

**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 March 31, 2019

or

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

For the transition period from _____ to _____
Commission File Number 001-03970

HARSCO

HARSCO CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

350 Poplar Church Road, Camp Hill, Pennsylvania

(Address of principal executive offices)

23-1483991

(I.R.S. employer identification number)

17011

(Zip Code)

Registrant's telephone number, including area code **717-763-7064**

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post 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 (Do not check if a smaller reporting company)

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

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value \$1.25 per share	HSC	New York Stock Exchange

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date.

Class	Outstanding at April 30, 2019
Common stock, par value \$1.25 per share	80,189,569

HARSCO CORPORATION
FORM 10-Q
INDEX

	<u>Page</u>	
<u>PART I — FINANCIAL INFORMATION</u>		
<u>Item 1.</u>	<u>Financial Statements</u>	<u>3</u>
	<u>Condensed Consolidated Balance Sheets (Unaudited)</u>	<u>3</u>
	<u>Condensed Consolidated Statements of Operations (Unaudited)</u>	<u>4</u>
	<u>Condensed Consolidated Statements of Comprehensive Income (Unaudited)</u>	<u>5</u>
	<u>Condensed Consolidated Statements of Cash Flows (Unaudited)</u>	<u>6</u>
	<u>Condensed Consolidated Statements of Equity (Unaudited)</u>	<u>7</u>
	<u>Notes to Condensed Consolidated Financial Statements (Unaudited)</u>	<u>8</u>
<u>Item 2.</u>	<u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>28</u>
<u>Item 3.</u>	<u>Quantitative and Qualitative Disclosures About Market Risk</u>	<u>35</u>
<u>Item 4.</u>	<u>Controls and Procedures</u>	<u>35</u>
<u>PART II — OTHER INFORMATION</u>		
<u>Item 1.</u>	<u>Legal Proceedings</u>	<u>36</u>
<u>Item 1A.</u>	<u>Risk Factors</u>	<u>36</u>
<u>Item 2.</u>	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	<u>36</u>
<u>Item 6.</u>	<u>Exhibits</u>	<u>36</u>
<u>SIGNATURES</u>		<u>37</u>

PART I — FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

**HARSCO CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS (Unaudited)**

(In thousands)	March 31 2019	December 31 2018
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 84,743	\$ 64,260
Restricted cash	2,942	2,886
Trade accounts receivable, net	296,795	291,213
Other receivables	51,130	54,182
Inventories	147,696	133,111
Current portion of contract assets	17,478	24,254
Other current assets	45,219	35,128
Total current assets	646,003	605,034
Property, plant and equipment, net	483,448	469,900
Right-of-use assets, net	49,584	—
Goodwill	412,449	411,552
Intangible assets, net	78,753	79,825
Deferred income tax assets	50,051	49,114
Other assets	17,273	17,442
Total assets	\$ 1,737,561	\$ 1,632,867
LIABILITIES		
Current liabilities:		
Short-term borrowings	\$ 6,426	\$ 10,078
Current maturities of long-term debt	6,538	6,489
Accounts payable	159,037	149,410
Accrued compensation	37,483	57,586
Income taxes payable	1,598	2,634
Insurance liabilities	40,830	40,774
Current portion of advances on contracts	37,014	31,317
Current portion of operating lease liabilities	12,936	—
Other current liabilities	122,721	118,708
Total current liabilities	424,583	416,996
Long-term debt	642,375	585,662
Insurance liabilities	20,384	19,575
Retirement plan liabilities	201,572	213,578
Advances on contracts	27,478	37,675
Operating lease liabilities	37,037	—
Other liabilities	48,860	46,005
Total liabilities	1,402,289	1,319,491
COMMITMENTS AND CONTINGENCIES		
HARSCO CORPORATION STOCKHOLDERS' EQUITY		
Preferred stock	—	—
Common stock	143,178	141,842
Additional paid-in capital	192,912	190,597
Accumulated other comprehensive loss	(584,425)	(567,107)
Retained earnings	1,340,878	1,298,752
Treasury stock	(805,520)	(795,821)
Total Harsco Corporation stockholders' equity	287,023	268,263
Noncontrolling interests	48,249	45,113
Total equity	335,272	313,376
Total liabilities and equity	\$ 1,737,561	\$ 1,632,867

See accompanying notes to unaudited condensed consolidated financial statements.

HARSCO CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

	Three Months Ended March 31	
	2019	2018
(In thousands, except per share amounts)		
Revenues from continuing operations:		
Service revenues	\$ 229,520	\$ 244,209
Product revenues	217,768	163,829
Total revenues	447,288	408,038
Costs and expenses from continuing operations:		
Cost of services sold	181,871	191,675
Cost of products sold	157,004	119,678
Selling, general and administrative expenses	67,029	57,083
Research and development expenses	1,262	1,239
Other expenses, net	1,876	1,822
Total costs and expenses	409,042	371,497
Operating income from continuing operations	38,246	36,541
Interest income	534	498
Interest expense	(9,739)	(9,583)
Defined benefit pension income (expense)	(1,337)	839
Income from continuing operations before income taxes and equity income	27,704	28,295
Income tax expense	(4,855)	(8,266)
Equity income of unconsolidated entities, net	20	—
Income from continuing operations	22,869	20,029
Discontinued operations:		
Loss on disposal of discontinued business	(440)	(580)
Income tax benefit related to discontinued business	108	128
Loss from discontinued operations	(332)	(452)
Net income	22,537	19,577
Less: Net income attributable to noncontrolling interests	(1,840)	(1,769)
Net income attributable to Harsco Corporation	\$ 20,697	\$ 17,808
Amounts attributable to Harsco Corporation common stockholders:		
Income from continuing operations, net of tax	\$ 21,029	\$ 18,260
Loss from discontinued operations, net of tax	(332)	(452)
Net income attributable to Harsco Corporation common stockholders	\$ 20,697	\$ 17,808
Weighted-average shares of common stock outstanding	79,907	80,650
Basic earnings (loss) per common share attributable to Harsco Corporation common stockholders:		
Continuing operations	\$ 0.26	\$ 0.23
Discontinued operations	—	(0.01)
Basic earnings per share attributable to Harsco Corporation common stockholders	\$ 0.26	\$ 0.22
Diluted weighted-average shares of common stock outstanding	81,653	83,544
Diluted earnings (loss) per common share attributable to Harsco Corporation common stockholders:		
Continuing operations	\$ 0.26	\$ 0.22
Discontinued operations	—	(0.01)
Diluted earnings per share attributable to Harsco Corporation common stockholders	\$ 0.25 ^(a)	\$ 0.21

(a) Does not total due to rounding

See accompanying notes to unaudited condensed consolidated financial statements.

HARSCO CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (Unaudited)

(In thousands)	Three Months Ended March 31	
	2019	2018
Net income	\$ 22,537	\$ 19,577
Other comprehensive income (loss):		
Foreign currency translation adjustments, net of deferred income taxes of \$1,131 and \$1,627 in 2019 and 2018, respectively	9,454	12,501
Net gain (loss) on cash flow hedging instruments, net of deferred income taxes of \$945 and \$(839) in 2019 and 2018, respectively	(3,147)	2,677
Pension liability adjustments, net of deferred income taxes of \$(342) and \$(325) in 2019 and 2018, respectively	(1,791)	(9,001)
Unrealized gain (loss) on marketable securities, net of deferred income taxes of \$(5) and \$4 in 2019 and 2018, respectively	15	(14)
Total other comprehensive income	4,531	6,163
Total comprehensive income	27,068	25,740
Less: Comprehensive income attributable to noncontrolling interests	(2,260)	(3,047)
Comprehensive income attributable to Harsco Corporation	\$ 24,808	\$ 22,693

See accompanying notes to unaudited condensed consolidated financial statements.

HARSCO CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

(In thousands)	Three Months Ended March 31	
	2019	2018
Cash flows from operating activities:		
Net income	\$ 22,537	\$ 19,577
Adjustments to reconcile net income to net cash provided (used) by operating activities:		
Depreciation	30,204	31,418
Amortization	3,045	1,934
Deferred income tax expense	595	4,635
Equity income of unconsolidated entities, net	(20)	—
Other, net	(279)	1,944
Changes in assets and liabilities:		
Accounts receivable	(3,270)	(4,848)
Inventories	(14,448)	(11,490)
Contract assets	6,770	(5,698)
Right-of-use assets	3,895	—
Accounts payable	3,099	7,340
Accrued compensation	(19,924)	(26,131)
Advances on contracts	(3,406)	(7,348)
Operating lease liabilities	(3,913)	—
Retirement plan liabilities, net	(9,403)	(12,252)
Other assets and liabilities	(644)	(7,324)
Net cash provided (used) by operating activities	14,838	(8,243)
Cash flows from investing activities:		
Purchases of property, plant and equipment	(36,407)	(26,897)
Purchase of business, net of cash acquired	680	—
Proceeds from sales of assets	1,177	377
Net payments from settlement of foreign currency forward exchange contracts	(4,091)	(3,822)
Net cash used by investing activities	(38,641)	(30,342)
Cash flows from financing activities:		
Short-term borrowings, net	(3,578)	(3,659)
Current maturities and long-term debt:		
Additions	56,998	46,000
Reductions	(1,700)	(2,944)
Sale of noncontrolling interests	876	477
Stock-based compensation - Employee taxes paid	(8,237)	(709)
Net cash provided by financing activities	44,359	39,165
Effect of exchange rate changes on cash and cash equivalents, including restricted cash	(17)	738
Net increase in cash and cash equivalents, including restricted cash	20,539	1,318
Cash and cash equivalents, including restricted cash, at beginning of period	67,146	66,209
Cash and cash equivalents, including restricted cash, at end of period	\$ 87,685	\$ 67,527

See accompanying notes to unaudited condensed consolidated financial statements.

HARSCO CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF EQUITY (Unaudited)

(In thousands, except share amounts)	Harsco Corporation Stockholders' Equity						
	Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Noncontrolling Interests	Total
	Issued	Treasury					
Balances, December 31, 2017	\$ 141,110	\$ (762,079)	\$ 180,201	\$ 1,157,801	\$ (546,582)	\$ 44,714	\$ 215,165
Adoption of new accounting standards				3,907	(1,520)		2,387
Net income				17,808		1,769	19,577
Total other comprehensive income, net of deferred income taxes of \$467					4,885	1,278	6,163
Sale of subsidiary shares to noncontrolling interest						477	477
Stock appreciation rights exercised, net 2,560 shares	5	(26)	(5)				(26)
Vesting of restricted stock units and other stock grants, net 102,695 shares	171	(683)	(171)				(683)
Amortization of unearned portion of stock-based compensation, net of forfeitures			3,285				3,285
Balances, March 31, 2018	\$ 141,286	\$ (762,788)	\$ 183,310	\$ 1,179,516	\$ (543,217)	\$ 48,238	\$ 246,345

(In thousands)	Harsco Corporation Stockholders' Equity						
	Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Noncontrolling Interests	Total
	Issued	Treasury					
Balances, December 31, 2018	\$ 141,842	\$ (795,821)	\$ 190,597	\$ 1,298,752	\$ (567,107)	\$ 45,113	\$ 313,376
Adoption of new accounting standards (See Note 2)				21,429	(21,429)		—
Net income				20,697		1,840	22,537
Sale of subsidiary shares to noncontrolling interest						876	876
Total other comprehensive income, net of deferred income taxes of \$1,729					4,111	420	4,531
Stock appreciation rights exercised, net 927 shares	2	(8)	(2)				(8)
Vesting of restricted stock units and other stock grants, net 94,229 shares	198	(1,456)	(198)				(1,456)
Vesting of performance share units, net 529,213 shares	1,136	(8,235)	(1,149)				(8,248)
Amortization of unearned portion of stock-based compensation, net of forfeitures			3,664				3,664
Balances, March 31, 2019	\$ 143,178	\$ (805,520)	\$ 192,912	\$ 1,340,878	\$ (584,425)	\$ 48,249	\$ 335,272

See accompanying notes to unaudited condensed consolidated financial statements.

HARSCO CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

1. Basis of Presentation

Harsco Corporation (the "Company") has prepared these unaudited condensed consolidated financial statements in accordance with accounting principles generally accepted in the U.S. ("U.S. GAAP") for interim financial information and with the instructions to Form 10-Q and Rule 10-01 of Regulation S-X of the Securities and Exchange Commission (the "SEC"). Accordingly, the unaudited condensed consolidated financial statements do not include all information and disclosure required by U.S. GAAP for annual financial statements. The December 31, 2018 Condensed Consolidated Balance Sheet information contained in this Quarterly Report on Form 10-Q was derived from the 2018 audited consolidated financial statements. The unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements, including the notes thereto, included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018. In the opinion of management, all adjustments (all of which are of a normal recurring nature) that are necessary for a fair statement are reflected in the unaudited condensed consolidated financial statements.

Reclassifications

Certain reclassifications have been made to prior year amounts to conform with current year classifications.

2. Recently Adopted and Recently Issued Accounting Standards

The following accounting standards have been adopted in 2019:

On January 1, 2019, the Company adopted changes issued by the Financial Accounting Standards Board ("FASB") related to accounting for leases. The changes introduce a lessee model that brings most leases onto the balance sheet. The changes also align many of the underlying principles of the new lessor model with those in the FASB's new revenue recognition standard. Furthermore, the changes address other concerns related to the current leases model such as eliminating the requirement in current guidance for an entity to use bright-line tests in determining lease classification. The changes also require lessors to increase the transparency of their exposure to changes in value of their residual assets and how they manage that exposure. The Company elected the package of practical expedients permitted under the transition, which among other items, allowed the carry forward of the historical lease classification. The Company has elected to apply the transition requirements at the January 1, 2019 effective date and therefore, comparative information has not been restated and continues to be reported under U.S. GAAP in effect for those periods. The changes had a significant impact on the Condensed Consolidated Balance Sheets upon adoption and the Company recorded Right-of-use ("ROU") assets and lease liabilities of \$53.0 million and \$53.4 million, respectively. The difference between the ROU assets and lease liabilities was recorded primarily as adjustments to other assets and liabilities where prepaid rent and deferred expenses were previously recorded. Additionally, the Company's accounting for finance leases remained consistent. The changes did not have an impact on the Company's Condensed Consolidated Statements of Operations or Condensed Consolidated Statements of Cash Flows. The discount rates used to calculate the ROU assets and lease liabilities as of the effective date were based on the remaining lease terms as of the effective date. See Note 6, Leases for additional information.

On January 1, 2019, the Company adopted changes issued by the FASB which expand and refine hedge accounting for both financial and non-financial risk components, aligns the recognition and presentation of the effects of hedging instruments and hedged items in the financial statements and includes certain targeted improvements to ease the application of current guidance related to the assessment of hedge effectiveness. Upon adoption, the Company's recognition model for the excluded component was modified from a mark-to-market approach to an amortization approach for hedging relationships. Hedging relationships entered into on or after January 1, 2019 will be under the amortization approach while those entered into before January 1, 2019 will continue to be recognized under the mark-to-market approach. As such, there was no effect of applying this election reflected as an adjustment to Accumulated other comprehensive loss with a corresponding adjustment to the opening balance of Retained earnings. Presentation and disclosure amendments are required to be applied prospectively. Other than required expanded disclosures, the adoption of these changes did not have a material impact on the Company's condensed consolidated financial statements.

