and before the date of payment of any final Cash Performance Award, a Participant's employment is terminated, whether voluntarily or involuntarily for any reason other than for Cause, the Participant shall be entitled to receive on the payment date the cash payment that the Participant would have earned had the Participant continued to be an employee of the Corporation as of the payment date, subject to the satisfaction of the applicable Performance Targets and certification by the Committee of the attainment of such Performance Targets and the amount of the payment.

E. PERFORMANCE SHARE AWARDS

24. *Awards and Period of Contingency*. The Committee may, concurrently with, or independently of, the granting of another Award under the Plan, in its sole discretion, grant to a Participant a Performance Share Award conditional upon the satisfaction of objective pre-established Performance Targets with respect to Performance Criteria as set forth in Paragraphs 28-31 below during a Performance Period of not less than three (3) fiscal years of the Corporation, including the year in which the conditional award is made. Any such grant may set a specific number of Performance Shares that may be earned, or a range of Performance Shares that may be earned, depending on the degree of achievement of Performance Targets pre-established by the Committee. Performance Share Awards shall be paid within two and one-half months following the end of the calendar year in which the relevant Performance Period ends. Except as provided in Paragraphs 30-31, the Corporation shall issue Common Stock in payment of Performance Share Awards only if the Committee shall have certified that the applicable Performance Targets have been satisfied at the end of a Performance Period. Prior to the issuance of shares of Common Stock at the end of a Performance Period, a Performance Share Award shall be credited as a bookkeeping entry in the name of the Participant in an account maintained by the Corporation. No shares of Common Stock will be issued to the Participant in respect of a Performance Share Award on the date of an Award. A Participant shall not be the legal or beneficial owner of shares subject to a Performance Share Award and shall not have any voting rights or rights to distributions with respect to such shares prior to the issuance of shares at the end of the Performance Period, provided that the Committee may specify that the Participant is entitled to receive Dividend Equivalents. A Participant may not transfer a Performance Share Award except by will or the laws of descent and distribution. The Committee may, in its discretion, credit a Participant with Dividend Equivalents with respect to a Performance Share Award.

25. *Effect of Death or Disability.* If a Participant in the Plan holding a Performance Share Award dies or becomes Disabled while employed by the Corporation (or an Affiliate), then the Participant (or the Participant's estate or the legatees or distributes of the Participant's estate, as the case may be) shall be entitled to receive on the payment date at the end of the Performance Period, that number of shares of Common Stock that the Participant would have earned had the Participant then been an employee of the Corporation, multiplied by a fraction, the numerator of which is the number of months the Participant was employed by the Corporation during the Performance Period and the denominator of which is the number of months of the Performance Period (treating fractional months as whole

months in each case). Except as provided in Paragraphs 30-31, such payment shall be subject to satisfaction of the applicable Performance Targets and certification by the Committee of the attainment of such Performance Targets and the amount of payment.

26. *Effect of Normal Retirement*. If a Participant's employment with the Corporation (or an Affiliate) terminates as a result of Normal Retirement and on the date of such Normal Retirement, the Participant holds one or more Performance Share Awards, the oldest outstanding Performance Share Award shall remain outstanding and the Participant shall be entitled to receive on the regular payment date for such Performance Share Award the same number of shares that the Participant would have earned had such Participant been an employee of the Corporation as of such date, subject to the satisfaction of the applicable Performance Targets and certification by the Committee of the attainment of such Performance Targets and the amount of the payment to the extent required by Paragraphs 30-31. With respect to any other Performance Share Awards outstanding on the date of Normal Retirement, the Committee, or if the Committee delegates to the CEO such authority, the CEO, shall determine in its sole discretion whether the Participant is eligible to receive any shares with respect to such awards and, if so, the amount thereof, in which event such payment shall be made on the regular payment date for such Performance Share Awards following the date of the Participant's Normal Retirement. Any such payment to a Participant shall be subject to the satisfaction of the applicable Performance Targets and certification by the Committee of the attainment of such Performance Targets and the amount of the payment. Except as provided in this Paragraph 26, if the Participant is the subject of Normal Retirement, all Performance Share Awards held by such Participant shall be canceled and all of the Participant's awards thereunder shall terminate as of the effective date of such Normal Retirement.

27. *Effect of Other Terminations of Employment.*

(a) *General Termination*. If a Participant's employment with the Corporation is terminated for any reason, whether voluntary, involuntary, or for Cause, other than those terminations described in Paragraphs 25-26 above or in Paragraph 27(b) below, then his or her outstanding Performance Share Awards shall be canceled and all of the Participant's rights under any such award shall terminate as of the effective date of the termination of such employment.

(b) *Pre-Payment Termination*. If, after the end of a Performance Period and before the date of payment of any final award, a Participant's employment is terminated, whether voluntarily or involuntarily for any reason other than for Cause, the Participant shall be entitled to receive on the payment date the payment that the Participant would have earned had the Participant continued to be an employee of the Corporation as of the payment date, subject to the satisfaction of the applicable Performance Targets and certification by the Committee of the attainment of such performance targets and the amount of the payment to the extent required by Paragraphs 30-31.

F. PERFORMANCE CRITERIA

28. *Establishment of Performance Targets*. The Committee may, in its sole discretion, grant an Award under the Plan conditional upon the satisfaction of objective pre-established Performance Targets based on specified Performance Criteria during a Performance Period. The Performance Period for Cash Performance Awards and Performance Shares shall be not less than three (3) full fiscal years of the Corporation, including the year in which an Award is made and may be shorter in the case of other Awards but not less than one full fiscal year. Any Performance Targets established by the Committee shall include one or more objective formulas or standards for determining the level or levels of achievement of the Performance Targets that must be achieved in order for payment to be made with respect to an Award (and any related Dividend Equivalents), and the amount of the Award (and any Dividend Equivalents) payable to a Participant if the Performance Targets are satisfied in whole or in part or exceeded. The Performance Targets may be fixed by the Committee for the Corporation as a whole or for a subsidiary, division, Affiliate, business segment, or business unit, depending on the Committee's judgment as to what is appropriate, and shall be set by the Committee not later than the earlier of the 90th day after the commencement of the period of services to which the Performance Period relates or by the time 25% of such period of services has elapsed, in either case, provided that the outcome of the Performance Targets is substantially uncertain at the time the Performance Targets are established. The Performance Targets with respect to a Performance Period need not be the same for all Participants. Performance measures and Performance Targets may differ from Participant to Participant and from Award to Award.

29. *Performance Criteria*. Performance Targets shall be based on at least one or more of the Performance Criteria listed on Exhibit A hereto that the Committee deems appropriate, as they apply to the Corporation as a whole or to a subsidiary, a division, Affiliate, business segment, or business unit thereof. The Committee may adjust, upward or downward, the Performance Targets to reflect (i) a change in accounting standards or principles, (ii) a significant acquisition or divestiture, (iii) a significant capital transaction, or (iv) any other unusual, nonrecurring items which are separately identified and quantified in the Corporation's audited financial statements, so long as such accounting change is required or such transaction or nonrecurring item occurs after the goals for the fiscal year are established, and such adjustments are stated at the time that the Performance Targets are determined. The Committee may also adjust, upward or downward, as applicable, the Performance Targets to reflect any other extraordinary item or event, so long as any such item or event is separately identified as an item or event requiring adjustment of such targets at the time the Performance Targets are determined, and such item or event occurs after the goals for the fiscal year are established.