On January 1, 2019, the Company adopted changes issued by the FASB which allow entities to reclassify stranded income tax effects resulting from the Tax Cuts and Jobs Act (the "Tax Act") from accumulated other comprehensive income to retained earnings in the consolidated financial statements. Under the Tax Act, deferred taxes were adjusted to reflect the reduction of the historical corporate income tax rate to the newly enacted corporate income tax rate, which left the tax effects on items within accumulated other comprehensive income stranded at historical tax rates. The adoption of these changes resulted in the Company reclassifying approximately \$21 million of stranded income tax effects into Retained earnings.

The following accounting standards have been issued and become effective for the Company at a future date:

In June 2016, the FASB issued changes which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses rather than incurred losses to estimate credit losses on certain types of financial instruments, including trade receivables. This may result in the earlier recognition of allowances for losses. The changes become effective for the Company on January 1, 2020, with early adoption permitted. Management has not yet completed the assessment of the impact of the new standard on the Company's condensed consolidated financial statements.

In January 2017, the FASB issued changes that remove the second step of the annual goodwill impairment test, which requires a hypothetical purchase price allocation. The changes provide that the amount of goodwill impairment will be equal to the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. All other goodwill impairment guidance remains largely unchanged. The same one-step impairment test will be applied to goodwill at all reporting units, even those with zero or negative carrying amounts. Entities will be required to disclose the amount of goodwill at reporting units with zero or negative carrying amounts. The changes become effective for the Company on January 1, 2020. Management has determined that these changes will not have a material impact on the Company's condensed consolidated financial statements. However, should the Company be required to record a goodwill impairment charge in future periods, the amount recorded may differ compared to any amounts that might be recorded under current practice.

In August 2018, the FASB issued changes which modify the disclosure requirements for fair value measurements. The amendments in this update remove the requirement to disclose the amount of, and reasons for, transfers between Level 1 and Level 2 of the fair value hierarchy; the policy for timing of transfers between levels; and the valuation processes for Level 3 fair value measurements. The changes require disclosure of changes in unrealized gains and losses for the period included in other comprehensive income (loss) for recurring Level 3 fair value measurements held at the end of the reporting period and the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. The changes become effective for the Company on January 1, 2020. Other than required expanded disclosures, the adoption of these changes will not have a material impact on the Company's condensed consolidated financial statements.

In August 2018, the FASB issued changes which modify the disclosure requirements for employers that sponsor defined benefit pension or other post-retirement plans. The changes remove the requirements to disclose: amounts in accumulated other comprehensive income (loss) expected to be recognized as components of net periodic benefit cost over the next fiscal year; the amount and timing of plan assets expected to be returned to the employer; and the effects of a one-percentage point change in assumed health care cost trend rates. The update also requires disclosure of an explanation of the reasons for significant gains and losses related to changes in the benefit obligation for the period. The changes become effective for the Company on January 1, 2021. Management does not believe these changes will have a material impact on its condensed consolidated financial statements.

3. Acquisitions

In May 2018, the Company acquired Altek Europe Holdings Limited and its affiliated entities (collectively, "Altek"), a U.K.-based manufacturer of market-leading products that enable aluminum producers and recyclers to manage and efficiently extract value from critical byproduct streams, reduce byproduct generation and improve operating productivity. The Company acquired Altek, on a debt and cash free basis, for a purchase price of £45 million (approximately \$60 million) in cash, with the potential for up to £25 million (approximately \$33 million) in additional contingent consideration through 2021 subject to the future financial performance of Altek. The cash consideration transferred included payments of \$59.4 million, net of cash acquired and normal working capital adjustments. In addition, the Company recognized contingent consideration with an initial fair value of \$12.1 million as of the acquisition date. Altek's revenues and operating results have been included in the results of the Harsco Metals & Minerals Segment. Inclusion of pro forma financial information for this transaction is not necessary as the acquisition is immaterial to the Company's results of operations.

The initial fair value of contingent consideration was estimated using a probability simulation model, which uses assumptions and estimates to forecast a range of outcomes for the contingent consideration. Key inputs to the model include projected earnings before interest, tax, depreciation and amortization; the discount rate; the projection risk neutralization rate; and volatility, which are Level 3 data. The Company will assess these assumptions and estimates on a quarterly basis as additional data impacting the assumptions is obtained. Any changes in the fair value of contingent consideration related to updated assumptions and estimates will be recognized in the Consolidated Statements of Operations during the period in which the change occurs.

The fair value recorded for the assets acquired and liabilities assumed for Altek is as follows:

(In millions)	Final Valuation		
	June 30 2018	Measurement Period Adjustments (a)	March 31 2019
Cash and cash equivalents	\$ 1.7	\$ —	\$ 1.7
Net working capital	(1.5)	0.2	(1.3)
Property, plant and equipment	3.3	—	3.3
Intangible assets	52.5	0.2	52.7
Goodwill	20.9	1.6	22.5
Net deferred tax liabilities	(8.5)	—	(8.5)
Other liabilities	(0.3)	—	(0.3)
Total identifiable net assets of Altek	<u>\$ 68.1</u>	<u>\$ 2.0</u>	<u>\$ 70.1</u>

(a) The measurement period adjustments did not have a material impact on the Company's previously reported operating results.

The following table reflects the changes in the fair value of contingent consideration:

(In thousands)	Contingent Consideration
Balance, December 31, 2018	\$ 8,420
Fair value adjustment (b)	369
Foreign currency translation	186
Balance, March 31, 2019	<u>\$ 8,975</u>

(b) These amounts are recorded in the caption Other expenses, net on the Condensed Consolidated Statements of Operations.

4. Accounts Receivable and Inventories

Accounts receivable consist of the following:

(In thousands)	March 31 2019	December 31 2018
Trade accounts receivable	\$ 301,439	\$ 295,847
Less: Allowance for doubtful accounts	(4,644)	(4,634)
Trade accounts receivable, net	<u>\$ 296,795</u>	<u>\$ 291,213</u>
Other receivables (a)	<u>\$ 51,130</u>	<u>\$ 54,182</u>

(a) Other receivables include insurance claims, employee receivables, tax claims and other miscellaneous items not included in Trade accounts receivable, net.

The provision (benefit) for doubtful accounts related to trade accounts receivable was as follows:

(In thousands)	Three Months Ended	
	March 31 2019	March 31 2018
Provision (benefit) for doubtful accounts related to trade accounts receivable	\$ 26	\$ (46)

Inventories consist of the following:

(In thousands)	March 31 2019	December 31 2018
Finished goods	\$ 19,089	\$ 17,223
Work-in-process	21,715	21,787
Raw materials and purchased parts	82,983	72,194
Stores and supplies	23,909	21,907
Total inventories	<u>\$ 147,696</u>	<u>\$ 133,111</u>

The Company recognized an initial estimated forward loss provision related to the contracts with the federal railway system of Switzerland ("SBB") of \$45.1 million for the year ended December 31, 2016. The Company recorded an additional forward loss provision of \$1.8 million for the year ended December 31, 2018. At March 31, 2019, the entire remaining estimated forward loss provision of \$6.8 million is included in the caption Other current liabilities on the Condensed Consolidated Balance Sheets. The estimated forward loss provision represents the Company's best estimate based on currently available information. It is possible that the Company's overall estimate of costs to complete these contracts may increase, which would result in an additional estimated forward loss provision at such time, but the Company is unable to estimate any further possible loss or range of loss at this time. There are a number of key events expected to occur in 2019, including the finalization of the manufacturing designs for certain of the vehicles, and which could affect the cost estimates. Any adjustment to the cost estimates would be recorded when new information becomes available and could have a material impact on the Company's results of operations in that period.

The Company recognized \$4.7 million and \$7.9 million of revenues for the contracts with SBB at zero margin, on an over time basis, utilizing a cost-to-cost method for the three months ended March 31, 2019 and 2018, respectively. For the three months ended March 31, 2019 and 2018, consolidated product revenue gross margins were not significantly impacted by the revenue recognized under the SBB contracts. The Company has substantially completed the first contract and is approximately 30% complete on the second contract with SBB as of March 31, 2019.

5. Property, Plant and Equipment

Property, plant and equipment consists of the following:

(In thousands)	March 31 2019	December 31 2018
Land	\$ 10,515	\$ 10,621
Land improvements	15,932	16,156
Buildings and improvements	190,715	191,072
Machinery and equipment	1,566,706	1,538,166
Uncompleted construction	42,493	37,713
Gross property, plant and equipment	<u>1,826,361</u>	<u>1,793,728</u>
Less: Accumulated depreciation	<u>(1,342,913)</u>	<u>(1,323,828)</u>
Property, plant and equipment, net	<u>\$ 483,448</u>	<u>\$ 469,900</u>

6. Leases

The Company leases certain property and equipment under noncancelable lease agreements. The Company determines if a contract or arrangement contains a lease at inception. All leases are evaluated and classified as either an operating or finance lease. A lease is classified as a finance lease if any of the following criteria are met: (i) ownership of the underlying asset transfers to the Company by the end of the lease term; (ii) the lease contains an option to purchase the underlying asset that the Company is reasonably expected to exercise; (iii) the lease term is for a major part of the remaining economic life of the underlying asset; (iv) the present value of the sum of lease payments and any residual value guaranteed by the Company equals or exceeds substantially all of the fair value of the underlying asset; or (v) the underlying asset is of a specialized nature that it is expected to have no alternative use to the lessor at the end of the lease term. A lease that does not meet any of the criteria to be classified as a finance lease is classified as an operating lease.

Operating leases are included in the captions Right-of-use assets, net, Current portion of operating lease liabilities, and Operating lease liabilities on the Condensed Consolidated Balance Sheets. ROU assets and operating lease liabilities are recognized based on the present value of the future lease payments over the lease term at the commencement date. As most of the Company's leases do not provide an implicit rate for use in determining the present value of future payments, the Company uses an incremental borrowing rate that reflects the creditworthiness of the Company for a lending period commensurate to the term of the lease and the standard lending practices related to such loans in the respective jurisdiction where the underlying assets are located. This incremental borrowing rate reflects the creditworthiness of the Company for a lending period commensurate to the term of the lease and the standard lending practices related to such loans in the respective jurisdiction where the underlying assets are located. ROU assets also include any lease payments made and exclude any lease incentives and initial direct costs incurred. Lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Lease expense for minimum lease payments is recognized on a straight-line basis over the lease term, including rent abatement periods and rent holidays.

Finance leases are included in the captions Property, plant and equipment, net; Current maturities of long-term debt and Long-term debt on the Condensed Consolidated Balance Sheets. Finance lease costs are split between depreciation expense related to the asset and interest expense on the lease liability, using the effective rate charged by the lessor.

The Company has lease agreements with lease and non-lease components, which the Company has elected to account for as a single lease component. Additionally, the Company has elected not to record short-term leases, those with expected terms of twelve months or less, on the Condensed Consolidated Balance Sheets. Certain lease agreements include fixed escalations, while others include rental payments adjusted periodically for inflation. There are no material residual value guarantees or material restrictive covenants. The Company's leases, excluding short-term leases, have remaining terms of less than one year to 24.5 years, some of which include options to extend for up to 10 years, and some of which include options to terminate within one year.

The components of lease expense were as follows:

(In thousands)	Three Months Ended March 31 2019
Finance leases:	
Amortization expense	\$ 310
Interest on lease liabilities	4
Operating leases	4,608
Short-term leases	4,669
Variable lease expense	314
Total lease expense	\$ 9,905

Supplemental cash flow information related to leases was as follows:

(In thousands)	Three Months Ended March 31 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Cash flows from operating activities - Operating leases	\$ 4,670
Cash flows from financing activities - Finance leases	363
Right-of-use assets obtained in exchange for lease obligations:	
Operating leases (a)	\$ 53,750
Finance leases	373

(a) Includes ROU assets of \$53.0 million that were recorded upon adoption at January 1, 2019.

Supplemental balance sheet information related to leases was as follows:

(In thousands)	March 31 2019
Operating Leases:	
Operating lease right-of-use assets	\$ 49,584
Other current liabilities	12,936
Operating lease liabilities	37,037
Finance Leases:	
Property, plant and equipment, net	\$ 1,286
Current maturities of long-term debt	1,054
Long-term debt	945

Supplemental additional information related to leases is as follows:

(In thousands)	March 31 2019
Other information:	
Weighted average remaining lease term - Operating leases (in years)	4.42
Weighted average remaining lease term - Finance leases (in years)	2.01
Weighted average discount rate - Operating leases	6.9%
Weighted average discount rate - Finance leases	4.1%

Maturities of lease liabilities were as follows:

(In thousand)	Operating Leases	Finance Leases
Year Ending December 31st:		
2019 (excluding the three months ended March 31, 2019)	\$ 12,210	\$ 1,027
2020	12,943	631
2021	9,775	295
2022	7,563	117
2023	6,254	16
After 2023	21,576	2
Total lease payments	70,321	2,088
Less imputed interest	(20,348)	(89)
Total	\$ 49,973	\$ 1,999

As previously disclosed, under then in effect lease accounting in accordance with U.S. GAAP, future minimum payments under operating leases with noncancelable terms were as follows as of December 31, 2018:

(In thousands)	2019	2020	2021	2022	2023	After 2023
	\$ 13,985	12,204	9,448	7,706	6,201	28,442

As of March 31, 2019, the Company has an additional operating lease for property that has not yet commenced with an estimated ROU asset and lease liability of approximately \$5.0 million to be recognized upon the anticipated lease commencement in October 2019.

7. Goodwill and Other Intangible Assets

The following table reflects the changes in carrying amounts of goodwill by segment for the three months ended March 31, 2019:

(In thousands)	Harsco Metals & Minerals Segment	Harsco Industrial Segment	Harsco Rail Segment	Consolidated Totals
Balance at December 31, 2018	\$ 391,687	\$ 6,839	\$ 13,026	\$ 411,552
Foreign currency translation	897	—	—	897
Balance at March 31, 2019	\$ 392,584	\$ 6,839	\$ 13,026	\$ 412,449

The Company tests for goodwill impairment annually, or more frequently if indicators of impairment exist, or if a decision is made to dispose of a business. The Company performs the annual goodwill impairment test as of October 1 and monitors for triggering events on an ongoing basis. The Company determined that, as of March 31, 2019, no interim goodwill impairment testing was necessary.

Intangible assets included in the caption, Intangible assets, net, on the Condensed Consolidated Balance Sheets consist of the following:

(In thousands)	March 31, 2019		December 31, 2018	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Customer related	\$ 137,242	\$ 101,090	\$ 136,307	\$ 99,383
Patents	2,597	2,505	2,598	2,503
Technology related	36,572	3,599	35,831	2,681
Trade names	9,298	2,051	9,212	1,897
Other	5,929	3,640	5,865	3,524
Total	\$ 191,638	\$ 112,885	\$ 189,813	\$ 109,988

Amortization expense for intangible assets was as follows:

(In thousands)	Three Months Ended	
	March 31	
	2019	2018
Amortization expense for intangible assets	\$ 2,352	\$ 1,282

The estimated amortization expense for the next five fiscal years based on current intangible assets is as follows:

(In thousands)	2019	2020	2021	2022	2023
Estimated amortization expense (a)	\$ 9,000	\$ 8,750	\$ 8,500	\$ 8,250	\$ 8,250

(a) These estimated amortization expense amounts do not reflect the potential effect of future foreign currency exchange fluctuations.

8. Employee Benefit Plans

Defined Benefit Pension Plans Net Periodic Pension Cost (Benefit)	Three Months Ended			
	March 31			
	U.S. Plans		International Plans	
(In thousands)	2019	2018	2019	2018
Service costs	\$ 10	\$ 10	\$ 356	\$ 386
Interest costs	2,651	2,391	5,664	5,672
Expected return on plan assets	(2,593)	(3,017)	(9,517)	(11,145)
Recognized prior service costs	—	—	66	(39)
Recognized loss	1,405	1,302	3,653	3,840
Settlement/curtailment losses	—	166	—	—
Defined benefit pension plans net periodic pension cost (benefit)	\$ 1,473	\$ 852	\$ 222	\$ (1,286)

Company Contributions (In thousands)	Three Months Ended	
	March 31	
	2019	2018
Defined benefit pension plans (U.S.)	\$ 1,479	\$ 1,284
Defined benefit pension plans (International)	9,270	9,734
Multiemployer pension plans	521	501
Defined contribution pension plans	3,390	2,835

The Company's estimate of expected contributions to be paid during the remainder of 2019 for the U.S. and international defined benefit pension plans are \$7.0 million and \$11.5 million, respectively.

9. Income Taxes

Income tax expense related to continuing operations for the three months ended March 31, 2019 and March 31, 2018 was \$4.9 million and \$8.3 million, respectively.

An income tax benefit from an uncertain tax position may be recognized when it is more likely than not that the position will be sustained upon examination, based on technical merits, including resolutions of any related appeals or litigation processes. The reserve for uncertain tax positions at March 31, 2019 was \$3.5 million, including interest and penalties. Within the next twelve months, it is reasonably possible that up to \$0.1 million of unrecognized income tax benefits will be recognized upon settlement of tax examinations and the expiration of various statutes of limitations.

10. Commitments and Contingencies

Environmental

The Company is involved in a number of environmental remediation investigations and cleanups and, along with other companies, has been identified as a "potentially responsible party" for certain byproduct disposal sites. While each of these matters is subject to various uncertainties, it is probable that the Company will agree to make payments toward funding certain of these activities, and it is possible that some of these matters will be decided unfavorably to the Company. The Company has evaluated its potential liability, and its financial exposure is dependent upon such factors as the continuing evolution of environmental laws and regulatory requirements, the availability and application of technology, the allocation of cost among potentially responsible parties, the years of remedial activity required and the remediation methods selected. Other than set forth herein the Company did not have any material accruals or record any material expenses related to environmental matters during the periods presented.

The Company evaluates its liability for future environmental remediation costs on a quarterly basis. Although actual costs to be incurred at identified sites in future periods may vary from the estimates (given inherent uncertainties in evaluating environmental exposures), the Company does not expect that any costs that are reasonably possible to be incurred by the Company in connection with environmental matters in excess of the amounts accrued would have a material adverse effect on the Company's financial condition, results of operations or cash flows.

As previously disclosed, the Company has had ongoing meetings with the Supreme Council for Environment in Bahrain ("SCE") over processing a byproduct ("salt cakes") stored at the Al Hafeerah site. The Company's Bahrain operations that produced the salt cakes has ceased operations and are owned under a strategic venture for which its strategic venture partner owns a 35% minority interest. An Environmental Impact Assessment and Technical Feasibility Study were approved by the SCE during the first quarter of 2018. The Company has previously established a reserve of \$7.0 million, which represents the Company's best estimate of the ultimate costs to be incurred to resolve this matter. The Company continues to evaluate this reserve and any future change in estimated costs could be material to the Company's results of operations in any one period.

On July 27, 2018, Brazil's Federal and Rio de Janeiro State Public Prosecution Offices (MPF and MPE) filed a Civil Public Action against one of the Company's customers (CSN), the Company's Brazilian subsidiary, the Municipality of Volta Redonda, Brazil, and the Instituto Estadual do Ambiente (local environmental protection agency) seeking the implementation of various measures to limit and reduce the accumulation of customer-owned slag at the site in Brazil. On August 6, 2018, the 3rd Federal Court in Volta Redonda granted the MPF and MPE an injunction against the same parties requiring, among other things, CSN and the Company's Brazilian subsidiary to limit the volume of slag sent to the site. Because the customer owns the site and the slag located on the site, the Company believes that complying with this injunction is the steel producer's responsibility. On March 18, 2019, the Court issued an order fining the Company 5,000 Brazilian real per day (or approximately \$1,300 per day) and CSN 20,000 Brazilian real per day until the requirements of the injunction are met. This fine is not yet currently being enforced, and the Company is appealing the fine and the underlying injunction. Both the Company and CSN continue to have discussions with the governmental authorities on the injunction and the possible resolution of the underlying case. The Company does not believe that a loss relating to this matter is probable or estimable at this point.

On October 19, 2018, local environmental authorities issued an enforcement action against the Company concerning the Company's operations at a customer site in Ijmuiden, Netherlands. The enforcement action alleges violations of the Company's environmental permit at the site, which restricts the release of any visible dust emissions. The enforcement action ordered the Company to cease all violations of the permit by October 31, 2018. The authorities have issued fines of approximately \$0.3 million, with the possibility of additional fines for any future violations. The Company is vigorously contesting the enforcement action and fines and is also working with its customer to ensure the control of emissions. The Company has contractual indemnity rights from its customer, should it be required to pay the assessed fines.

Brazilian Tax Disputes

The Company is involved in a number of tax disputes with federal, state and municipal tax authorities in Brazil. These disputes are at various stages of the legal process, including the administrative review phase and the collection action phase, and include assessments of fixed amounts of principal and penalties, plus interest charges that increase at statutorily determined amounts per month and are assessed on the aggregate amount of the principal and penalties. In addition, the losing party, at the collection action or court of appeals phase, could be subject to a charge to cover statutorily mandated legal fees, which are generally calculated as a percentage of the total assessed amounts due, inclusive of penalty and interest. Many of the claims relate to value-added ("ICMS"), services and social security tax disputes. The largest proportion of the assessed amounts relate to ICMS claims filed by the State Revenue Authorities from the State of São Paulo, Brazil (the "SPRA"), encompassing the period from January 2002 to May 2005.

In October 2009, the Company received notification of the SPRA's final administrative decision regarding the levying of ICMS in the State of São Paulo in relation to services provided to a customer in the State between January 2004 and May 2005. As of March 31, 2019, the principal amount of the tax assessment from the SPRA with regard to this case is approximately \$2 million, with penalty, interest and fees assessed to date increasing such amount by an additional \$21 million. On

June 4, 2018, the Appellate Court of the State of Sao Paulo ruled in favor of the SPRA, but ruled that the assessed penalty should be reduced to approximately \$2 million. After calculating the interest accrued on the penalty, the Company estimates that this ruling reduces the current overall liability for this case to approximately \$9 million. The Company has appealed the ruling in favor of the SPRA to the Superior Court of Justice. Due to multiple court precedents in the Company's favor, as well as the Company's ability to appeal, the Company does not believe a loss is probable.

Another ICMS tax case involving the SPRA refers to the tax period from January 2002 to December 2003. In December 2018, the administrative tribunal hearing the case upheld the Company's liability. The Company plans to appeal to the judicial phase. The aggregate amount assessed by the tax authorities in August 2005 was \$6.5 million (the amounts with regard to this claim are valued as of the date of the assessment since it has not yet reached the collection phase), composed of a principal amount of \$1.5 million, with penalty and interest assessed through that date increasing such amount by an additional \$4.9 million. On December 6, 2018, the administrative tribunal reduced the applicable penalties to \$1.2 million. After calculating the interest accrued on the current penalty, the Company estimates that this ruling reduces the current overall liability for this case to approximately \$10 million. All such amounts include the effect of foreign currency translation. Due to multiple court precedents in the Company's favor the Company does not believe a loss is probable.

The Company continues to believe that sufficient coverage for these claims exists as a result of the indemnification obligations of the Company's customer and such customer's pledge of assets in connection with the October 2009 notice, as required by Brazilian law.

The Company intends to continue its practice of vigorously defending itself against these tax claims under various alternatives, including judicial appeal. The Company will continue to evaluate its potential liability with regard to these claims on a quarterly basis; however, it is not possible to predict the ultimate outcome of these tax-related disputes in Brazil. No loss provision has been recorded in the Company's condensed consolidated financial statements for the disputes described above because the loss contingency is not deemed probable, and the Company does not expect that any costs that are reasonably possible to be incurred by the Company in connection with Brazilian tax disputes would have a material adverse effect on the Company's financial condition, results of operations or cash flows.

Brazilian Labor Disputes

The Company is subject to ongoing collective bargaining and individual labor claims in Brazil through the Harsco Metals & Minerals Segment which allege, among other things, the Company's failure to pay required amounts for overtime and vacation at certain sites. The Company is vigorously defending itself against these claims; however, litigation is inherently unpredictable, particularly in foreign jurisdictions. While the Company does not currently expect that the ultimate resolution of these claims will have a material adverse effect on the Company's financial condition, results of operations or cash flows, it is not possible to predict the ultimate outcome of these labor-related disputes. As of March 31, 2019 and December 31, 2018, the Company has established reserves of \$7.0 million and \$7.1 million, respectively, on the Company's Condensed Consolidated Balance Sheets for amounts considered to be probable and estimable.

Customer Disputes

The Company may, in the normal course of business, become involved in commercial disputes with subcontractors or customers. Although results of operations and cash flows for a given period could be adversely affected by a negative outcome in these or other lawsuits, claims or proceedings, management believes that the ultimate outcome of any ongoing matters will not have a material adverse effect on the Company's financial condition, results of operations or cash flows.

Lima Refinery Litigation

On April 8, 2016, Lima Refining Company filed a lawsuit against the Company in the District Court of Harris County, Texas related to a January 2015 explosion at an oil refinery operated by Lima Refining Company. The action seeks approximately \$317 million plus interest in property damages, lost profits and business interruption damages. The action alleges the explosion occurred because of a defect in a heat exchange cooler manufactured by Hammco Corporation ("Hammco") in 2009, prior to the Company's acquisition of Hammco in 2014. The Company is vigorously contesting the allegations against it. The Company has both an indemnity right from the sellers of Hammco and liability insurance coverage under various primary and excess policies that the Company believes will be available, if necessary, to cover substantially all such liability that might ultimately be incurred in the above action. As a result, the Company believes the situation will not result in a net unreimbursed loss.

Other

The Company is named as one of many defendants (approximately 90 or more in most cases) in legal actions in the U.S. alleging personal injury from exposure to airborne asbestos over the past several decades. In their suits, the plaintiffs have named as defendants, among others, many manufacturers, distributors and installers of numerous types of equipment or products that allegedly contained asbestos.

The Company believes that the claims against it are without merit. The Company has never been a producer, manufacturer or processor of asbestos fibers. Any asbestos-containing part of a Company product used in the past was purchased from a supplier and the asbestos encapsulated in other materials such that airborne exposure, if it occurred, was not harmful and is not associated with the types of injuries alleged in the pending actions.

At March 31, 2019, there were approximately 17,127 pending asbestos personal injury actions filed against the Company. Of those actions, approximately 16,586 were filed in the New York Supreme Court (New York County), approximately 119 were filed in other New York State Supreme Court Counties and approximately 422 were filed in courts located in other states.

The complaints in most of those actions generally follow a form that contains a standard damages demand of \$20 million or \$25 million, regardless of the individual plaintiff's alleged medical condition, and without identifying any specific Company product.

At March 31, 2019, approximately 16,550 of the actions filed in New York Supreme Court (New York County) were on the Deferred/Inactive Docket created by the court in December 2002 for all pending and future asbestos actions filed by persons who cannot demonstrate that they have a malignant condition or discernible physical impairment. The remaining approximately 36 cases in New York County are pending on the Active or In Extremis Docket created for plaintiffs who can demonstrate a malignant condition or physical impairment.

The Company has liability insurance coverage under various primary and excess policies that the Company believes will be available, if necessary, to substantially cover any liability that might ultimately be incurred in the asbestos actions referred to above. The costs and expenses of the asbestos actions are being paid by the Company's insurers.

In view of the persistence of asbestos litigation in the U.S., the Company expects to continue to receive additional claims in the future. The Company intends to continue its practice of vigorously defending these claims and cases. At March 31, 2019, the Company has obtained dismissal in approximately 28,189 cases by stipulation or summary judgment prior to trial.

It is not possible to predict the ultimate outcome of asbestos-related actions in the U.S. due to the unpredictable nature of this litigation, and no loss provision has been recorded in the Company's condensed consolidated financial statements because a loss contingency is not deemed probable or estimable. Despite this uncertainty, and although results of operations and cash flows for a given period could be adversely affected by asbestos-related actions, the Company does not expect that any costs that are reasonably possible to be incurred by the Company in connection with asbestos litigation would have a material adverse effect on the Company's financial condition, results of operations or cash flows.

The Company is subject to various other claims and legal proceedings covering a wide range of matters that arose in the ordinary course of business. In the opinion of management, all such matters are adequately covered by insurance or by established reserves, and, if not so covered, are without merit or are of such kind, or involve such amounts, as would not have a material adverse effect on the financial position, results of operations or cash flows of the Company.

Insurance liabilities are recorded when it is probable that a liability has been incurred for a particular event and the amount of loss associated with the event can be reasonably estimated. Insurance reserves have been estimated based primarily upon actuarial calculations and reflect the undiscounted estimated liabilities for ultimate losses, including claims incurred but not reported. Inherent in these estimates are assumptions that are based on the Company's history of claims and losses, a detailed analysis of existing claims with respect to potential value, and current legal and legislative trends. If actual claims differ from those projected by management, changes (either increases or decreases) to insurance reserves may be required and would be recorded through income in the period the change was determined. When a recognized liability is covered by third-party insurance, the Company records an insurance claim receivable to reflect the covered liability. Insurance claim receivables are included in Other receivables on the Company's Condensed Consolidated Balance Sheets. See Note 1, Summary of Significant Accounting Policies, to the Consolidated Financial Statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018 for additional information on Accrued insurance and loss reserves.

11. Reconciliation of Basic and Diluted Shares

	Three Months Ended	
	March 31	
(In thousands, except per share amounts)	2019	2018
Income from continuing operations attributable to Harsco Corporation common stockholders	\$ 21,029	\$ 18,260
Weighted-average shares outstanding - basic	79,907	80,650
Dilutive effect of stock-based compensation	1,746	2,894
Weighted-average shares outstanding - diluted	81,653	83,544
Earnings from continuing operations per common share, attributable to Harsco Corporation common stockholders:		
Basic	\$ 0.26	\$ 0.23
Diluted	\$ 0.26	\$ 0.22

The following average outstanding stock-based compensation units were not included in the computation of diluted earnings per share because the effect was antidilutive:

	Three Months Ended	
	March 31	
(In thousands)	2019	2018
Stock appreciation rights	608	696
Performance share units	233	—

12. Derivative Instruments, Hedging Activities and Fair Value

Derivative Instruments and Hedging Activities

The Company uses derivative instruments, including foreign currency exchange forward contracts, interest rate swaps and cross-currency interest rate swaps ("CCIRs"), to manage certain foreign currency and interest rate exposures. Derivative instruments are viewed as risk management tools by the Company and are not used for trading or speculative purposes. All derivative instruments are recorded on the Condensed Consolidated Balance Sheets at fair value. The accounting for changes in the fair value of derivatives depends on the intended use of the derivative, whether the Company has elected to designate a derivative in a hedging relationship and apply hedge accounting and whether the hedging relationship has satisfied the criteria necessary to apply hedge accounting. Derivatives designated and qualifying as a hedge of the exposure to variability in expected future cash flows, or other types of forecasted transactions, are considered cash flow hedges. Hedge accounting generally provides for the matching of the timing of gain or loss recognition on the hedging instrument with the recognition of the earnings effect of the hedged forecasted transactions in a cash flow hedge. The Company may enter into derivative contracts that are intended to economically hedge certain of its risk, even though hedge accounting does not apply or the Company elects not to apply hedge accounting.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). The Company utilizes market data or assumptions that the Company believes market participants would use in valuing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique.