30. *Approval and Certification*. Promptly after the close of a Performance Period, the Committee shall certify in writing the extent to which the Performance Targets have been met and shall determine on that basis the amount payable to Participant in respect of an Award. The Committee shall have the discretion to approve proportional or adjusted Awards under the Plan to address situations where a Participant joined the Corporation or an Affiliate, or transferred or is promoted within the Corporation or an Affiliate, during a Performance Period. The Committee may, in its sole discretion, elect to make a payment under an Award to a Disabled Participant or to the Participant's estate (or to legatees or distributees, as the case may be, of the Participant's estate) in the case of death or upon a Change in Control, without regard to actual attainment of the Performance Targets (or the Committee's certification thereof).

31. *Committee Discretion*.

(a) *Negative Discretion*. The Committee shall have the discretion to decrease the amount payable under any Award made under the Plan upon attainment of a Performance Target. The Committee shall also have the discretion to decrease or increase the amount payable upon attainment of the Performance Target to take into account the effect on an Award of any unusual, non-recurring circumstance, extraordinary items, change in accounting methods, or other factors to the extent provided in Exhibit A hereto.

(b) *Positive Adjustment*. In its discretion, the Committee may, either at the time it grants an Award or at any time thereafter, provide for the positive adjustment of the formula applicable to an Award granted to a Participant to reflect such Participant's individual performance in his or her position with the Corporation or an Affiliate or such other factors as the Committee may determine.

G. NON-EMPLOYEE DIRECTORS

32. *Non-Employee Director Compensation*. The Board shall determine from time to time the amount and form of compensation to be paid to Non-Employee Directors for serving as a member of the Board. The percentage of Non-Employee Directors' compensation to be paid in cash, Directors' Shares, or in other forms of compensation shall be determined by the Board from time to time. No Non-Employee Director may be granted, during any calendar year, Awards having a Fair Market Value (determined on the date of grant) that exceeds $500,000. The independent members of the Board may make exceptions to this limit for a non-executive chair of the Board, provided that the Non-Employee Director receiving such additional compensation may not participate in the decision to award such compensation. In addition to the annual compensation of Non-Employee Directors, the Board may also authorize one-time grants of Directors' Shares to Non-Employee Directors, or to an individual upon joining the Board, on such terms as it shall deem appropriate, subject to the limitation in the foregoing sentence.

33. *Directors' Shares*. Except as otherwise provided in Paragraph 34, each Director who is a Non-Employee Director on November 15 of each calendar year shall be issued on November 15 of that year (or the first trading day thereafter if November 15 is not a trading day on the principal exchange on which the Common Stock then regularly trades) that number of Directors' Shares as shall have been determined by the Board for that year. The number of shares of Common Stock to be awarded to a Non-Employee Director shall be determined by dividing the dollar amount of annual compensation to be paid in shares by the Fair Market Value of the Common Stock on the date of grant. Any individual who serves as a Non-Employee Director during a calendar year but ceases to be a Director prior

to November 15 of such year shall be issued a pro rata number of Directors' Shares based on the number of full and partial months that the individual served as a Director for that year and the amount of compensation to be paid in Directors Shares as determined by the Board for that year, with such shares to be issued as of, and the number of such shares to be determined on the basis of the Fair Market Value of the Common Stock on, the date he or she ceases to be a Director (or if such date is not a trading date, the next such trading day on the principal exchange on which the Common Stock then regularly trades); provided that the Board may determine that any Non-Employee Director removed for cause (as determined by the Board) at any time during any calendar year shall forfeit the right to receive Directors' Shares for that year.

34. *Deferred Stock Units. A Non-Employee* Director may elect to defer receipt of his or her Directors' Shares in accordance with such procedures as may from time to time be prescribed by the Committee. A deferral election shall be valid only if it is delivered prior to the first day of the calendar year in which the services giving rise to the Directors' Shares are to be performed (or such other date as the Committee may determine for the year in which an individual first becomes a Non-Employee Director). A Participant's deferral election shall become irrevocable as of the last date the deferral could be delivered or such earlier date as may be established by the Committee. A Non-Employee Director may revoke or change a deferral election at any time prior to the date the election becomes irrevocable, subject to such restrictions as the Committee may establish from time to time. Any such revocation or change shall be in a form and manner determined by the Committee. A Non-Employee Director's deferral election shall remain in effect and will apply to Directors' Shares in subsequent years unless and until the Director timely revokes the deferral election in accordance with such procedures as the Committee shall determine. The Committee may adopt procedures for the extension of any deferral period. If a valid deferral election is filed by a Non-Employee Director, Deferred Stock Units shall be credited as a bookkeeping entry in the name of the Non-Employee Director to an account maintained by the Corporation on the basis of one Deferred Stock Unit for each Directors' Share deferred. No shares of Common Stock shall be issued to the Non-Employee Director in respect of Deferred Stock Units at the time such shares would be issued absent such deferral. Shares of Common Stock shall be issuable to the Non-Employee Director in a lump sum upon the termination of services as a Non-Employee Director (but only if such termination constitutes a separation from service within the meaning of Code Section 409A, if applicable) or, if earlier, a specified date elected by the Non-Employee Director at the time of the deferral election. Dividend Equivalents shall be credited on Deferred Stock Units and distributed at the same time that shares of Common Stock are delivered to a Non-Employee Director in settlement of the Deferred Stock Units.

35. *Delivery of Shares*. Shares of Common Stock shall be issued to a Non-Employee Director at the time Directors' Shares are paid or Deferred Stock Units are settled by a issuing a stock certificate, or making an appropriate entry in the Corporation's shareholder records, in the name of the Non-Employee Director, evidencing such share payment. Each stock certificate will bear an appropriate legend with respect to any restrictions on transferability, if applicable. A Non-Employee Director shall not have any rights of a stockholder with respect to Directors' Shares or Deferred Stock Units until such shares of Common Stock are issued and then only from the date of issuance of such shares. No adjustments shall be made for dividends, distributions or other rights for which the record date is prior to the date of issuance of the shares. No fractional shares shall be issued as Directors' Shares. The Committee may round the number of shares of Common Stock to be delivered to the nearest whole share.

H. CHANGE IN CONTROL

36. *Change in Control.* Each Participant who is an employee of the Corporation or an Affiliate, upon acceptance of an Award under the Plan, and as a condition to such Award, shall be deemed to have agreed that, in the event any "Person" (as defined below) begins a tender or exchange offer, circulates a proxy to shareholders, or takes other steps seeking to effect a "Change in Control" of the Corporation (as defined below), such Participant will not voluntarily terminate his or her employment with the Corporation or with an Affiliate of the Corporation, as the case may be, and, unless terminated by the Corporation or such Affiliate, will continue to render services to the Corporation or such Affiliate until such Person has abandoned, terminated or succeeded in such efforts to effect a Change in Control.

(a) In the event a Change in Control occurs and, within eighteen (18) months following the date of the Change in Control, (i) a Participant experiences an involuntary termination of employment (other than for Cause, death or Disability) such that he or she is no longer in the employ of the Corporation or an Affiliate, or (ii) an event or condition that constitutes “Good Reason” occurs and the Participant subsequently resigns for Good Reason within the time limits set forth in Paragraph 36(h)(iv) below pursuant to a resignation that meets the requirements set forth in Paragraph 36(h)(iv) below:

(i) all Options and SSARs to purchase or acquire shares of Common Stock of the Corporation shall immediately vest on the date of such termination of employment and become exercisable in accordance with the terms of the appropriate Option or SSAR Award Agreement;

(ii) all outstanding Restrictions, including any Performance Targets, with respect to any Restricted Stock or Restricted Stock Unit Award or any other Award shall immediately vest or expire on the date of such termination of employment and be deemed to have been satisfied or earned “at target” as if the Performance Targets (if any) have been achieved, and such Award shall become immediately due and payable on the date of such termination of employment; and

(iii) all Cash Performance Awards and Performance Share Awards outstanding shall be deemed to have been earned at “target” as if the Performance Targets have been achieved, and such Awards shall immediately vest and become immediately due and payable on the date of such termination of employment.

(b) In the event a Change in Control occurs and a Participant’s outstanding Awards are (i) impaired in value or rights, as determined solely in the discretionary judgment of the “Continuing Directors” (as defined below), (ii) not assumed by a successor corporation or an affiliate thereof or, (iii) not replaced with an award or grant that, solely in the discretionary judgment of the Continuing Directors, preserves the existing value of the outstanding Awards at the time of the Change in Control:

(i) all Options and SSARs to purchase or acquire shares of Common Stock of the Corporation shall immediately vest on the date of such Change in Control and become exercisable in accordance with the terms of the appropriate Option or SSAR Award Agreement;

(ii) all outstanding Restrictions, including any Performance Targets, with respect to any Options, SSARs, Restricted Stock or Restricted Stock Unit Awards shall immediately vest or expire on the date of such Change in Control and be deemed to have been satisfied or earned “at target” as if the Performance Targets (if any) have been achieved, and such Award shall become immediately due and payable on the date of such Change in Control;

(iii) Cash Performance Awards and Performance Share Awards outstanding shall immediately vest and become immediately due and payable on the date of such Change in Control as follows:

(A) the Performance Period of all Cash Performance Awards and Performance Share Awards outstanding shall terminate on the last day of the month prior to the month in which the Change in Control occurs;

(B) the Participant shall be entitled to a cash or stock payment the amount of which shall be determined in accordance with the terms and conditions of the Plan and the appropriate Cash Performance Award Agreement and Performance Share Award Agreement, which amount shall be multiplied by a fraction, the numerator of which is the number of months in the Performance Period that has passed prior to the Change in Control (as determined in accordance with clause (iii)(A) above) and the denominator of which is the total number of months in the original Performance Period; and

(C) the Continuing Directors shall promptly determine whether the Participant is entitled to any Cash Performance Award or Performance Share Award, and any such Award payable shall be paid to the Participant promptly but in no event more than five (5) days after a Change in Control;

(c) The Continuing Directors shall have the sole and complete authority and discretion to decide any questions concerning the application, interpretation or scope of any of the terms and conditions of any Award or participation under the Plan in connection with a Change in Control, and their decisions shall be binding and conclusive upon all interested parties; and

(d) Other than as set forth above, the terms and conditions of all Awards shall remain unchanged.

(e) Notwithstanding the provisions of this Paragraph 36, the Committee may, in its discretion, take such other action with respect to Awards in connection with a Change in Control as it shall determine to be appropriate.

(f) If a change in the ownership or effective control of the Corporation or in the ownership of a substantial portion of the assets of the Corporation occurs (as defined in Section 409A of the Code), Deferred Stock Units shall be settled on the date of such Change in Control by the delivery of shares of Common Stock.

(g) A "Change in Control" shall be deemed to have taken place upon the occurrence of any of the following events (capitalized terms are defined below):

(i) any Person is or becomes the Beneficial Owner, directly or indirectly, of securities of the Corporation (not including in the securities beneficially owned by such Person any securities acquired directly from the Corporation or its Affiliates) representing 20% or more of either the then outstanding shares of Common Stock of the Corporation or the combined voting power of the Corporation's then outstanding securities, excluding any Person who becomes such a Beneficial Owner in connection with a transaction described in clause (A) of paragraph (iii) below; or

(ii) the following individuals cease for any reason to constitute a majority of the number of directors then serving: individuals who, on the date of the spin-off of the Corporation by Dover Corporation, constituted the Board and any new director (other than a director whose initial assumption of office is in connection with an actual or threatened election contest, including but not limited to a consent solicitation, relating to the election of directors of the Corporation) whose appointment or election by the Board or nomination for election by the Corporation's shareholders was approved or recommended by a vote of at least two-thirds (2/3) of the directors in office at the time of such approval or recommendation who either were directors on the date of the spin-off of the Corporation by Dover Corporation or whose appointment, election or nomination for election was previously so approved or recommended; or

(iii) there is consummated a merger or consolidation of the Corporation or any direct or indirect subsidiary of the Corporation with any other corporation, other than (A) any such merger or consolidation after the consummation of which the voting securities of the Corporation outstanding immediately prior to such merger or consolidation continue to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof) at least 50% of the combined voting power of the voting securities of the Corporation or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (B) any such merger or consolidation effected to implement a recapitalization of the Corporation (or similar transaction) in which no Person is or becomes the Beneficial Owner, directly or indirectly, of securities of the Corporation (not including in the securities Beneficially Owned by such Person any securities acquired directly from the Corporation or its Affiliates) representing 20% or more of either the then outstanding shares of Common Stock of the Corporation or the combined voting power of the Corporation's then outstanding securities; or

(iv) the shareholders of the Corporation approve a plan of complete liquidation or dissolution of the Corporation or there is consummated an agreement for the sale or disposition by the Corporation of all or substantially all of the Corporation's assets, other than a sale or disposition by the Corporation of all or substantially all of the Corporation's assets to an entity, at least 50% of the combined voting power of the voting securities of which are owned by shareholders of the Corporation in substantially the same proportions as their ownership of the Corporation immediately prior to such transaction or series of transactions.

(v) Notwithstanding the foregoing, with respect to an Award that is determined to be deferred compensation subject to the requirements of Section 409A of the Code, the Corporation will not make a payment upon the happening of a Change in Control unless the Corporation is deemed to have undergone a change in the ownership or effective control of the Corporation or in the ownership of a substantial portion of the assets of the Corporation (as such terms are defined in Section 409A of the Code).

(h) For purposes of this Paragraph 36, the following terms shall have the meanings indicated:

(i) "Affiliate" shall have the meaning set forth in Rule 12b-2 under Section 12 of the Exchange Act.

(ii) "Beneficial Owner" shall have the meaning set forth in Rule 13d-3 under the Exchange Act, except that a Person shall not be deemed to be the Beneficial Owner of any securities that are properly filed on a Form 13-F.

(iii) "Continuing Directors" shall have the meaning ascribed to it in the Corporation's Certificate of Incorporation.