The fair value hierarchy distinguishes between (1) market participant assumptions developed based on market data obtained from independent sources (observable inputs), and (2) an entity's own assumptions about market participant assumptions based on the best information available in the circumstances (unobservable inputs). The fair value hierarchy consists of three broad levels, which give the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

The three levels of the fair value hierarchy are described below:

- Level 1—Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- Level 2—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates); and inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- Level 3—Inputs that are both significant to the fair value measurement and unobservable.

In instances in which multiple levels of inputs are used to measure fair value, hierarchy classification is based on the lowest level input that is significant to the fair value measurement in its entirety. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability.

The Company primarily applies the market approach for recurring fair value measurements and endeavors to utilize the best available information. Accordingly, the Company utilizes valuation techniques that maximize the use of observable inputs, such as forward rates, interest rates, the Company's credit risk and counterparties' credit risks, and which minimize the use of unobservable inputs. The Company is able to classify fair value balances based on the ability to observe those inputs. Foreign currency exchange forward contracts, interest rate swaps and CCIRs are based upon pricing models using market-based inputs (Level 2). Model inputs can be verified and valuation techniques do not involve significant management judgment.

The fair value of outstanding derivative contracts recorded as assets and liabilities on the Condensed Consolidated Balance Sheets was as follows:

(In thousands)	Balance Sheet Location	Fair Value of Derivatives Designated as Hedging Instruments	Fair Value of Derivatives Not Designated as Hedging Instruments	Total Fair Value
March 31, 2019				
Asset derivatives (Level 2):				
Foreign currency exchange forward contracts	Other current assets	\$ 2,275	\$ 5,520	\$ 7,795
Interest rate swaps	Other current assets	736	—	736
Total		<u>\$ 3,011</u>	<u>\$ 5,520</u>	<u>\$ 8,531</u>
Liability derivatives (Level 2):				
Foreign currency exchange forward contracts	Other current liabilities	\$ 121	\$ 1,426	\$ 1,547
Interest rate swaps	Other current liabilities	96	—	96
Interest rate swaps	Other liabilities	4,639	—	4,639
Total		<u>\$ 4,856</u>	<u>\$ 1,426</u>	<u>\$ 6,282</u>
December 31, 2018				
Asset derivatives (Level 2):				
Foreign currency exchange forward contracts	Other current assets	\$ 2,970	\$ 589	\$ 3,559
Interest rate swaps	Other current assets	1,331	—	1,331
Interest rate swaps	Other assets	128	—	\$ 128
Total		<u>\$ 4,429</u>	<u>\$ 589</u>	<u>\$ 5,018</u>
Liability derivatives (Level 2):				
Foreign currency exchange forward contracts	Other current liabilities	\$ 24	\$ 2,910	\$ 2,934
Interest rate swaps	Other liabilities	1,849	—	1,849
Total		<u>\$ 1,873</u>	<u>\$ 2,910</u>	<u>\$ 4,783</u>

All of the Company's derivatives are recorded on the Condensed Consolidated Balance Sheets at gross amounts and not offset. All of the Company's interest rate swaps, CCIRs and certain foreign currency exchange forward contracts are transacted under International Swaps and Derivatives Association ("ISDA") documentation. Each ISDA master agreement permits the net settlement of amounts owed in the event of default. The Company's derivative assets and liabilities subject to enforceable master netting arrangements resulted in a net liability of \$1.0 million and \$0.1 million at March 31, 2019 and December 31, 2018, respectively.

The effect of derivative instruments on the Condensed Consolidated Statements of Operations and the Condensed Consolidated Statements of Comprehensive Income:

Derivatives Designated as Hedging Instruments

(In thousands)	Amount Recognized in Other Comprehensive Income ("OCI") on Derivatives		Location of Amount Reclassified from Accumulated OCI into Income	Amount Reclassified from Accumulated OCI into Income - Effective Portion or Equity	
	Three Months Ended			Three Months Ended	
	March 31			March 31	
	2019	2018		2019	2018
Foreign currency exchange forward contracts	\$ (712)	\$ 240	Product revenues	\$ (32)	\$ (212)
Foreign currency exchange forward contracts (a)	—	—	Retained earnings	—	(1,520)
Interest rate swaps	(3,309)	3,310	Interest expense	(301)	—
Cross-currency interest rate swaps (b)	(52)	(93)	Interest expense	314	271
	<u>(4,073)</u>	<u>3,457</u>		<u>\$ (19)</u>	<u>\$ (1,461)</u>

(a) The Company has adopted the new revenue recognition standard utilizing the modified retrospective transition method, including use of practical expedients. See Note 2, Recently Adopted and Recently Issued Accounting Standards for additional information.

(b) Amounts represent changes in foreign currency translation related to balances in Accumulated other comprehensive loss.

The location and amount of gain (loss) recognized on the Condensed Consolidated Statements of Operations:

(in thousands)	Three Months Ended				
	March 31				
	2019		2018		
	Product Revenues	Interest Expense	Product Revenues	Cost of Products Sold	Interest Expense
Total amounts of income and expense line items presented in the statement of financial performance in which the effects of cash flow hedges are recorded	\$ 217,768	\$ (9,739)	\$ 163,829	\$ 119,678	\$ (9,583)
Interest rate swaps:					
Amount of gain or (loss) reclassified from accumulated other comprehensive income into income	—	301	—	—	—
Foreign exchange contracts:					
Amount of gain or (loss) reclassified from accumulated other comprehensive income into income	32	—	212	—	—
Amount excluded from effectiveness testing recognized in earnings based on changes in fair value	78	—	—	(19)	—
Cross-currency interest rate swaps:					
Amount of gain or (loss) reclassified from accumulated other comprehensive income into income	—	(314)	—	—	(271)

Derivatives Not Designated as Hedging Instruments

(In thousands)	Location of Gain (Loss) Recognized in Income on Derivatives	Amount of Gain (Loss) Recognized in Income on Derivatives for the Three Months Ended March 31(c)	
		2019	2018
Foreign currency exchange forward contracts	Cost of services and products sold	\$ 2,323	\$ (5,466)

(c) These gains (losses) offset amounts recognized in cost of services and products sold principally as a result of intercompany or third party foreign currency exposures.

Foreign Currency Exchange Forward Contracts

The Company conducts business in multiple currencies and, accordingly, is subject to the inherent risks associated with foreign exchange rate movements. Foreign currency-denominated assets and liabilities are translated into U.S. dollars at the exchange rates existing at the respective balance sheet dates, and income and expense items are translated at the average exchange rates during the respective periods.

The Company uses derivative instruments to hedge cash flows related to foreign currency fluctuations. Foreign currency exchange forward contracts outstanding are part of a worldwide program to minimize foreign currency exchange operating income and balance sheet exposure by offsetting foreign currency exposures of certain future payments between the Company and various subsidiaries, suppliers or customers. The unsecured contracts are with major financial institutions. The Company may be exposed to credit loss in the event of non-performance by the contract counterparties. The Company evaluates the creditworthiness of the counterparties and does not expect default by them. Foreign currency exchange forward contracts are used to hedge commitments, such as foreign currency debt, firm purchase commitments and foreign currency cash flows for certain export sales transactions.

Changes in the fair value of derivatives used to hedge foreign currency denominated balance sheet items are reported directly in earnings, along with offsetting transaction gains and losses on the items being hedged. Derivatives used to hedge forecasted cash flows associated with foreign currency commitments may be accounted for as cash flow hedges, as deemed appropriate, if the criteria for hedge accounting are met. Gains and losses on derivatives designated as cash flow hedges are deferred in Accumulated other comprehensive loss, a separate component of equity, and reclassified to earnings in a manner that matches the timing of the earnings impact of the hedged transactions. The ineffective portion of all hedges, if any, is recognized currently in earnings.

The recognized gains and losses offset amounts recognized in cost of services and products sold principally as a result of intercompany or third party foreign currency exposures. At March 31, 2019 and December 31, 2018, the notional amounts of foreign currency exchange forward contracts were \$444.3 million and \$423.9 million, respectively. These contracts are primarily denominated in British pounds sterling and Euros and mature through October 2021.

In addition to foreign currency exchange forward contracts, the Company designates certain loans as hedges of net investments in international subsidiaries. The Company recorded pre-tax net gains of \$4.8 million and \$9.5 million for the three months ended March 31, 2019 and March 31, 2018, respectively, in Accumulated other comprehensive loss.

Interest Rate Swaps

The Company uses interest rate swaps in conjunction with certain debt issuances in order to secure a fixed interest rate. Changes in the fair value attributed to the effect of the swaps' interest spread and changes in the credit worthiness of the counter-parties are recorded in Accumulated other comprehensive loss.

In January 2017 and February 2018, the Company entered into a series of interest rate swaps that cover the period from 2018 through 2022 and had the effect of converting \$300.0 million of the Term Loan Facility from floating-rate to fixed-rate. The fixed rates provided by the swaps replace the adjusted LIBOR rate in the interest calculation, ranging from 2.12% for 2019 to 3.12% for 2022. The total notional of the Company's interest rate swaps was \$300.0 million as of March 31, 2019.

Cross-Currency Interest Rate Swaps

The Company may use CCIRs in conjunction with certain debt issuances in order to secure a fixed local currency interest rate. Under these CCIRs, the Company receives interest based on a fixed or floating U.S. dollar rate and pays interest on a fixed local currency rate based on the contractual amounts in dollars and the local currency, respectively. At maturity, there is also the payment of principal amounts between currencies. Changes in the fair value attributed to the effect of the swaps' interest spread and changes in the credit worthiness of the counter-parties are recorded in Accumulated other comprehensive loss. Changes in value attributed to the effect of foreign currency fluctuations are recorded in the Condensed Consolidated Statements of Operations and offset currency fluctuation effects on the debt principal. The Company had no outstanding CCIRs at March 31, 2019.

Fair Value of Other Financial Instruments

The carrying amounts of cash and cash equivalents, accounts receivable, accounts payable, accrued liabilities and short-term borrowings approximate fair value due to the short-term maturities of these assets and liabilities. At March 31, 2019 and December 31, 2018, the total fair value of long-term debt (excluding deferred financing costs), including current maturities, was \$657.4 million and \$592.0 million, respectively, compared with a carrying value of \$661.5 million and \$605.4 million, respectively. Fair values for debt are based on pricing models using market-based inputs (Level 2) for similar issues or on the current rates offered to the Company for debt of the same remaining maturities.

13. Review of Operations by Segment

(In thousands)	Three Months Ended	
	March 31	
	2019	2018
Revenues From Continuing Operations		
Harsco Metals & Minerals	\$ 261,312	\$ 264,723
Harsco Industrial	117,385	83,598
Harsco Rail	68,591	59,678
Corporate	—	39
Total Revenues From Continuing Operations	\$ 447,288	\$ 408,038
Operating Income (Loss) From Continuing Operations		
Harsco Metals & Minerals	\$ 24,497	\$ 27,735
Harsco Industrial	17,030	12,421
Harsco Rail	5,389	1,952
Corporate	(8,670)	(5,567)
Total Operating Income From Continuing Operations	\$ 38,246	\$ 36,541
Depreciation and Amortization		
Harsco Metals & Minerals	\$ 28,705	\$ 29,085
Harsco Industrial	2,025	1,855
Harsco Rail	1,167	1,064
Corporate	1,352	1,348
Total Depreciation and Amortization	\$ 33,249	\$ 33,352

(In thousands)	Three Months Ended	
	March 31	
	2019	2018
Capital Expenditures		
Harsco Metals & Minerals	\$ 29,163	\$ 25,176
Harsco Industrial	2,175	1,087
Harsco Rail	3,916	430
Corporate	1,153	204
Total Capital Expenditures	\$ 36,407	\$ 26,897

Reconciliation of Segment Operating Income to Income From Continuing Operations Before Income Taxes and Equity Income

(In thousands)	Three Months Ended	
	March 31	
	2019	2018
Segment operating income	\$ 46,916	\$ 42,108
General Corporate expense	(8,670)	(5,567)
Operating income from continuing operations	38,246	36,541
Interest income	534	498
Interest expense	(9,739)	(9,583)
Defined benefit pension income (expense)	(1,337)	839
Income from continuing operations before income taxes and equity income	\$ 27,704	\$ 28,295

14. Revenue Recognition

The Company recognizes revenues to depict the transfer of promised services and products to customers in an amount that reflects the consideration the Company expects to receive in exchange for those services or products. Service revenues include the service components of the Harsco Metals & Minerals and Harsco Rail Segments. Product revenues include the Harsco Industrial Segment and the product revenues of the Harsco Metals & Minerals and Harsco Rail Segments.

A summary of the Company's revenues by primary geographical markets as well as by key product and service groups is as follows:

(In thousands)	Three Months Ended				
	March 31, 2019				
	Harsco Metals & Minerals Segment	Harsco Industrial Segment	Harsco Rail Segment	Corporate	Consolidated Totals
Primary Geographical Markets (a):					
North America	\$ 73,349	\$ 112,099	\$ 50,366	\$ —	\$ 235,814
Western Europe	98,221	—	10,013	—	108,234
Latin America (b)	36,991	5,286	591	—	42,868
Asia-Pacific	34,138	—	7,621	—	41,759
Middle East and Africa	13,915	—	—	—	13,915
Eastern Europe	4,698	—	—	—	4,698
Total Revenues	\$ 261,312	\$ 117,385	\$ 68,591	\$ —	\$ 447,288
Key Product and Service Groups:					
On-site services and material logistics, product quality improvement and resource recovery for iron, steel and metals manufacturing; value-added environmental solutions for industrial co-products; as well as aluminum dross and scrap processing systems	\$ 261,312	\$ —	\$ —	\$ —	\$ 261,312
Railway track maintenance services and equipment	—	—	68,591	—	68,591
Air-cooled heat exchangers	—	76,203	—	—	76,203
Industrial grating and fencing products	—	33,376	—	—	33,376
Heat transfer products	—	7,806	—	—	7,806
Total Revenues	\$ 261,312	\$ 117,385	\$ 68,591	\$ —	\$ 447,288

Three Months Ended

March 31, 2018

(In thousands)	Harsco Metals & Minerals Segment	Harsco Industrial Segment	Harsco Rail Segment	Corporate	Consolidated Totals
Primary Geographical Markets (a):					
North America	\$ 71,065	\$ 78,858	\$ 40,405	\$ 39	\$ 190,367
Western Europe	96,921	—	14,720	—	111,641
Latin America (b)	41,458	4,740	833	—	47,031
Asia-Pacific	36,221	—	3,720	—	39,941
Middle East and Africa	11,553	—	—	—	11,553
Eastern Europe	7,505	—	—	—	7,505
Total Revenues	\$ 264,723	\$ 83,598	\$ 59,678	\$ 39	\$ 408,038
Key Product and Service Groups:					
On-site services and material logistics, product quality improvement and resource recovery for iron, steel and metals manufacturing; value-added environmental solutions for industrial co-products; as well as aluminum dross and scrap processing systems	\$ 264,723	\$ —	\$ —	\$ —	\$ 264,723
Railway track maintenance services and equipment	—	—	59,678	—	59,678
Air-cooled heat exchangers	—	44,267	—	—	44,267
Industrial grating and fencing products	—	30,097	—	—	30,097
Heat transfer products	—	9,234	—	—	9,234
General Corporate	—	—	—	39	39
Total Revenues	\$ 264,723	\$ 83,598	\$ 59,678	\$ 39	\$ 408,038

(a) Revenues are attributed to individual countries based on the location of the facility generating the revenue.

(b) Includes Mexico.

The Company may receive payments in advance of earning revenue, which are treated as Advances on contracts on the Condensed Consolidated Balance Sheets. The Company may recognize revenue in advance of being able to contractually invoice the customer, which is treated as Contract assets on the Condensed Consolidated Balance Sheets. Contract assets are transferred to Trade accounts receivable, net when right to payment becomes unconditional. Contract assets and Contract liabilities are reported as a net position, on a contract-by-contract basis, at the end of each reporting period. These instances are primarily related to the Harsco Rail Segment and air-cooled heat exchangers business of the Harsco Industrial Segment.

The Company had Contract assets totaling \$17.5 million and \$24.3 million at March 31, 2019 and December 31, 2018, respectively. The decrease is due principally to the transfer of contract assets to accounts receivable in excess of additional contract assets recognized during the three months ended March 31, 2019, primarily in the Harsco Rail Segment. The Company had Advances on contracts totaling \$64.5 million and \$69.0 million at March 31, 2019 and December 31, 2018, respectively. The decrease is due principally to the recognition of revenue on previously received advances on contracts in excess of receipts of new advances on contracts during the period and the impact of foreign currency translation during the three months ended March 31, 2019, primarily in the Harsco Rail Segment. During the three months ended March 31, 2019, the Company recognized \$21.5 million of revenue related to amounts included in Advances on contracts at December 31, 2018.

At March 31, 2019, the Harsco Metals & Minerals Segment had remaining, fixed, unsatisfied performance obligations, where the expected contract duration exceeds one year totaling \$136.7 million. Of this amount, \$43.6 million is expected to be fulfilled by March 31, 2020, \$35.4 million by March 31, 2021, \$24.9 million by March 31, 2022, \$22.9 million by March 31, 2023 and the remainder thereafter. These amounts exclude any variable fees, fixed fees subject to indexation and any performance obligations expected to be satisfied within one year. The decrease from December 31, 2018 is primarily due to changes in foreign currency exchange rates.

At March 31, 2019, the Harsco Rail Segment had remaining, fixed, unsatisfied performance obligations, where the expected contract duration exceeds one year totaling \$209.8 million. Of this amount, \$94.3 million is expected to be fulfilled by March 31, 2020, \$64.5 million by March 31, 2021, \$36.7 million by March 31, 2022, \$14.2 million by March 31, 2023 and the remainder thereafter. These amounts exclude any variable fees, fixed fees subject to indexation and any performance obligations expected to be satisfied within one year.

15. Other Expenses, Net

The major components of this Condensed Consolidated Statements of Operations caption are as follows:

(In thousands)	Three Months Ended	
	March 31	
	2019	2018
Employee termination benefit costs	\$ 2,598	\$ 1,443
Other costs to exit activities	1,165	364
Impaired asset write-downs	214	9
Contingent consideration adjustments	369	—
Net gains	(2,271)	—
Other	(199)	6
Other expenses, net	<u>\$ 1,876</u>	<u>\$ 1,822</u>

16. Components of Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss is included in the Condensed Consolidated Statements of Equity. The components of Accumulated other comprehensive loss, net of the effect of income taxes, and activity for the three months ended March 31, 2018 and 2019 was as follows:

(In thousands)	Components of Accumulated Other Comprehensive Income (Loss) - Net of Tax				
	Cumulative Foreign Exchange Translation Adjustments	Effective Portion of Derivatives Designated as Hedging Instruments	Cumulative Unrecognized Actuarial Losses on Pension Obligations	Unrealized Gain (Loss) on Marketable Securities	Total
Balance at December 31, 2017	\$ (111,567)	\$ 808	\$ (435,840)	\$ 17	\$ (546,582)
Adoption of new accounting standard (a)	—	(1,520)	—	—	(1,520)
Other comprehensive income (loss) before reclassifications	12,501 ^(b)	2,768 ^(c)	(13,945) ^(b)	(14)	1,310
Amounts reclassified from accumulated other comprehensive loss, net of tax	—	(91)	4,944	—	4,853
Total other comprehensive income (loss)	12,501	2,677	(9,001)	(14)	6,163
Other comprehensive income attributable to noncontrolling interests	(1,278)	—	—	—	(1,278)
Other comprehensive income (loss) attributable to Harsco Corporation	11,223	2,677	(9,001)	(14)	4,885
Balance at March 31, 2018	<u>\$ (100,344)</u>	<u>\$ 1,965</u>	<u>\$ (444,841)</u>	<u>\$ 3</u>	<u>\$ (543,217)</u>

Components of Accumulated Other Comprehensive Income (Loss) - Net of Tax

(In thousands)	Cumulative Foreign Exchange Translation Adjustments	Effective Portion of Derivatives Designated as Hedging Instruments	Cumulative Unrecognized Actuarial Losses on Pension Obligations	Unrealized Gain (Loss) on Marketable Securities	Total
Balance at December 31, 2018	\$ (159,810)	\$ 1,389	\$ (408,655)	\$ (31)	\$ (567,107)
Adoption of new accounting standard (c)	—	—	(21,429) (d)	—	(21,429)
Other comprehensive income (loss) before reclassifications	11,725 (b)	(3,084) (c)	(6,573) (b)	15	2,083
Amounts reclassified from accumulated other comprehensive loss, net of tax	(2,271)	(63)	4,782	—	2,448
Total other comprehensive income (loss)	9,454	(3,147)	(1,791)	15	4,531
Other comprehensive income attributable to noncontrolling interests	(420)	—	—	—	(420)
Other comprehensive income (loss) attributable to Harsco Corporation	9,034	(3,147)	(1,791)	15	4,111
Balance at March 31, 2019	\$ (150,776)	\$ (1,758)	\$ (431,875)	\$ (16)	\$ (584,425)

(a) Represents the opening balance sheet adjustment to retained earnings related to the adoption of the revenue recognition standard adopted by the Company on January 1, 2018.

(b) Principally foreign currency fluctuation.

(c) Net change from periodic revaluations.

(d) Represents the adoption of the new accounting standard on January 1, 2019 related to stranded tax effects from the Tax Act. See Note 2, Recently Adopted and Recently Issued Accounting Standards for more information.

Amounts reclassified from accumulated other comprehensive loss are as follows:

(In thousands)	Three Months Ended		Affected Caption in the Condensed Consolidated Statements of Operations
	March 31 2019	March 31 2018	
Recognition of cumulative foreign currency translation adjustments:			
Gain on substantial liquidation of subsidiary (e)	\$ (2,271)	\$ —	Other expenses, net
Amortization of cash flow hedging instruments:			
Foreign currency exchange forward contracts	\$ (32)	\$ (212)	Product revenues
Cross-currency interest rate swaps	314	271	Interest expense
Interest rate swaps	(301)	—	Interest expense
Total before tax	(19)	59	
Tax expense	(44)	(150)	
Total reclassification of cash flow hedging instruments, net of tax	\$ (63)	\$ (91)	
Amortization of defined benefit pension items (f):			
Recognized losses	\$ 5,058	\$ 5,142	Defined benefit pension income (expense)
Recognized prior-service costs	66	(39)	Defined benefit pension income (expense)
Settlement/curtailment losses	—	166	Defined benefit pension income (expense)
Total before tax	5,124	5,269	
Tax benefit	(342)	(325)	
Total reclassification of defined benefit pension items, net of tax	\$ 4,782	\$ 4,944	

(e) No tax impact.

(f) These accumulated other comprehensive loss components are included in the computation of net periodic pension costs. See Note 8, Employee Benefit Plans, for additional details.

17. Subsequent Events

On May 9, 2019 the Company announced two separate strategic transactions that accelerate the transformation of the Company's portfolio of businesses into a leading provider of environmental solutions and aligns with the Company's strategy to decrease the complexity of the Company's business portfolio by focusing on less cyclical and higher-growth businesses.

The Company has entered into a definitive agreement to acquire CEHI Acquisition Corporation and Subsidiaries ("Clean Earth"), a leader in processing special waste and hazardous and non-hazardous waste, from Compass Diversified Holdings for approximately \$625 million in cash, subject to post-closing adjustments. The transaction has been approved by the Company's Board of Directors ("Board") and is expected to close during the next few months, subject to customary closing conditions, including receipt of certain regulatory approvals. There are no material financial or other contingencies to close the transaction.

In addition, the Company has entered into a definitive agreement to sell the Harsco Industrial Air-X-Changers business to Chart Industries, Inc. for \$592 million in cash, subject to post-closing adjustments. The transaction has been approved by the Company's Board and is expected to close during the next few months, subject to customary closing conditions, including receipt of certain regulatory approvals. There are no material financial or other contingencies to close the transaction.

The Company has received bank financing commitments for the purchase of Clean Earth and plans to pursue long-term, unsecured debt financing as well as the upsize and extension of the Company's revolving credit facility. The proceeds from the sale of the Harsco Industrial Air-X-Changers business will be used to reduce borrowings under the existing Senior Secured Credit Facility and support further investment in the core environmental solutions business and the Harsco Rail Segment.

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

The following discussion should be read in conjunction with the accompanying unaudited condensed consolidated financial statements as well as the audited consolidated financial statements of Harsco Corporation (the "Company"), including the notes thereto, included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018 which includes additional information about the Company's critical accounting policies, contractual obligations, practices and the transactions that support the financial results, and provides a more comprehensive summary of the Company's outlook, trends and strategies for 2019 and beyond.

Certain amounts included in Item 2 of this Quarterly Report on Form 10-Q are rounded in millions and all percentages are calculated based on actual amounts. As a result, minor differences may exist due to rounding.

Forward-Looking Statements

The nature of the Company's business and the many countries in which it operates subject it to changing economic, competitive, regulatory and technological conditions, risks and uncertainties. In accordance with the "safe harbor" provisions of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, the Company provides the following cautionary remarks regarding important factors that, among others, could cause future results to differ materially from the results contemplated by forward-looking statements, including the expectations and assumptions expressed or implied herein. Forward-looking statements contained herein could include, among other things, statements about management's confidence in and strategies for performance; expectations for new and existing products, technologies and opportunities; and expectations regarding growth, sales, cash flows, and earnings. Forward-looking statements can be identified by the use of such terms as "may," "could," "expect," "anticipate," "intend," "believe," "likely," "estimate," "plan" or other comparable terms.

Factors that could cause actual results to differ, perhaps materially, from those implied by forward-looking statements include, but are not limited to: (1) changes in the worldwide business environment in which the Company operates, including general economic conditions; (2) changes in currency exchange rates, interest rates, commodity and fuel costs and capital costs; (3) changes in the performance of equity and bond markets that could affect, among other things, the valuation of the assets in the Company's pension plans and the accounting for pension assets, liabilities and expenses; (4) changes in governmental laws and regulations, including environmental, occupational health and safety, tax and import tariff standards; (5) market and competitive changes, including pricing pressures, market demand and acceptance for new products, services and technologies; (6) the Company's inability or failure to protect its intellectual property rights from infringement in one or more of the many countries in which the Company operates; (7) failure to effectively prevent, detect or recover from breaches in the Company's cybersecurity infrastructure; (8) unforeseen business disruptions in one or more of the many countries in which the Company operates due to political instability, civil disobedience, armed hostilities, public health issues or other calamities; (9) disruptions associated with labor disputes and increased operating costs associated with union organization; (10) the seasonal nature of the Company's business; (11) the Company's ability to successfully enter into new contracts and complete new acquisitions or strategic ventures in the time-frame contemplated, or at all; (12) the integration of the Company's strategic acquisitions, including the acquisition of CEHI Acquisition Corporation and Subsidiaries ("Clean Earth"); (13) risks associated with the acquisition of Clean Earth and the sale of the Harsco Industrial Air-X-Changers business generally, such as the inability to obtain, or delays in obtaining, regulatory approval; (14) the occurrence of any event, change or other circumstances that could give rise to the termination of the definitive agreements entered into for the acquisition of Clean Earth and the sale of the Harsco Industrial Air-X-Changers business; (15) potential severe volatility in the capital markets and the impact on the cost of the Company to obtain debt financing as may be necessary to consummate the acquisition of Clean Earth; (16) failure to retain key management and employees of Clean Earth; (17) the amount and timing of repurchases of the Company's common stock, if any; (18) the outcome of any disputes with customers, contractors and subcontractors; (19) the financial condition of the Company's customers, including the ability of customers (especially those that may be highly leveraged and those with inadequate liquidity) to maintain their credit availability; (20) implementation of environmental remediation matters; (21) risk and uncertainty associated with intangible assets; and (22) other risk factors listed from time to time in the Company's SEC reports. A further discussion of these, along with other potential risk factors, can be found in Part I, Item 1A, "Risk Factors," of the Company's Annual Report on Form 10-K for the year ended December 31, 2018 and Part II, Item 1A, Risk Factors herein. The Company cautions that these factors may not be exhaustive and that many of these factors are beyond the Company's ability to control or predict. Accordingly, forward-looking statements should not be relied upon as a prediction of actual results. The Company undertakes no duty to update forward-looking statements except as may be required by law.

Executive Overview

The Company is a diversified, multinational provider of industrial services and engineered products serving global industries that are fundamental to worldwide economic growth and infrastructure development. The Company's operations consist of three reportable segments: Harsco Metals & Minerals, Harsco Industrial and Harsco Rail. In general, each of the Company's segments are among the market leaders in their respective sectors. The Harsco Metals & Minerals Segment operates primarily under long-term contracts, providing critical services and support to the steelmaking process; and environmental and zero waste solutions for manufacturing by-products within the metals industry. The Harsco Industrial Segment is a supplier of custom-engineered and manufactured air-cooled heat exchangers that support the processing and distribution of natural gas and downstream refined products; manufactures a full range of metal bar grating configurations, used mainly in industrial flooring, as well as safety and security applications; and also manufactures energy-efficient heat transfer products such as boilers and water heaters, for various commercial and industrial applications. The Harsco Rail Segment is a provider of highly engineered maintenance equipment, after-market parts and safety and diagnostic systems which support railroad and transit customers worldwide. The Company has locations in approximately 30 countries, including the U.S. The Company was incorporated in 1956.

Highlights from the first quarter 2019 included (refer to the discussion of segment and consolidated results included within Results of Operations below, as well as Liquidity and Capital Resources, for additional information pertaining to the key drivers impacting these highlights):

- Revenues for the first quarter of 2019 increased approximately 10% compared with the first quarter of 2018. The primary drivers for this increase were strong demand in the Harsco Industrial Segment's air-cooled heat exchangers business and increased maintenance of way equipment sales in the Harsco Rail Segment.
- Operating income from continuing operations for the first quarter of 2019 increased approximately 5% compared with the first quarter of 2018. The primary driver for this increase was improved operating results in the Harsco Industrial and Harsco Rail Segments. These improvements were partially offset by modestly lower operating results in the Harsco Metals & Minerals Segment primarily due to increased selling, general and administrative costs to support the Company's strategic growth initiatives and the impact of foreign currency translation. Additionally, Corporate costs increased during the first quarter of 2019 compared to the same period in prior year to support the Company's strategic initiatives such as the acquisition of Clean Earth, a leader in processing special waste and hazardous and non-hazardous waste, and the sale of the Harsco Industrial Air-X-Changers business as announced on May 9, 2019. See Note 17, Subsequent Events, in Part I, Item 1, "Financial Statements," for additional information.
- Diluted earnings per common share from continuing operations attributable to Harsco Corporation for the first quarter of 2019 were \$0.26, an increase of approximately 18% compared with the first quarter of 2018. The primary drivers for the increase were improved operating results and a decrease in income tax expense. As anticipated, these factors were partially offset by increased defined benefit pension expense.
- Cash flows from operating activities for the first quarter of 2019 were \$14.8 million, an increase of \$23.1 million compared with the first quarter of 2018. The primary driver for this increase was a favorable change in working capital.