(iv) "Good Reason" shall mean "Good Reason" due to any one or more of the following events that occur following a Change in Control, unless the Participant has consented to such action in writing: (a) a material diminution of the responsibilities, position and/or title of the Participant compared with the responsibilities, position and title, respectively, of the Participant immediately prior to the Change in Control; (b) a relocation of the Participant's principal business location to an area outside a 25 mile radius of its location immediately preceding the Change in Control and that requires that the Participant commute an additional distance of at least 20 miles more than such Participant was required to commute immediately prior to the Change in Control; or (c) a material reduction in the Participant's base salary or bonus opportunities; provided, however, that (i) Good Reason shall not be deemed to exist unless written notice of termination on account thereof is given by the Participant to the Corporation no later than sixty (60) days after the time at which the event or condition purportedly giving rise to Good Reason first occurs or arises; and (ii) if there exists (without regard to this clause (ii)) an event or condition that constitutes Good Reason, the Corporation shall have thirty (30) days from the date notice of such a termination is given to cure such event or condition and, if the Corporation does so, such event or condition shall not constitute Good Reason hereunder. The Participant's right to resign from employment for a Good Reason event or condition shall be waived if the Participant fails to resign within sixty (60) days following the last day of the Corporation's cure period. Notwithstanding the foregoing, if a Participant and the Corporation (or any of its Affiliates) have entered into an employment agreement or other similar agreement that specifically defines "Good Reason," then with respect to such Participant, "Good Reason" shall have the meaning defined in that employment agreement or other agreement.

(v) "Person" shall have the meaning given in Section 3(a)(9) of the Exchange Act, as modified and used in Sections 13(d) and 14(d) thereof, except that such term shall not include (i) the Corporation or any of its Affiliates, (ii) a trustee or other fiduciary holding securities under an employee benefit plan of the Corporation or any of its Affiliates, (iii) an underwriter temporarily holding securities pursuant to an offering of such securities or (iv) a corporation owned, directly or indirectly, by the shareholders of the Corporation in substantially the same proportions as their ownership of stock of the Corporation.

I. GENERAL PROVISIONS

37. *Legal Compliance*.

(a) *Section 16(b) of the Exchange Act*. All elections and transactions under this Plan by persons subject to Section 16 of the Exchange Act involving shares of Common Stock are intended to comply with any applicable exemptive condition under Rule 16b-3 and the Committee shall interpret and administer these guidelines in a manner consistent therewith. The Committee may establish and adopt electronic or other administrative guidelines, designed to facilitate compliance with Section 16(b) of the Exchange Act, as it may deem necessary or proper for the administration and operation of this Plan and the transaction of business hereunder. If an officer or Director (as defined in Rule 16a-1) is designated by the Committee to receive an Award, any such Award shall be deemed approved by the Committee and shall be deemed an exempt purchase under Rule 16b-3. Any provisions in this Plan or an Award Agreement inconsistent with Rule 16b-3 shall be inoperative and shall not affect the validity of this Paragraph 37(a). Notwithstanding anything herein to the contrary, if the grant of any Award or the payment of a share of Common Stock with respect to an Award or any election with regard thereto results or would result in a violation of Section 16(b) of the Exchange Act, any such grant, payment or election shall be deemed to be amended to comply therewith, and to the extent such grant, payment or election cannot be amended to comply therewith, such grant, payment or election shall be immediately canceled and the Participant shall not have any rights thereto.

(b) *Securities Laws*. The grant of Awards and the issuance of shares of Common Stock pursuant to any Award shall be subject to compliance with all applicable requirements of federal, state, and foreign law with respect to such securities and the requirements of any stock exchange or market system upon which the Common Stock may then be listed. In addition, no Award may be exercised or shares issued pursuant to an Award unless (i) a registration statement under the Securities Act shall at the time of such exercise or issuance be in effect with respect to the shares issuable pursuant to the Award or (ii) in the opinion of legal counsel to the Corporation, the shares issuable pursuant to the Award may be issued in accordance with the terms of an applicable exemption from the registration requirements of the Securities Act. The inability of the Corporation to obtain from any regulatory body having jurisdiction the authority, if any, deemed by the Corporation's legal counsel to be necessary to the lawful issuance and sale of any shares hereunder shall relieve the Corporation of any liability in respect of the failure to issue or sell such shares as to which such requisite authority shall not have been obtained. As a condition to issuance of any Common Stock, the Corporation may require the Participant to satisfy any qualifications that may be necessary or appropriate, to evidence compliance with any applicable law or regulation, and to make any representation or warranty with respect thereto as may be requested by the Corporation.

(c) *Registration*. The Corporation will stamp stock certificates delivered to the shareholder with an appropriate legend if the shares of Common Stock are not registered under the Securities Act, or are otherwise not free to be transferred by the Participant and will issue appropriate stop-order instructions to the transfer agent for the Common Stock, if and to the extent such stamping or instructions may then be required by the Securities Act or by any rule or regulation of the Securities and Exchange Commission issued pursuant to the Securities Act.

(d) *Blackout Period*. Options and SSARs may not be exercised during any period prohibited by the Corporation's stock trading policies or applicable securities laws. A Participant may not sell any shares acquired under the Plan during any period prohibited by the Corporation's stock trading policies. The Committee may, in its discretion, extend the term of an Award that would otherwise expire during a blackout period for the length of the blackout period plus ten (10) trading days after the expiration of the blackout period so that a Participant does not lose the benefit of the Award as the result of the restrictions on exercise or sales of shares of Common Stock during the blackout period.

38. *Substitution or Assumption of Awards in Corporate Transactions*. The Committee may grant Awards under the Plan in connection with the acquisition, whether by purchase, merger, consolidation or other corporate transaction, of the business or assets of any corporation or other entity, in substitution for awards previously granted by such corporation or other entity or otherwise. The Committee may also assume any previously granted awards of an employee, director, consultant or other service provider of another corporation or entity that becomes a Participant by reason of such corporation transaction. The terms and conditions of the substituted or assumed awards may vary from the terms and conditions that would otherwise be required by the Plan solely to the extent the Committee deems necessary for such purpose. To the extent permitted by applicable law and the listing requirements of the NYSE or other exchange or securities market on which the shares of Common Shares are listed, any such substituted or assumed awards shall not reduce the share reserve set forth in Paragraph 5.

39. *Withholding Taxes.* The Corporation and its Affiliates shall make arrangements for the collection of any minimum Federal, State, foreign, or local taxes of any kind required to be withheld with respect to any transactions effected under the Plan. The obligations of the Corporation under the Plan shall be conditional on satisfaction of such withholding obligations. The Corporation shall have no obligation to deliver shares of Common Stock, to release shares of Common Stock from an escrow established pursuant to an Award Agreement, or to make any payment in cash under

the Plan until the Corporation's or its Affiliates' tax withholding obligations have been satisfied by the Participant. The Corporation, to the extent permitted by law, shall have the right to deduct from any payment of any kind otherwise due to or with respect to a Participant through payroll withholding, cash payment or otherwise, including by means of a Cashless Exercise of an Option, an amount up to the maximum statutory tax rate in the applicable jurisdictions as determined by the Corporation. The Corporation may, in its discretion require that all or a portion of such shares be sold to satisfy the Corporation's withholding obligations under the Plan. The Corporation shall have the right, but not the obligation, to deduct from the shares of Common Stock issuable to a Participant upon the exercise or settlement of an Award, or to accept from the Participant the tender of, a number of whole shares of Common Stock having a Fair Market Value, as determined by the Corporation, equal to all or any part of the tax withholding obligations of the Corporation or any Affiliate.

40. *Effect of Recapitalization or Reorganization.* The obligations of the Corporation with respect to any grant or Award under the Plan shall be binding upon the Corporation, its successors or assigns, including any successor or resulting corporation either in liquidation or merger of the Corporation into another corporation owning all the outstanding voting stock of the Corporation or in any other transaction whether by merger, consolidation or otherwise under which such succeeding or resulting corporation acquires all or substantially all the assets of the Corporation and assumes all or substantially all its obligations, unless Awards are terminated in accordance with Paragraph 36.