Looking forward, the Company maintains a positive outlook across all businesses. The Company's view for the remainder of 2019 and beyond is supported by the below factors, which should be considered in the context of other risks, trends and strategies in the Company's Annual Report on Form 10-K for the year ended December 31, 2018:

- Customers served by the Harsco Metals & Minerals Segment have benefited from recent improvements in global steel production. For 2019, (i) global growth in steel production and consumption are expected to increase demand for mill services; (ii) new site (contract) contributions are expected to outpace site exits; and (iii) continued operational savings are expected to improve operating results compared to 2018. Additionally, revenues for 2019 will be positively impacted by demand for aluminum dross and scrap processing systems and the inclusion of a full year of results for Altek.
- The Harsco Industrial Segment's air-cooled heat exchangers business continues to be positively impacted by fundamental improvements within energy markets. Bookings for this business have increased significantly over the past year. For 2019, (i) the air-cooled heat exchangers business continues to maintain a robust backlog, (ii) improved demand is anticipated across this Segment's product offerings as the result of increased capital spending in end markets; and (iii) new product offerings are expected to positively impact operating results.

- The Harsco Rail Segment has experienced continued improvement in demand for maintenance of way equipment from North American railroads following a period of decreased demand in recent years. Harsco Rail has also benefited from continued growth, market penetration and investment in foreign markets to increase international equipment sales as well as after-market parts and Protran Technology. As a result, this Segment began 2019 with strong backlog. Additionally, the Harsco Rail Segment has undertaken a number of strategic actions over the past two years to improve manufacturing processes. As previously disclosed, the Company began to consolidate and centralize North American manufacturing and distribution into one facility, allowing for improved efficiency and better service to customers. The capital investment to complete this program and other expenditures will continue through 2019. The annualized savings anticipated from this latest action are approximately \$7 million, with a portion of these benefits expected to materialize in the second-half of 2019. The net impact of such costs and savings will not have a significant impact on 2019 operating results.
- The Company anticipates higher selling, general and administrative costs across all Segments as well as increased research and development spending in the Harsco Rail Segment, necessary to support anticipated volume increases and the Company's strategic growth initiatives.
- Net periodic pension cost ("NPPC") will increase by approximately \$9 million during 2019, which will primarily be reflected in the caption Defined benefit pension (income) expense on the consolidated statement of operations. The increase is primarily the result of lower plan assets at December 31, 2018.
- The Company anticipates that corporate spending will increase in 2019 in order to support the Company's strategic growth initiatives.

Results of Operations

Segment Results

(In millions, except percentages)	Three Months Ended	
	March 31	
	2019	2018
Revenues:		
Harsco Metals & Minerals	\$ 261.3	\$ 264.7
Harsco Industrial	117.4	83.6
Harsco Rail	68.6	59.7
Total Revenues	\$ 447.3	\$ 408.0
Operating Income (Loss):		
Harsco Metals & Minerals	\$ 24.5	\$ 27.7
Harsco Industrial	17.0	12.4
Harsco Rail	5.4	2.0
Corporate	(8.7)	(5.6)
Total Operating Income:	\$ 38.2	\$ 36.5
Operating Margins:		
Harsco Metals & Minerals	9.4%	10.5%
Harsco Industrial	14.5	14.9
Harsco Rail	7.9	3.3
	8.6%	9.0%

Harsco Metals & Minerals Segment:

Significant Effects on Revenues (In millions)	March 31, 2019
	Three Months Ended
Revenues — 2018	\$ 264.7
Impact of foreign currency translation.	(16.2)
Net effects of price/volume changes, primarily attributable to volume changes.	8.9
Effect of Altek acquisition.	4.4
Net impact of new and lost contracts.	(0.8)
Other.	0.3
Revenues — 2019	\$ 261.3

Factors Positively Affecting Operating Income:

- Overall, steel production by customers under services contracts, including the impact of new and exited contracts increased modestly for the first quarter of 2019 compared with the same period in the prior year.
- Operating income was positively affected by a \$2.3 million gain during the first quarter of 2019 related to the recognition of a foreign currency cumulative translation adjustment resulting from the substantial liquidation of a subsidiary.

Factors Negatively Impacting Operating Income:

- Operating results for the first quarter of 2019 were negatively impacted by decreased profitability in the Company's nickel-related sites partially due to decreased nickel prices. Nickel prices decreased 13% for the first quarter of 2019 compared with the same period in prior year.
- Higher operating costs in the industrial abrasives and roofing granules business.
- Operating results for the first quarter of 2019 were also negatively impacted by costs associated with the continued integration and scaling of the aluminum dross and scrap processing systems business acquired during 2018 including increased amortization expenses associated with intangible assets recognized as part of the acquisition.
- Higher selling, general and administrative costs due to higher compensation expense to support and execute the Company's growth strategies.
- Foreign currency translation decreased operating income by \$1.6 million for the first quarter of 2019 compared with the same period in prior year.

Harsco Industrial Segment:

	March 31, 2019
Significant Effects on Revenues (In millions)	Three Months Ended
Revenues — 2018	\$ 83.6
Net effects of price/volume changes, primarily attributable to volume changes.	34.0
Impact of foreign currency translation.	(0.2)
Revenues — 2019	\$ 117.4

Factors Positively Affecting Operating Income:

- Higher overall volumes in the air-cooled heat exchanger business resulting in increased operating income during the first quarter of 2019 compared with the same period in prior year.
- A favorable sales mix and increased demand led to increased operating income in the industrial grating businesses.

Factors Negatively Impacting Operating Income:

- Higher selling, general and administrative costs for the first quarter of 2019 resulting primarily from increased external sales commissions due to increased volumes in the air-cooled heat exchanger business.

Harsco Rail Segment:

	March 31, 2019
Significant Effects on Revenues (In millions)	Three Months Ended
Revenues — 2018	\$ 59.7
Net effect of price/volume changes, primarily attributable to volume changes.	10.4
Impact of foreign currency translation.	(1.5)
Revenues — 2019	\$ 68.6

Factors Positively Affecting Operating Income:

- Improving demand for machine sales increased operating income during the first quarter of 2019 compared with the same period in the prior year.
- A favorable mix and increased demand for after-market part sales increased operating income during the first quarter of 2019 compared with the same period in the prior year.
- Results for the first quarter of 2018 included an additional forward contract loss provision related to the Company's first of two contracts with the federal railway system of Switzerland of \$1.8 million resulting from incurring actual costs to complete in excess of originally estimated costs.

Factors Negatively Impacting Operating Income:

- Lower contract service volumes decreased operating income in the first quarter of 2019 compared with the same period in prior.
- Increased selling, general and administrative expenses for the first quarter of 2019 primarily related to higher compensation expense to support and execute the Company's growth strategy.
- Operating income was negatively impacted by \$2.6 million of costs associated with the initiative to improve manufacturing efficiency, including the recently announced consolidation of U.S. manufacturing and distribution into one facility.

Consolidated Results

(In millions, except per share amounts)	March 31	
	Three Months Ended	
	2019	2018
Total revenues	\$ 447.3	\$ 408.0
Cost of services and products sold	338.9	311.4
Selling, general and administrative expenses	67.0	57.1
Research and development expenses	1.3	1.2
Other expenses, net	1.9	1.8
Operating income from continuing operations	38.2	36.5
Interest income	0.5	0.5
Interest expense	(9.7)	(9.6)
Defined benefit pension income (expense)	(1.3)	0.8
Income tax expense	(4.9)	(8.3)
Income from continuing operations	22.9	20.0
Loss from discontinued operations	(0.3)	(0.5)
Net income	22.5	19.6
Total other comprehensive income	4.5	6.2
Total comprehensive income	27.1	25.7
Diluted earnings per common share from continuing operations attributable to Harsco Corporation common stockholders	0.26	0.22
Effective income tax rate for continuing operations	17.5%	29.2%

Comparative Analysis of Consolidated Results
Revenues

Revenues for the first quarter of 2019 increased \$39.3 million or 9.6% from the first quarter of 2018. Foreign currency translation decreased revenues by approximately \$18 million for the first quarter of 2019 compared with the same period in the prior year. Refer to the discussion of segment results above for information pertaining to factors positively affecting and negatively impacting revenues.

Cost of Services and Products Sold

Cost of services and products sold for the first quarter of 2019 increased \$27.5 million or 8.8% from the first quarter of 2018. The changes in cost of services and products sold was attributable to the following significant items:

(In millions)	March 31, 2019	
	Three Months Ended	
Increased costs due to changes in revenues (exclusive of the effects of foreign currency translation and including fluctuations in commodity costs included in selling prices).	\$	42.7
Impact of foreign currency translation.		(14.6)
Other.		(0.6)
Total change in cost of services and products sold — 2019 vs. 2018	\$	27.5

Selling, General and Administrative Expenses

Selling, general and administrative expenses for the first quarter of 2019 increased \$9.9 million or 17.4% from the first quarter of 2018. This increase was primarily related to higher compensation expense and professional fees needed to support personnel investment and execute the Company's growth strategy; the inclusion of selling, general and administrative expenses associated with the Altek acquisition which occurred in May 2018; and increased external sales commissions primarily in the Company's air-cooled heat exchange business; partially offset by the impact of foreign currency translation.

Other Expenses, Net

The major components of this Condensed Consolidated Statements of Operations caption are as follows:

(In thousands)	Three Months Ended	
	March 31	
	2019	2018
Employee termination benefit costs	\$ 2,598	\$ 1,443
Other costs to exit activities	1,165	364
Impaired asset write-downs	214	9
Contingent consideration adjustments	369	—
Net gains	(2,271)	—
Other	(199)	6
Other expenses, net	<u>\$ 1,876</u>	<u>\$ 1,822</u>

Interest Expense

Interest expense during the first quarter of 2019 increased \$0.2 million compared with the first quarter of 2018. The increase primarily relates to modestly higher borrowings under the Company's Senior Secured Credit Facility.

Defined Benefit Pension Income (Expense)

Defined benefit pension expense for the first quarter of 2019 was \$1.3 million, compared with defined benefit pension income of \$0.8 million for the first quarter of 2018. The change is primarily the result of lower plan assets at December 31, 2018.

Income Tax Expense

Income tax expense related to continuing operations for the first quarter of 2019 was \$4.9 million, compared with \$8.3 million for the first quarter of 2018. Income tax expense decreased primarily due to the income tax benefit recognized for stock-based compensation which vested during the first quarter of 2019.

Income from Continuing Operations

Income from continuing operations was \$22.9 million in the first quarter of 2019, compared with \$20.0 million in the first quarter of 2018. The primary driver for these increases was improved operating results in the Harsco Industrial and Harsco Rail Segments; and a decrease in income tax expense; partially offset by increased defined benefit pension expense.

Total Other Comprehensive Income

Total other comprehensive income was \$4.5 million in the first quarter of 2019, compared with total other comprehensive income of \$6.2 million in the first quarter of 2018. The primary drivers of this decrease were unrealized cash flow hedge losses for the three months ended March 31, 2019 compared to unrealized cash flow hedge gains for the same period in the prior year, partially offset by the net favorable impact of foreign currency translation due to the weakening of the U.S. dollar against certain currencies during the first three months of 2019 including foreign currency translation of cumulative unrecognized actuarial losses on the Company's pension obligations.

Liquidity and Capital Resources

Cash Flow Summary

The Company has sufficient financial liquidity and borrowing capacity to support the strategies within each of its businesses. The Company currently expects operational and business needs to be met by cash provided by operations supplemented with borrowings from time to time due to historical patterns of seasonal cash flow and for the funding of various projects. The Company regularly assesses capital needs in the context of operational trends and strategic initiatives.

The Company's cash flows from operating, investing and financing activities, as reflected in the Condensed Consolidated Statements of Cash Flows, are summarized in the following table:

(In millions)	Three Months Ended	
	March 31	
	2019	2018
Net cash provided (used) by:		
Operating activities	\$ 14.8	\$ (8.2)
Investing activities	(38.6)	(30.3)
Financing activities	44.4	39.2
Effect of exchange rate changes on cash and cash equivalents, including restricted cash	—	0.7
Net change in cash and cash equivalents, including restricted cash	\$ 20.5	\$ 1.3

Net cash provided (used) by operating activities — Net cash provided by operating activities in the first three months of 2019 was \$14.8 million, an increase of \$23.1 million from net cash used by operating activities in the first three months of 2018. The increase is primarily attributable to customer receipts in the Harsco Rail Segment and lower accrued compensation payments compared to the same period prior year.

Net cash used by investing activities — Net cash used by investing activities in the first three months of 2019 was \$38.6 million, an increase of \$8.3 million from the net cash used by investing activities in the first three months of 2018. The increase was primarily due to the increase in capital expenditures, primarily in the Company's Harsco Metals & Minerals Segment in the first three months of 2019, compared with the first three months of 2018.

Net cash provided by financing activities — Net cash provided by financing activities in the first three months of 2019 was \$44.4 million, an increase of \$5.2 million from net cash provided by financing activities in the first three months of 2018. The change was primarily due to net cash borrowings of \$51.7 million in the first three months of 2019 compared with net cash borrowings of \$39.4 million in the three months of 2018; partially offset by the payment of employee taxes related to stock-based compensation vesting.

Sources and Uses of Cash

The Company's principal sources of liquidity are cash provided by operations and borrowings under the Senior Secured Credit Facility, augmented by cash proceeds from asset sales. In addition, the Company has other bank credit facilities available throughout the world. The Company expects to continue to utilize all of these sources to meet future cash requirements for operations and growth initiatives.

Summary of Senior Secured Credit Facility Borrowings:

(In millions)	March 31 2019	December 31 2018
By type:		
Revolving Credit Facility	\$ 119.0	\$ 62.0
Term Loan Facility	540.4	541.8
Total	\$ 659.4	\$ 603.8
By classification:		
Current	\$ 5.4	\$ 5.4
Long-term	654.0	598.3
Total	\$ 659.4	\$ 603.8

(In millions)	March 31, 2019			
	Facility Limit	Outstanding Balance	Outstanding Letters of Credit	Available Credit
Multi-year revolving credit facility	\$ 500.0	\$ 119.0	\$ 30.4	\$ 350.6

Debt Covenants

The Senior Secured Credit Facility contains a consolidated net debt to consolidated adjusted earnings before interest, tax depreciation and amortization ("EBITDA") ratio covenant, which is not to exceed 3.50 to 1.0, and a minimum consolidated adjusted EBITDA to consolidated interest charges ratio covenant, which is not to be less than 3.0 to 1.0. At

March 31, 2019, the Company was in compliance with these covenants, as the total net leverage ratio was 1.8 to 1.0 and total interest coverage ratio was 8.6 to 1.0. Based on balances and covenants in effect at March 31, 2019, the Company could increase net debt by \$558.8 million, and still be in compliance with these debt covenants. Alternatively, keeping all other factors constant, the Company's adjusted EBITDA could decrease by \$159.7 million and the Company would still be within these debt covenants. The Company expects to continue to be in compliance with these debt covenants for at least the next twelve months.

Cash Management

The Company has various cash management systems throughout the world that centralize cash in various bank accounts where it is economically justifiable and legally permissible to do so. These centralized cash balances are then redeployed to other operations to reduce short-term borrowings and to finance working capital needs or capital expenditures. Due to the transitory nature of cash balances, they are normally invested in bank deposits that can be withdrawn at will or in very liquid short-term bank time deposits and government obligations. The Company's policy is to use the largest banks in the various countries in which the Company operates. The Company monitors the creditworthiness of banks and when appropriate will adjust banking operations to reduce or eliminate exposure to less creditworthy banks. The Company plans to continue the strategy of targeted, prudent investing for strategic purposes for the foreseeable future, and to make more efficient use of existing investments.

At March 31, 2019, the Company's consolidated cash and cash equivalents included \$84.1 million held by non-U.S. subsidiaries. At March 31, 2019, approximately 1% of the Company's consolidated cash and cash equivalents had regulatory restrictions that would preclude the transfer of funds with and among subsidiaries. Non-U.S. subsidiaries also held \$25.6 million of cash and cash equivalents in consolidated strategic ventures. The strategic venture agreements may require strategic venture partner approval to transfer funds with and among subsidiaries. While the Company's remaining non-U.S. cash and cash equivalents can be transferred with and among subsidiaries, the majority of these non-U.S. cash balances will be used to support the ongoing working capital needs and continued growth of the Company's non-U.S. operations.

Recently Adopted and Recently Issued Accounting Standards

Information on recently adopted and recently issued accounting standards is included in Note 2, Recently Adopted and Recently Issued Accounting Standards, in Part I, Item 1, Financial Statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risks have not changed significantly from those disclosed in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

ITEM 4. CONTROLS AND PROCEDURES

The Company adopted changes issued by the Financial Accounting Standards Board related to accounting for leases, which required the implementation of new accounting processes, which changed the Company's internal controls over lease accounting. The Company has completed the design of these controls and they have been implemented as of March 31, 2019. Other than these changes, there have been no changes in internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting during the first quarter of 2019.

Based on the evaluation required by Securities Exchange Act Rules 13a-15(b) and 15d-15(b), the Company's management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of disclosure controls and procedures, as defined in Securities Exchange Act Rules 13a-15(e) and 15d-15(e), at March 31, 2019. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective at March 31, 2019.

PART II — OTHER INFORMATION**ITEM 1. LEGAL PROCEEDINGS**

Information on legal proceedings is included in Note 10, Commitments and Contingencies, in Part I, Item 1, Financial Statements.

ITEM 1A. RISK FACTORS

The Company's risk factors as of March 31, 2019 have not changed materially from those described in Part 1, Item 1A, "Risk Factors," of the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

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

On May 2, 2018, the Company announced that the Board of Directors adopted a share repurchase program authorizing the Company to repurchase up to \$75,000,000 of outstanding shares of the Company's common stock through April 24, 2021. The Company did not purchase any shares of common stock under this program during the quarter ended March 31, 2019. The approximate dollar value of shares that may yet be purchased under the share repurchase program is \$44,989,369. When and if appropriate, repurchases are made in open market transactions, depending on market conditions. Share repurchases may not occur and may be discontinued at any time.

ITEM 6. EXHIBITS

The following exhibits are included as part of this report by reference:

Exhibit Number	Description
10.1	Form of RSU Award Agreement (for awards granted on or after March 6, 2019).
10.2	Form of PSU Award Agreement (for awards granted on or after March 6, 2019).
10.3	Form of SAR Award Agreement (for awards granted on or after March 6, 2019).
31.1	Certification Pursuant to Rule 13a-14(a) or 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Chairman, President and Chief Executive Officer).
31.2	Certification Pursuant to Rule 13a-14(a) or 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Chief Financial Officer).
32	Certifications Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Chairman, President and Chief Executive Officer and Chief Financial Officer).
101.Def	Definition Linkbase Document
101.Pre	Presentation Linkbase Document
101.Lab	Labels Linkbase Document
101.Cal	Calculation Linkbase Document
101.Sch	Schema Document
101.Ins	Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.

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.

HARSCO CORPORATION

(Registrant)

DATE	<u>May 9, 2019</u>	<u>/s/ PETER F. MINAN</u> Peter F. Minan <i>Senior Vice President and Chief Financial Officer</i> (On behalf of the registrant and as Principal Financial Officer)
------	--------------------	---

DATE	<u>May 9, 2019</u>	<u>/s/ SAMUEL C. FENICE</u> Samuel C. Fenice <i>Vice President and Corporate Controller</i> (Principal Accounting Officer)
------	--------------------	---

HARSCO CORPORATION

RESTRICTED STOCK UNITS AGREEMENT

(FORM)

This RESTRICTED STOCK UNITS AGREEMENT (this "**Agreement**") is made as of March 6, 2019, by and between Harsco Corporation, a Delaware corporation, and [Participant Name:First Name Last Name] (the "**Grantee**").

1. Certain Definitions. Capitalized terms used, but not otherwise defined, in this Agreement will have the meanings given to such terms in the Company's 2013 Equity and Incentive Compensation Plan, as amended by Amendment No. 1 to the 2013 Equity and Incentive Compensation Plan (the "**Plan**").

2. Grant of RSUs. Subject to and upon the terms, conditions and restrictions set forth in this Agreement, including, without limitation, **Exhibit A** attached hereto (the "**Non-Competition Agreement**"), any additional terms and conditions for the Grantee's country (Grantees outside the United States only) set forth in the attached **Exhibit B** which forms part of this Agreement, and in the Plan the Company grants to the Grantee, as of March 6, 2019 (the "**Date of Grant**"), [Granted:Shares Granted] Restricted Stock Units ("**RSUs**"). Each RSU shall represent the right of the Grantee to receive one share of Common Stock subject to and upon the terms and conditions of this Agreement. Notwithstanding anything in this **Section 2** or otherwise in this Agreement to the contrary, the Grantee acknowledges and agrees to be bound by the restrictive covenant terms, conditions and provisions in the Non-Competition Agreement as a "Grantee" as referred to therein.

3. Restrictions on Transfer of RSUs. Subject to **Section 15** of the Plan, neither the RSUs granted hereby nor any interest therein or in the Common Stock related thereto shall be transferable prior to payment to the Grantee pursuant to **Section 5** hereof other than by will or pursuant to the laws of descent and distribution.

4. Vesting of RSUs. Subject to the terms and conditions of this Agreement and the Plan, the RSUs covered by this Agreement shall vest as described in this Section.

- (a) The RSUs covered by this Agreement shall vest and become nonforfeitable and payable to the Grantee pursuant to **Section 5** hereof as follows, provided Grantee has continuously been employed with the Company or a Subsidiary through such respective Vesting Date:

Percentage of RSU Vesting	Vesting Date
33.3%	(a) One Year from Grant Date
33.3%	(b) Two Years from Grant Date
33.3%	(c) Three Years From Grant Date

Any RSUs that do not so become nonforfeitable on a Vesting Date will be forfeited, including, except as provided in **Section 4(b)** or **Section 4(d)** below, if the Grantee ceases to be continuously employed by the Company or a

Subsidiary prior to a Vesting Date. For purposes of this Agreement, "continuously employed" (or substantially similar term) means the absence of any interruption or termination of the Grantee's employment with the Company or with a Subsidiary of the Company. Continuous employment shall not be considered interrupted or terminated in the case of sick leave, military leave or any other leave of absence approved by the Company or in the case of transfers between locations of the Company and its Subsidiaries.

- (b) Notwithstanding **Section 4(a)** above, all of the RSUs shall become nonforfeitable and payable to the Grantee pursuant to **Section 5** hereof upon the occurrence of any of the following events (each, a "**Paying Event**") at a time when the RSUs have not been forfeited (to the extent the RSUs have not previously become nonforfeitable):
- (i) the Grantee's death or becoming Disabled while the Grantee is continuously employed by the Company or any of its Subsidiaries; or
 - (ii) the Grantee's retirement (A) at age 62 or older while continuously employed by the Company or any of its Subsidiaries; or (B) at or after such time as the Grantee's age (minimum of age 55), plus full years of continuous employment by the Company or any of its Subsidiaries, equals 75.
- (c) For purposes of this **Section 4**, the Grantee shall be considered "Disabled" if the Grantee is: (i) unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve months, or (ii) by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve months, receiving income replacement benefits for a period of not less than three months under an accident and health plan covering employees of the Company.
- (d) (i) Notwithstanding **Section 4(a)** above, if at any time before a Vesting Date or forfeiture of the RSUs, and while the Grantee is continuously employed by the Company or a Subsidiary, a Change in Control occurs, then the unvested RSUs will become nonforfeitable and payable to the Grantee in accordance with **Section 5** hereof, except to the extent that a Replacement Award is provided to the Grantee in accordance with **Section 4(d)(ii)** to continue, replace or assume the RSUs covered by this Agreement (the "**Replaced Award**").
- (ii) For purposes of this Agreement, a "Replacement Award" means an award (A) of the same type (**e.g.**, time-based restricted stock units) as the Replaced Award, (B) that has a value at least equal to the value of the Replaced Award, (C) that relates to publicly traded equity securities of the Company or its successor in the Change in Control or another entity that is affiliated with the Company or its successor following the Change in Control or is payable solely in cash, (D) if the Grantee holding

the Replaced Award is subject to U.S.

federal income tax under the Code, the tax consequences of which to such Grantee under the Code are not less favorable to such Grantee than the tax consequences of the Replaced Award, and (E) the other terms and conditions of which are not less favorable to the Grantee holding the Replaced Award than the terms and conditions of the Replaced Award (including the provisions that would apply in the event of a subsequent Change in Control). A Replacement Award may be granted only to the extent it does not result in the Replaced Award or Replacement Award failing to comply with or be exempt from Section 409A of the Code. Without limiting the generality of the foregoing, the Replacement Award may take the form of a continuation of the Replaced Award if the requirements of the two preceding sentences are satisfied. The determination of whether the conditions of this **Section 4(d)(ii)** are satisfied will be made by the Committee, as constituted immediately before the Change in Control, in its sole discretion.

(iii) If, upon receiving a Replacement Award, the Grantee's employment with the Company or a Subsidiary (or any of their successors) (as applicable, the "**Successor**") is subsequently terminated by the Grantee for Good Reason or by the Successor without Cause within a period of two years after the Change in Control, 100% of the Replacement Award will become nonforfeitable and payable with respect to the time-based restricted stock units covered by such Replacement Award.

(iv) A termination by the Grantee for "Good Reason" means Grantee's termination of his or her employment with the Successor as a result of the occurrence of any of the following: (A) a change in the Grantee's principal location of employment that is greater than 50 miles from such location as of the date of this Agreement without the Grantee's consent; provided, however, that the Grantee hereby acknowledges that the Grantee may be required to engage in travel in connection with the performance of the Grantee's duties and that such travel shall not constitute a change in the Grantee's principal location of employment for purposes hereof; (B) a material diminution in the Grantee's base compensation; (C) a change in the Grantee's position with the Successor without the Grantee's consent such that there is a material diminution in the Grantee's authority, duties or responsibilities; or (D) any other action or inaction that constitutes a material breach by the Successor of the agreement, if any, under which the Grantee provides services to the Successor or its subsidiaries. Notwithstanding the foregoing, the Grantee's termination of the Grantee's employment with the Successor as a result of the occurrence of any of the foregoing shall not constitute a termination for "Good Reason" unless (X) the Grantee gives the Successor written notice of such occurrence within 90 days of such occurrence and such occurrence is not cured by the Successor within 30 days of the date on which such written notice is received by the Successor and (Y) the Grantee actually terminates his or her employment with the Successor prior to the 365th day following such

occurrence.

(v) A termination by the Successor without "Cause" means the Successor's termination of the Grantee's employment with the Successor under circumstances that do not involve or relate to the occurrence of any of the following: (A) an act or acts of personal dishonesty taken by the Grantee and intended to result in substantial personal enrichment of the Grantee at the expense of the Company; (B) repeated failure by the Grantee to devote reasonable attention and time during normal business hours to the business and affairs of the Company or to use the Grantee's reasonable best efforts to perform faithfully and efficiently the responsibilities assigned to the Grantee (provided that such failure is demonstrated to be willful and deliberate on the Grantee's part and is not remedied in a reasonable period of time after receipt of written notice from the Company); or (C) the conviction of the Grantee of a felony.

5. Form and Time of Payment of RSUs.

- (a) Payment for the RSUs, after and to the extent they have become nonforfeitable, shall be made in the form of shares of Common Stock. Except as provided in **Section 5(b)** or **5(c)**, payment shall be made within 10 days following the date that the RSUs become nonforfeitable pursuant to **Section 4** hereof.
- (b) If the RSUs become nonforfeitable (i) by reason of the occurrence of a Change in Control as described in **Section 4(d)**, and if the Change in Control does not constitute a "change in control" for purposes of Section 409A(a)(2)(A)(v) of the Code, or (ii) by reason of a termination of the Grantee's employment by reason of retirement, and if such termination does not constitute a "separation from service" for purposes of Section 409A(a)(2)(A)(i) of the Code, then payment for RSUs will be made upon the earliest of (v) the Grantee's "separation from service" with the Company and its Subsidiaries (determined in accordance with Section 409A(a)(2)(A)(i) of the Code), (w) the Vesting Date for such RSUs, (x) the Grantee's death, (y) the occurrence of a Change in Control that constitutes a "change in control" for purposes of Section 409A(a)(2)(A)(v) of the Code, or (z) the Grantee's becoming Disabled.
- (c) If the RSUs become payable on the Grantee's "separation from service" with the Company and its Subsidiaries within the meaning of Section 409A(a)(2)(A)(i) of the Code (including by reason of the Grantee's retirement as described in **Section 4(b)(ii)**, due to the termination of the Grantee's employment under the conditions specified in **Section 4(d)(iii)** of this Agreement or by reason of **Section 5(b)**) and the Grantee is a "specified employee" as determined pursuant to procedures adopted by the Company in compliance with Section 409A of the Code, then payment for the RSUs shall be made on the earlier of the first day of the seventh month after the date of the Grantee's "separation from service" with the Company and its Subsidiaries within the meaning of Section 409A(a)(2)(A)(i) of the Code or the Grantee's death.

- (d) Except to the extent provided by Section 409A of the Code and permitted by the Committee, no Common Stock may be issued to the Grantee at a time earlier than otherwise expressly provided in this Agreement.
- (e) The Company's obligations to the Grantee with respect to the RSUs will be satisfied in full upon the issuance of Common Stock corresponding to such RSUs.

6. Dividend Equivalents; Voting and Other Rights.

- (a) The Grantee shall have no rights of ownership in the Common Stock underlying the RSUs and no right to vote the Common Stock underlying the RSUs until the date on which the shares of Common Stock underlying the RSUs are issued or transferred to the Grantee pursuant to **Section 5** above.
- (b) From and after the Date of Grant and until the earlier of (i) the time when the RSUs become nonforfeitable and are paid in accordance with **Section 5** hereof or (ii) the time when the Grantee's right to receive Common Stock in payment of the RSUs is forfeited in accordance with **Section 4** hereof, on the date that the Company pays a cash dividend (if any) to holders of Common Stock generally, the Grantee shall be entitled to a current cash payment equal to the value of the product of (x) the dollar amount of the cash dividend paid per share of Common Stock on such date and (y) the total number of RSUs covered by this Agreement. Such dividend equivalents (if any) shall be paid in cash during the vesting period for the RSUs.
- (c) The obligations of the Company under this Agreement will be merely that of an unfunded and unsecured promise of the Company to deliver shares of Common Stock in the future, and the rights of the Grantee will be no greater than that of an unsecured general creditor. No assets of the Company will be held or set aside as security for the obligations of the Company under this Agreement.