41. *Employment Rights and Obligations*. Neither the making of any grant or Award under the Plan, nor the provisions related to a Change in Control of the Corporation or a Person seeking to effect a change in control of the Corporation, shall alter or otherwise affect the rights of the Corporation to change any and all the terms and conditions of employment of any Participant including, but not limited to, the right to terminate such Participant's employment. Neither this Plan nor the grant of any Award hereunder shall give any Participant any right with respect to continuance of employment by the Corporation or any Affiliate, nor shall they be a limitation in any way on the right of the Corporation or any Affiliate by which an employee is employed to terminate his or her employment at any time. The provisions of Awards need not be the same with respect to each Participant, and such Awards to individual Participants need not be the same in subsequent years.

42. *Rights as a Stockholder*. A Participant shall have no rights as a stockholder with respect to any shares of Common Stock covered by an Award until the date of the issuance of such shares (as evidenced by the appropriate entry on the books of the Corporation or of a duly authorized transfer agent of the Corporation). No adjustment shall be made for dividends, distributions or other rights for which the record date is prior to the date such shares are issued, except as provided with respect to Dividend Equivalents or as provided in the Plan or an Award Agreement.

43. *Non-compete*.

(a) *Non-Competition*. The enhanced benefits of any Normal Retirement or Early Retirement (the Early Retirement Provisions of this Paragraph 43 are applicable only to Dover Replacement Awards as set forth in Exhibit B to the Plan) provided to a Participant, unless such benefits are waived in writing by the Participant, shall be subject to the provisions of this Paragraph 43. Any Participant who is the beneficiary of any such Normal Retirement or Early Retirement shall be deemed to have expressly agreed not to engage, directly or indirectly in any capacity, in any business in which the Corporation or any Affiliate at which such Participant was employed at any time in the three (3) years immediately prior to termination of employment was engaged, as the case may be, in the geographic area in which the Corporation or such Affiliate actively carried on business at the end of the Participant's employment there, for the period with respect to which such Normal Retirement or Early Retirement affords the Participant enhanced benefits, which period shall be, (a) with respect to Options or SSARs, the additional period allowed the Participant for the vesting and exercise of Options or SSARs outstanding at termination of employment, (b) with respect to Restricted Stock or Restricted Stock Unit Awards, the period remaining after the Participant's termination of employment until the end of the original Restricted Period for such Award, and (c) with respect to Cash Performance Awards and Performance Shares Awards granted under the Plan, the period until the payment date following the end of the last applicable Performance Period.

(b) *Breach.* In the event that a Participant shall fail to comply with the provisions of this Paragraph 43, the Normal Retirement or Early Retirement shall be automatically rescinded and the Participant shall forfeit the enhanced benefits referred to above and shall return to the Corporation the economic value theretofore realized by reason of such benefits as determined by the Committee. If the provisions of this Paragraph 43 or the corresponding provisions of an Award shall be unenforceable as to any Participant, the Committee may rescind the benefits of any such Early Retirement with respect to such Participant.

(c) *Other Termination.* The Committee may, in its discretion, adopt such other non-competition restrictions applicable to Awards as it deems appropriate from time to time.

(d) *Revision.* If any provision of this Paragraph 43 or the corresponding provisions of an Award is determined by a court to be unenforceable because of its scope in terms of geographic area or duration in time or otherwise, the Corporation and the Participant agree that the court making such determination is specifically authorized to reduce the duration and/or geographical area and/or other scope of such provision and, in its reduced form, such provision shall then be enforceable; and in every case the remainder of this Paragraph 43, or the corresponding provisions of an Award, shall not be affected thereby and shall remain valid and enforceable, as if such affected provision were not contained herein or therein.

44. *Clawback*. Awards shall be subject to such clawback requirements and policies as may be required by applicable laws or ChampionX policies as in effect from time to time.

45. *Amendment*. Except as expressly provided in the next sentence and Paragraph 46, the Board may amend the Plan in any manner it deems necessary or appropriate (including any of the terms, conditions or definitions contained herein), or terminate the Plan at any time; provided, however, that any such termination will not affect the validity of any Awards previously made under the Plan. Without the approval of the Corporation's shareholders, the Board cannot: (a) increase the maximum number of shares covered by the Plan or change the class of employees eligible to receive any Awards; (b) extend beyond 120 months from the date of the grant the period within which an Option or SSAR may be exercised; (c) make any other amendment to the Plan that would constitute a modification, revision or amendment requiring shareholder approval pursuant to any applicable law or regulation or rule of the principal exchange on which the Corporation's shares are traded, or (d) change the class of persons eligible to receive ISOs.

46. *No Repricing Without Shareholder Approval*. Without the approval of the Corporation's shareholders, the Board cannot approve either (i) the cancellation of outstanding Options or SSARs in exchange for cash or the grant in substitution therefor of new Awards having a lower exercise or base price or (ii) the amendment of outstanding Options or SSARs to reduce the exercise price or base price thereof, except as provided in Paragraph 36 with respect to a Change in Control. This limitation shall not be construed to apply to "issuing or assuming an Option in a transaction to which Section 424(a) applies," within the meaning of Section 424 of the Code.

47. *Unfunded Plan*. This Plan is intended to constitute an "unfunded" plan for incentive and deferred compensation. With respect to any payments as to which a Participant has a fixed and vested interest but that are not yet made to a Participant by the Corporation, nothing contained herein shall give any such Participant any rights that are greater than those of a general unsecured creditor of the Corporation.

48. *Other Plans*. Nothing contained in this Plan shall prevent the Board from adopting other or additional compensation arrangements, subject to stockholder approval if such approval is required; and such arrangements may be either generally applicable or applicable only in specific cases.

49. *Other Benefits*. No Award payment under this Plan shall be deemed compensation for purposes of computing benefits under any retirement plan of the Corporation or its Affiliates nor affect any benefits under any other benefit plan now or subsequently in effect under which the availability or amount of benefits is related to the level of compensation.

50. *Death/Disability*. Subject to local laws and procedures, the Committee may request appropriate written documentation from a trustee or other legal representative, court, or similar legal body, regarding any benefit under the Plan to which the Participant is entitled in the event of such Participant's death before such representative

shall be entitled to act on behalf of the Participant and before a beneficiary receives any or all of such benefit. The Committee may also require any person seeking payment of benefits upon a Participant's Disability to furnish proof of such Disability.

51. *Successors and Assigns*. This Plan shall be binding on all successors and permitted assigns of a Participant, including, without limitation, the estate of such Participant and the executor, administrator or trustee of such estate.

52. *Headings and Captions.* The headings and captions herein are provided for reference and convenience only, shall not be considered part of this Plan, and shall not be employed in the construction of this Plan.

53. *Section 409A*.

(a) *General*. To the extent that the Committee determines that any Award granted under the Plan is, or may reasonably be, subject to Section 409A of the Code, the Award Agreement evidencing such Award shall incorporate the terms and conditions necessary to avoid the adverse consequences described in Section 409A(a)(1) of the Code (or any similar provision). To the extent applicable and permitted by law, the Plan and Award Agreements shall be interpreted in accordance with Section 409A and other interpretive guidance issued thereunder, including without limitation any other guidance that may be issued or amended after the date of grant of any Award hereunder. Notwithstanding any provision of the Plan to the contrary, in the event that the Committee determines that any Award is, or may reasonably be, subject to Section 409A and related Department of Treasury guidance (including such Department of Treasury guidance issued from time to time), the Committee may, without the Participant's consent, adopt such amendments to the Plan and the applicable Award Agreement or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, that the Committee determines are necessary or appropriate to (A) exempt the Award from Section 409A and/or preserve the intended tax treatment of the benefits provided with respect to the Award, or (B) comply with the requirements of Section 409A and related Department of Treasury guidance. Where applicable, the requirement that Awards constituting deferred compensation under Section 409A that are payable upon termination of a Participant's employment or services as a Director not be paid prior to the Participant's "separation from service" within the meaning of Section 409A are incorporated herein.

(b) *Specified Employees.* In addition, and except as otherwise set forth in the applicable Award Agreement, if the Corporation determines that any Award granted under this Plan constitutes, or may reasonably constitute, "deferred compensation" under Section 409A and the Participant is a "specified employee" of the Corporation at the relevant date, as such term is defined in Section 409A(a)(2)(B)(i), then any payment or benefit resulting from such Award will be delayed until the first day of the seventh month following the Participant's "separation from service" with the Corporation or its Affiliates within the meaning of Section 409A (or following the date of Participant's death if earlier), with all payments or benefits due thereafter occurring in accordance with the original schedule.

(c) *No Liability*. Notwithstanding anything to the contrary contained herein, neither the Corporation nor any of its Affiliates shall be responsible for, or required to reimburse or otherwise make any Participant whole for, any tax or penalty imposed on, or losses incurred by, any Participant that arises in connection with the potential or actual application of Section 409A to any Award granted hereunder.

54. *Governing Law*. The Plan and all Awards made hereunder shall be governed by and interpreted in accordance with the laws of the State of Delaware (regardless of the law that might otherwise govern under applicable Delaware principles of conflict of laws).

55. *Effective Date and Termination Date of Plan.* This Plan was first adopted by the Board of Directors of Apergy Corporation on April 18, 2018 and approved by the Board of Directors of Dover Corporation on April 18, 2018 and first became effective on May 9, 2018. Subject to the approval of the shareholders of Apergy Corporation, the effective date of this ChampionX Corporation Amended and Restated 2018 Equity and Cash Incentive Plan is the date of its adoption by the Board of Directors of Apergy Corporation pursuant to a Unanimous Written Consent. The Plan will terminate on March 24, 2030. No Award shall be granted pursuant to this Plan on or after March 24, 2030, but Awards granted prior to such date may extend beyond that date.

Exhibit A to the ChampionX 2018 Corporation Equity and Cash Incentive Plan Performance Criteria

Any Performance Targets established for purposes of conditioning the grant of an Award based on performance or the vesting of performance-based Awards shall be based on one or more of the following Performance Criteria either individually, alternatively, or in any combination applied either to the Corporation, as a whole or to a subsidiary, a division, Affiliate, business segment, or any business unit thereof, individually, alternatively, or in any combination, and measured either annually or cumulatively over a period of years, or on an absolute basis or relative to previous year's results or to a designated comparison group, in either case as specified by the Committee in the Award: (i) the attainment of certain target levels of, or a specified percentage increase in, revenues, income before income taxes and extraordinary items, income or net income, earnings before income tax, earnings before interest, taxes, depreciation and amortization, or a combination of any or all of the foregoing; (ii) the attainment of certain target levels of, or a percentage increase in, after-tax or pre-tax profits including, without limitation, those attributable to continuing and/or other operations; (iii) the attainment of certain target levels of, or a specified increase in, operational cash flow; (iv) the achievement of a certain level of, reduction of, or other specified objectives with regard to limiting the level of increase in, all or a portion of the Corporation's or an Affiliate's bank debt or other long-term or short-term public or private debt or other similar financial obligations of the Corporation or Affiliate, which may be calculated net of such cash balances and/or other offsets and adjustments as may be established by the Committee; (v) the attainment of a specified percentage increase in earnings per share or earnings per share from continuing operations; (vi) the attainment of certain target levels of, or a specified increase in, return on capital employed or return on invested capital or operating revenue or return on invested cash; (vii) the attainment of certain target levels of, or a percentage increase in, after-tax or pre-tax return on stockholders' equity; (viii) the attainment of certain target levels of, or a specified increase in, economic value added targets based on a cash flow return on investment formula; (ix) the attainment of certain target levels in the fair market value of the shares of the Corporation's Common Stock; (x) market segment share; (xi) product release schedules; (xii) new product innovation; (xiii) product or other cost reductions; (xiv) brand recognition or acceptance; (xv) product ship targets; (xvi) customer satisfaction; (xvii) total shareholder return; (xviii) return on assets or net assets; (xix) assets, operating margin or profit margin; (xx) the growth in the value of an investment in the Corporation's Common Stock assuming the reinvestment of dividends; and (xxi) such other business or other performance criteria determined appropriate by the Committee.

The Committee may provide that, in measuring achievement of Performance Targets, adjustments may be made for the following:

(i) to exclude restructuring and/or other nonrecurring charges;

(ii) to exclude exchange rate effects, as applicable, for non-U.S. dollar denominated net sales and operating earnings;

(iii) to exclude the effects of changes to generally accepted accounting principles required by the Financial Accounting Standards Board;

(iv) to exclude the effects of any statutory adjustments to corporate tax rates;

(v) to exclude the effects of any "unusual" or "infrequently occurring" events, as determined under generally accepted accounting principles or any acquisition or divestiture;

(vi) to exclude any other unusual, non-recurring gain or loss or other extraordinary item;

(vii) to respond to, or in anticipation of, any unusual or extraordinary corporate item, transaction, event or development;

(viii) to respond to, or in anticipation of, changes in applicable laws, regulations, accounting principles, or business conditions;

(ix) to exclude the dilutive effects of acquisitions or joint ventures;

(x) to assume that any business divested by the Corporation achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture;

(xi) to exclude the effect of any change in the outstanding shares of Common Stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common shareholders other than regular cash dividends;

(xii) to reflect a corporate transaction, such as a merger, consolidation, separation (including a spinoff or other distribution of stock or property by a corporation), or reorganization (whether or not such reorganization comes within the definition of such term in Section 368 of the Code);

(xiii) to reflect any partial or complete corporate liquidation; and

(xiv) such other items or events the Committee may deem appropriate.

Exhibit B to the ChampionX 2018 Corporation Equity and Cash Incentive Plan Early Retirement Provisions for Dover Replacement Awards

The Dover Replacement Awards issued under the Plan contain provisions with respect to Early Retirement, which Early Retirement provisions are not applicable to other Awards issued under the Plan. The following sets forth the special provisions of the Dover Replacement Awards with respect to Early Retirement. The provisions of this Exhibit B shall not apply to Awards that are not Dover Replacement Awards.

I. With respect to Dover Replacement Awards issued with respect to SSARs granted under the (i) Dover Corporation 2005 Equity and Cash Incentive Plan and (ii) Dover Corporation 2012 Equity and Cash Incentive Plan prior to August 6, 2014:

1. Definitions.

“Early Retirement I” shall mean the termination of a Participant’s employment with the Corporation and its Affiliates if, at the time of such termination of employment, (i) the Participant has at least ten (10) years of service with the Corporation and its Affiliates (service with an Affiliate shall be credited only for the period an Affiliate is owned by the Corporation; service with Dover Corporation and its Affiliates shall be credited for the period prior to the spin-off of ChampionX Corporation to the extent provided by the Predecessor Plans), (ii) the sum of the Participant’s years of service plus his or her age on the date of such termination equals at least sixty five (65), (iii) the Participant satisfies the notice requirements set forth in the Plan, and (iv) the Participant complies with the non-competition restrictions in Paragraph 43 of the Plan. In order to be eligible for Early Retirement I or II, a Participant must give six (6) months advance notice of retirement and must continue to be employed by the Corporation (or any Affiliate provided such Affiliate continues to be owned by the Corporation throughout the notice period) and perform his or her duties throughout such notice period. Failure to satisfy the notice requirement will render the Participant ineligible for Early Retirement I and II notwithstanding the satisfaction by the Participant of all other applicable requirements. ChampionX’s CEO shall have the authority to reduce or waive the notice requirement.

“Early Retirement II” shall mean the termination of a Participant’s employment with the Corporation and its Affiliates if, at the time of such termination of employment, (i) the Participant has at least fifteen (15) years of service with the Corporation and its Affiliates (service with an Affiliate shall be credited only for the period an Affiliate is owned by the Corporation; service with Dover Corporation and its Affiliates shall be credited for the period prior to the spin-off of ChampionX Corporation to the extent provided by the Predecessor Plans), (ii) the sum of the Participant’s years of service plus his or her age on the date of such termination equals at least seventy (70), (iii) the Participant satisfies the notice requirements set forth in the Plan, and (iv) the Participant complies with the non-competition restrictions in Paragraph 43 of the Plan. In order to be eligible for Early Retirement II, a Participant must provide advance notice of such Early Retirement, continue to provide services, and perform his or her duties throughout such notice period as set forth in the definition of Early Retirement I above. ChampionX’s CEO shall have the authority to reduce or waive the notice requirement.

“Early Retirement III” shall mean (i) the termination of a Participant’s employment with the Corporation and its Affiliates due to the sale of stock or assets of the business unit by which the Participant is employed, (ii) the Participant is so employed in good standing by the business unit through the date of such sale, and (iii) the Participant complies with the non-competition restrictions in Paragraph 43 of the Plan.

“Normal Retirement” shall mean (i) the termination of a Participant’s employment with the Corporation and its Affiliates if, at the time of such termination of employment, the Participant has attained age sixty two (62), and (ii) the Participant complies with the non-competition restrictions in Paragraph 43. In the event that the stock or assets of a business unit of the Corporation or an Affiliate that employs a Participant is sold, a Participant who has attained age 62 and remains employed by such business unit in good standing through the date of such sale, shall be treated as having terminated employment with the Corporation and its Affiliates in a Normal Retirement on the date of such sale, provided that the Participant complies with the non-compete restrictions in Paragraph 43.

2. SSARs.

If a Participant's employment terminates as the result of a Normal Retirement, the Participant shall have the right, on or before the earlier of the expiration date of the SSAR and sixty (60) months following the date of such Normal Retirement, to purchase or acquire shares under any SSARs which at the date of his or her Normal Retirement are, or within sixty (60) months following the date of Normal Retirement become, exercisable.

II. With respect to Dover Replacement Awards issued with respect to Awards granted under the Dover Corporation 2012 Equity and Cash Incentive Plan after August 6, 2014:

1. Definitions.

"Early Retirement I" shall mean the termination of a Participant's employment with the Corporation and its Affiliates if, at the time of such termination of employment, (i) the Participant has at least ten (10) years of service with the Corporation and its Affiliates (service with an Affiliate shall be credited only for the period an Affiliate is owned by the Corporation; service with Dover Corporation and its Affiliates shall be credited for the period prior to the spin-off of Apergy Corporation to the extent provided by the Predecessor Plans), (ii) the sum of the Participant's years of service plus his or her age on the date of such termination equals at least sixty five (65), (iii) the Participant has attained age fifty five (55), (iv) the Participant satisfies the notice requirements set forth in the Plan, and (v) the Participant complies with the non-competition restrictions in Paragraph 43. In order to be eligible for Early Retirement I or II, a Participant must give six (6) months advance notice of retirement and must continue to be employed by the Corporation (or any Affiliate provided such Affiliate continues to be owned by the Corporation throughout the notice period) and perform his or her duties throughout such notice period. Failure to satisfy the notice requirement will render the Participant ineligible for Early Retirement I and II notwithstanding the satisfaction by the Participant of all other applicable requirements. ChampionX's CEO shall have the authority to reduce or waive the notice requirement.

"Early Retirement II" shall mean the termination of a Participant's employment with the Corporation and its Affiliates if, at the time of such termination of employment, (i) the Participant has at least fifteen (15) years of service with the Corporation and its Affiliates (service with an Affiliate shall be credited only for the period an Affiliate is owned by the Corporation; service with Dover Corporation and its Affiliates shall be credited for the period prior to the spin-off of Apergy Corporation to the extent provided by the Predecessor Plans), (ii) the sum of the Participant's years of service plus his or her age on the date of such termination equals at least seventy (70), (iii) the Participant has attained age sixty (60), (iv) the Participant satisfies the notice requirements set forth in the Plan, and (v) the Participant complies with the non-competition restrictions in Paragraph 43. In order to be eligible for Early Retirement II, a Participant must provide advance notice of such Early Retirement, continue to provide services, and perform his or her duties throughout such notice period as set forth in the definition of Early Retirement I above. ChampionX's CEO shall have the authority to reduce or waive the notice requirement.

"Early Retirement III" shall mean (i) the termination of a Participant's employment with the Corporation and its Affiliates due to the sale of stock or assets of the business unit by which the Participant is employed, (ii) the Participant is so employed in good standing by the business unit through the date of such sale, and (iii) the Participant complies with the non-competition restrictions in Paragraph 43 of the Plan.

III. With respect to Dover Replacement Awards issued with respect to (i) SSARs granted under the Dover Corporation 2005 Equity and Cash Incentive Plan, and (ii) all Awards under the Dover Corporation 2012 Equity and Cash Incentive Plan (other than SSARs granted prior to August 6, 2014, as described in Section 1 above):

1. Options and SSARs.

If a Participant's employment terminates as the result of Early Retirement I, the Participant shall have the right, on or before the earlier of the expiration date of the Option or SSAR or twenty-four (24) months following the date of such Early Retirement I, to exercise, and acquire shares under, any Option or SSAR which at the date of Early Retirement I are, or within twenty-four (24) months following such termination become, exercisable. If a Participant's employment terminates as the result of Early Retirement II, the Participant shall have the right, on or before the earlier of the expiration date of the Option or SSAR or thirty-six (36) months following the date of such Early Retirement II, to exercise, and acquire shares under, any Option or SSAR which at the date of Early Retirement II are, or within thirty-six (36) months following such termination become, exercisable. If a Participant's employment terminates as the result of Early Retirement III, the Participant shall have the right, on or before the earlier of the expiration date of the Option or SSAR or twelve (12) months following the date of such Early Retirement III, to exercise, and acquire shares under, any Option or SSAR which at the date of Early Retirement III are, or within twelve (12) months following such termination become, exercisable. Notwithstanding the above, if a Participant eligible for Early Retirement III would also qualify for Early Retirement I or II excluding the notice requirement, the Participant shall be entitled to the benefits of Early Retirement I or II, as appropriate.

2. Restricted Stock and Restricted Stock Units

If the Participant's employment with the Corporation terminates as a result of Early Retirement, subject to compliance with the non-competition provisions of Paragraph 43 applicable to Early Retirement, the Restricted Stock and Restricted Stock Unit Awards shall continue to vest as if the Participant's employment had not terminated until the earlier of (i) twenty-four (24) months from the date of termination in the case of Early Retirement I, thirty-six (36) months from the date of termination in the case of Early Retirement II, and twelve (12) months in the case of Early Retirement III, and (ii) such time as the remaining temporal restrictions lapse. With respect to any outstanding performance-based Restricted Stock or Restricted Stock Unit Awards on the date of Early Retirement I or II, the Committee, or if the Committee delegates to the CEO such authority, the CEO, shall determine in its sole discretion whether the Participant is eligible to receive any shares with respect to such awards and, if so, the amount thereof, in which event such payment shall be made on the regular payment date for such performance-based Restricted Stock or Restricted Stock Unit Award following the date of the Participant's Early Retirement I or II. Any such payment to a Participant shall be subject to the satisfaction of the applicable Performance Targets and certification by the Committee of the attainment of such Performance Targets and the amount of the payment to the extent required by Paragraphs 30-31. Except as provided in this Paragraph, if the Participant is the subject of Early Retirement I or II, all performance-based Restricted Stock and Restricted Stock Unit Awards held by such Participant shall be canceled and all of the Participant's awards thereunder shall terminate as of the effective date of such Early Retirement. If the Participant in the Plan is the subject of Early Retirement III, all performance-based Restricted Stock and Restricted Stock Unit Awards held by such Participant shall be canceled and all of the Participant's rights thereunder shall terminate as of the effective date of such Early Retirement III. Notwithstanding the above, if a Participant eligible for Early Retirement III would also qualify for Early Retirement I or II excluding the notice requirement, the Participant shall be entitled to the benefits of Early Retirement I or II, as appropriate.

3. Performance Shares

If the Participant's employment terminates pursuant to Early Retirement I or Early Retirement II and on the date of such Early Retirement the Participant holds one or more outstanding Performance Share Awards, the Committee, or if the Committee delegates to the CEO such authority, the CEO, shall determine in its sole discretion whether the Participant shall receive any payment and, if so, the amount thereof, in which event such payment shall be made on the date or dates following the date of the Participant's Early Retirement on which the Corporation pays Performance Share Awards for the Performance Period relating to any such outstanding Performance Share Award held by such Participant. Except as provided in Paragraphs 30-31 of the Plan, any such payment to the Participant shall be subject to the satisfaction of the applicable Performance Targets, and certification by the Committee of such satisfaction and determination by the Committee of the amount of payment, and may not exceed the number of shares that the Participant would have been entitled to receive had the Participant been an employee of the Corporation on such payment date. Except as provided in this Paragraph and in Paragraph 27(b) of the Plan, if the Participant is the subject of Early Retirement I or II, all Performance Share Awards held by such Participant shall be canceled, and all of the Participant's Awards thereunder shall terminate as of the effective date of such Early Retirement. If the Participant in the Plan is the subject of Early Retirement III, all Performance Share Awards held by such Participant shall be canceled and all of the Participant's rights thereunder shall terminate as of the effective date of such Early Retirement III, except as provided in Paragraph 27(b) of the Plan. Notwithstanding the above, if a Participant eligible for Early Retirement III would also qualify for Early Retirement I or II excluding the notice requirement, the Participant shall be entitled to the benefits of Early Retirement I or II, as appropriate.

Exhibit 22.1

List of Issuer and Guarantor Subsidiaries

6.375% Senior Notes due 2026

ChampionX Corporation is the issuer of the 6.375% senior notes due May 2026 (“Senior Notes”). The following lists the issuer and the subsidiaries of ChampionX Corporation that guarantee the Senior Notes.

Entity	Jurisdiction of Formation	Role
ChampionX Corporation	Delaware	Issuer
Ace Downhole, LLC	Delaware	Guarantor
Apergy (Delaware) Formation, Inc.	Delaware	Guarantor
Apergy Artificial Lift, LLC	Delaware	Guarantor
Apergy BMCS Acquisition Corp.	Delaware	Guarantor
Apergy Energy Automation, LLC	Delaware	Guarantor
Apergy ESP Systems, LLC	Oklahoma	Guarantor
Apergy Funding Corporation	Delaware	Guarantor
Apergy USA, Inc.	Delaware	Guarantor
ChampionX Holding Inc.	Delaware	Guarantor
ChampionX LLC	Delaware	Guarantor
ChampionX U.S. 3 Inc.	Delaware	Guarantor
ChampionX U.S. 5 LLC	Delaware	Guarantor
ChampionX USA Inc.	Delaware	Guarantor
Harbison-Fischer, Inc.	Delaware	Guarantor
Honetreat Company	California	Guarantor
Norris Rods, Inc.	Delaware	Guarantor
Norriseal-Wellmark, Inc.	Delaware	Guarantor
PCS Ferguson, Inc.	Delaware	Guarantor
Quartzdyne, Inc.	Delaware	Guarantor
Spirit Global Energy Solutions, Inc.	Delaware	Guarantor
Theta Oilfield Services, Inc.	Delaware	Guarantor
UPCO, Inc.	Oklahoma	Guarantor
US Synthetic Corporation	Delaware	Guarantor
Wellmark Holdings, Inc.	Delaware	Guarantor
Windrock, Inc.	Tennessee	Guarantor

Exhibit 31.1

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13A-14(A) AND RULE 15D-14(A)
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED**

I, Sivasankaran Somasundaram, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of ChampionX Corporation (the “registrant”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (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: August 7, 2020	/s/ SIVASANKARAN SOMASUNDARAM
	Sivasankaran Somasundaram
	President and Chief Executive Officer
	(Principal Executive Officer)

Exhibit 31.2

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13A-14(A) AND RULE 15D-14(A)
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED**

I, Jay A. Nutt, certify that:

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

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (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: August 7, 2020

/s/ JAY A. NUTT

Jay A. Nutt

Senior Vice President and
Chief Financial Officer

(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
UNDER SECTION 906 OF THE SARBANES-OXLEY
ACT OF 2002, 18 U.S.C. SECTION 1350

I, Sivasankaran Somasundaram, President and Chief Executive Officer of ChampionX Corporation (the “Company”), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(a) The Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2020, as filed with the Securities and Exchange Commission (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(b) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date:	August 7, 2020	/s/ SIVASANKARAN SOMASUNDARAM
		Sivasankaran Somasundaram
		President and Chief Executive Officer (Principal Executive Officer)

Exhibit 32.2

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
UNDER SECTION 906 OF THE SARBANES-OXLEY
ACT OF 2002, 18 U.S.C. SECTION 1350**

I, Jay A. Nutt, Senior Vice President and Chief Financial Officer of ChampionX Corporation (the “Company”), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(a) The Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2020, as filed with the Securities and Exchange Commission (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(b) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 7, 2020

/s/ JAY A. NUTT

Jay A. Nutt

Senior Vice President and
Chief Financial Officer

(Principal Financial Officer)