7. Adjustments. The RSUs are subject to mandatory adjustment under the terms of **Section 11** of the Plan.

8. Withholding Taxes. To the extent that the Company is required to withhold federal, state, local or foreign taxes in connection with the delivery to the Grantee of Common Stock or any other payment to the Grantee or any other payment or vesting event under this Agreement, the Grantee hereby authorizes withholding from payroll and any other amounts payable to the Grantee, including amounts payable hereunder, and otherwise agrees to make adequate provision for, any sums required to satisfy such tax withholding obligations of the Company. The Company shall have no obligation to make delivery or payment hereunder until the tax withholding obligations of the Company have been satisfied by the Grantee. If all or any part of such withholding requirement be satisfied by retention by the Company of a portion of the Common Stock to be delivered to the Grantee or by delivering to the Company other shares of Common Stock held by the Grantee, the shares so retained shall be credited against such withholding requirement at the Market Value per Share of such Common Stock on the date of such delivery. In no event will the market value of the Common Stock to be withheld and/or delivered pursuant to this **Section 8** to satisfy applicable withholding taxes exceed the minimum amount of taxes required to be withheld, unless otherwise agreed to by

the Grantee, provided, however, that such amount shall not exceed the statutory maximum withholding rates.

9. Compliance With Law. The Company shall make reasonable efforts to comply with all applicable federal and state securities laws; provided, however, notwithstanding any other provision of the Plan and this Agreement, the Company shall not be obligated to issue any Common Stock pursuant to this Agreement if the issuance thereof would result in a violation of any such law.

10. Compliance With Section 409A of the Code. To the extent applicable, it is intended that this Agreement and the Plan comply with the provisions of Section 409A of the Code. This Agreement and the Plan shall be administered in a manner consistent with this intent, and any provision that would cause this Agreement or the Plan to fail to satisfy Section 409A of the Code shall have no force or effect until amended to comply with Section 409A of the Code (which amendment may be retroactive to the extent permitted by Section 409A of the Code and may be made by the Company without the consent of the Grantee).

11. Interpretation. Any reference in this Agreement to Section 409A of the Code will also include any proposed, temporary or final regulations, or any other guidance, promulgated with respect to such Section by the U.S. Department of the Treasury or the Internal Revenue Service. Except as expressly provided in this Agreement, capitalized terms used herein will have the meaning ascribed to such terms in the Plan.

12. No Employment Rights. The grant of the RSUs under this Agreement to the Grantee is a voluntary, discretionary award being made on a one-time basis and it does not constitute a commitment to make any future awards. The grant of the RSUs and any payments made hereunder will not be considered salary or other compensation for purposes of any severance pay or similar allowance, except as otherwise required by law. Nothing contained in this Agreement shall confer upon the Grantee any right to be employed or remain employed by the Company or any of its Subsidiaries, nor limit or affect in any manner the right of the Company or any of its Subsidiaries to terminate the employment or adjust the compensation of the Grantee.

13. Relation to Other Benefits. Any economic or other benefit to the Grantee under this Agreement or the Plan shall not be taken into account in determining any benefits to which the Grantee may be entitled under any profit-sharing, retirement or other benefit or compensation plan maintained by the Company or any of its Subsidiaries and shall not affect the amount of any life insurance coverage available to any beneficiary under any life insurance plan covering employees of the Company or any of its Subsidiaries.

14. Amendments. Any amendment to the Plan shall be deemed to be an amendment to this Agreement to the extent that the amendment is applicable hereto; provided, however, that (a) no amendment shall adversely affect the rights of the Grantee under this Agreement without the Grantee's written consent, and (b) the Grantee's consent shall not be required to an amendment that is deemed necessary by the Company to ensure compliance with Section 409A of the Code.

15. Severability. In the event that one or more of the provisions of this Agreement shall be invalidated for any reason by a court of competent jurisdiction, any provision so

invalidated shall be deemed to be separable from the other provisions hereof, and the remaining provisions hereof shall continue to be valid and fully enforceable.

16. Relation to Plan. This Agreement is subject to the terms and conditions of the Plan. In the event of any inconsistency between the provisions of this Agreement and the Plan, the Plan shall govern. The Committee acting pursuant to the Plan, as constituted from time to time, shall, except as expressly provided otherwise herein or in the Plan, have the right to determine any questions which arise in connection with this Agreement. In addition, the RSUs shall be subject to the terms and conditions of the Company's clawback policy in effect on the Date of Grant as if such RSUs were "Incentive-Based Compensation" (as such term is defined in such clawback policy).

17. Successors and Assigns. Without limiting **Section 3** hereof, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, administrators, heirs, legal representatives and assigns of the Grantee, and the successors and assigns of the Company.

18. Acknowledgement. The Grantee acknowledges that the Grantee (a) has received a copy of the Plan, (b) has had an opportunity to review the terms of this Agreement and the Plan, (c) understands the terms and conditions of this Agreement and the Plan and (d) agrees to such terms and conditions.

19. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same agreement.

[signature page follows]

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed on its behalf by its duly authorized officer and the Grantee has executed this Agreement, effective as of the day and year first above written.

HARSCO CORPORATION

By: /s/ F. Nicholas Grasberger III
Name: F. Nicholas Grasberger III
Title Chairman, President and CEO

The undersigned hereby acknowledges receipt of an executed version of this Agreement and accepts the award of RSUs granted hereunder on the terms and conditions set forth herein and in the Plan (including the terms of the Non-Competition Agreement, attached hereto as **Exhibit A**).

Grantee

By: _____
Name:

EXHIBIT A

Non-Competition Agreement

1. **Grant.** Grantee acknowledges that Grantee has access to the confidential and proprietary trade secret information of Harsco Corporation, including its subsidiaries, joint ventures, and operating divisions (the "Company"), as further described below ("Confidential/Proprietary Trade Secret Information"). Further, Grantee acknowledges that Grantee derives significant value from the Company and from the Confidential/Proprietary Trade Secret Information provided during the term of employment with the Company, which enables Grantee to optimize the performance of the Company's performance and Grantee's own personal, professional, and financial benefit. In consideration of the grant described in the award agreement (the "Agreement") to which these terms, conditions and provisions (the "Non-Competition Agreement") are attached as an exhibit, Grantee agrees that, during Grantee's employment by the Company, and for a period of twelve (12) months after the cessation of such employment for any reason (both such periods collectively referred to as the "Restricted Period"), Grantee will not, directly or indirectly, engage in any of the following competitive activities:
 - (a) For Grantee or on behalf of any other corporation, business, partnership, individual, or other entity, directly or indirectly solicit, divert, contract with, or attempt to solicit, divert, or contract with, any customer with whom Grantee had Material Contact during the final two (2) years of Grantee's employment with the Company concerning any products or services that are similar to those that Grantee was responsible for or were otherwise involved with during Grantee's employment with the Company. For purposes of this Non-Competition Agreement, the Grantee will have had "Material Contact" with a customer if: (i) Grantee had business dealings with the customer on the Company's behalf; (ii) Grantee was responsible for supervising or coordinating the dealings between the Company and the customer; or (iii) Grantee obtained Confidential/Proprietary Trade Secret Information about the customer as a result of Grantee's association with the Company;
 - (b) Within the geographic territory where Grantee was employed by the Company, obtained knowledge of Confidential/Proprietary Trade Secret Information, or had contact with the Company's customers, become employed by or otherwise render services to (as a director, employee, contractor or consultant) or have any ownership interest in any business which is engaged in offering the same or similar products or services as, or otherwise competes with those Company, including its subsidiaries and operating unit(s) with which Grantee was employed or in any way involved during the last twelve (12) months of employment with the Company; or
 - (c) (i) induce, offer, assist, encourage or suggest that another business or enterprise offer employment to or enter into a consulting arrangement with any employee, agent or representative of the Company or (ii) induce, offer, assist, encourage or suggest that any employee, agent or representative of the Company, including its subsidiaries and joint ventures, terminate his or her employment or business affiliation with the Company or accept employment with any other business or enterprise.
 - (d) Confidential/Proprietary Trade Secret Information.

- (i) (l) Grantee agrees to keep secret and confidential all Confidential/Proprietary Trade Secret Information (further described below) acquired by Grantee while employed by the Company or concerning the business and affairs of the Company, its vendors, its customers, and its affiliates (whether of a business, commercial or technological nature), and further agrees that Grantee will not disclose any such Confidential/Proprietary Trade Secret Information so acquired to any individual, partner, company, firm, corporation or other person or use the same in any manner other than in connection with the business and affairs of the Company and its affiliates. Except in the performance of services for the Company, the Grantee will not, for so long as the Confidential/Proprietary Trade Secret Information remains so designated under applicable law, use, disclose, reproduce, distribute, transmit, reverse engineer, decompile, disassemble, or transfer the Confidential/Proprietary Trade Secret Information or any portion thereof.
- (ii) For purposes of this Non-Competition Agreement, "Confidential/Proprietary Trade Secret Information" includes all information of a confidential or proprietary nature that relates to the business, products, services, research or development of the Company, and its affiliates or their respective suppliers, distributors, customers, independent contractors or other business relations. Confidential/Proprietary Trade Secret Information also includes, but is not limited to, the following: (A) internal business information (including information relating to strategic and staffing plans and practices, business, training, financial, marketing, promotional and sales plans and practices, cost, rate and pricing structures, accounting and business methods and customer and supplier lists); (B) identities of, individual requirements of, specific contractual arrangements with and information about, the Company's suppliers, distributors, customers, independent contractors or other business relations and their confidential information; (C) trade secrets, copyrightable works and other confidential information (including ideas, formulas, recipes, compositions, inventions, innovations, improvements, developments, methods, know-how, manufacturing and production processes and techniques, research and development information, compilations of data and analyses, data and databases relating thereto, techniques, systems, records, manuals, documentation, models, drawings, specifications, designs, plans, proposals, reports and all similar or related information whether patentable or unpatentable and whether or not reduced to practice); (D) other intellectual property rights of the Company, or any of its affiliates; and (E) any other information that would constitute a trade secret under the Pennsylvania Uniform Trade Secrets Act, as amended from time to time (or any successor). The term "Confidential/Proprietary Trade Secret Information" also includes any information or data described above which the Company obtains from another party and which the Company treats as proprietary or designates as trade secrets, whether or not owned or developed by the Company.
- (iii) All documents and materials supplied to Grantee or developed by Grantee in the course of, or as a result of Grantee's employment at the Company whether in hard copy, electronic format or otherwise shall be the sole property of the Company. Grantee will at any time upon the request of the Company and in any event promptly upon termination of Grantee's employment or relationship with the Company, but in any event no later than five (5) business days after such termination, deliver all such materials to the Company and will not retain any originals or copies of such materials,

whether in hard copy form or as computerized and/or electronic records. Except to the extent approved by the Company or required by Grantee's bona fide job duties for the Company, the Grantee also agrees that Grantee will not copy or remove from the Company's place of business or the place of business of a customer of the Company, property or information belonging to the Company or the customer or entrusted to the Company or the customer. In addition, the Grantee agrees that Grantee will not provide any such materials to any competitor of or entity seeking to compete with the Company unless specifically approved in writing by the Company. Notwithstanding anything in paragraph 1(d)(3) of this Non-Competition Agreement to the contrary, if the Company needs to take legal action to secure such return delivery of such materials, Grantee shall be responsible for all legal fees, costs and expenses incurred by the Company in doing so.

(iv) Grantee understands that nothing contained in this Agreement limits Grantee's ability to file a charge or complaint with any federal, state or local governmental agency or commission ("Government Agencies"). Grantee further understands that this Agreement does not limit Grantee's ability to communicate with any Government Agencies or otherwise participate in any investigation or proceeding that may be commenced by any Government Agency including providing documents or other information without notice to the Company. This Agreement does not limit the Grantee's right to receive an award for information provided to any Government Agencies.

2. Subsequent Employment.

(a) Advise the Company of New Employment. In the event of a cessation of Grantee's employment with the Company, and during the Restricted Period described in paragraph 1 above, Grantee agrees to disclose to the Company, the name and address of any new employer or business affiliation within ten (10) calendar days of Grantee's accepting such position. In the event that Grantee fails to notify the Company of such new employment or business affiliation as required above, the Restricted Period will be extended by a period equal to the period of nondisclosure.

(b) Grantee's Ability to Earn Livelihood. Grantee acknowledges that, in the event of a cessation of Grantee's employment with the Company, for any reason and at any time, the provisions of paragraph 1 of this Non-Competition Agreement will not unreasonably restrict Grantee's ability to earn a living. Grantee and the Company acknowledge that Grantee's rights have been limited by this Non-Competition Agreement only to the extent reasonably necessary to protect the legitimate interests of the Company in its Confidential/Proprietary Trade Secret Information.

3. Enforcement. Grantee agrees that if Grantee violates the covenants and agreements set forth in this Non-Competition Agreement, the Company would suffer irreparable harm, and that such harm to the Company may be impossible to measure in monetary damages. Accordingly, in addition to any other remedies which the Company may have at law or in equity, the Company will have the right to have all obligations, undertakings, agreements, covenants and other provisions of this Non-Competition Agreement specifically performed by Grantee, and the Company will have the right to obtain preliminary and permanent injunctive relief to secure specific performance, and to prevent a breach or contemplated

breach, of this Non- Competition Agreement. In such event, the Company will be entitled to an accounting and repayment of all profits, compensation, remunerations or benefits which Grantee or others, directly or indirectly, have realized or may realize as a result of, growing out of, or in conjunction with any violation of this Non-Competition Agreement. Such remedies will be an addition to and not in limitation of any injunctive relief or other rights or remedies to which the Company is or may be entitled at law or in equity. In the event that the Company obtains any requested relief in any action brought to enforce the terms of this Non-Competition Agreement through court proceedings, the Company will be entitled to reimbursement for all legal fees, costs and expenses incident to enforcement.

4. Severability. If any section, paragraph, term or provision of this Non-Competition Agreement, or the application thereof, is determined by a competent court or tribunal to be invalid or unenforceable, then the other parts of such section, paragraph, term or provision will not be affected thereby and will be given full force and effect without regard to the invalid or unenforceable portions, and the section, paragraph, term or provision of this Non-Competition Agreement will be deemed modified to the extent necessary to render it valid and enforceable.

5. Miscellaneous.

(a) Employment.

(i) This Non-Competition Agreement does not constitute a guarantee of employment and termination of employment will not affect the enforceability of this Non-Competition Agreement.

(ii) Grantee agrees that if Grantee is transferred from the entity or division which was Grantee's employer at the time Grantee signed this Non-Competition Agreement to employment by another division or another company that is a subsidiary or affiliate of Harsco Corporation, and Grantee has not entered into a superseding agreement with the new employer covering the subject matter of this Non-Competition Agreement, then this Non-Competition Agreement will continue in effect and the Grantee's new employer will be termed "the Company" for all purposes hereunder and will have the right to enforce this Non-Competition Agreement as Grantee's employer. In the event of any subsequent transfer, Grantee's new employer will succeed to all rights under this Non- Competition Agreement so long as such employer will be Harsco Corporation or one of its subsidiaries or affiliates and so long as this Non-Competition Agreement has not been superseded.

(b) Headings. The headings contained in this Non-Competition Agreement are inserted for convenience of reference only, and will not be deemed to be a part of this Non-Competition Agreement for any purposes, and will not in any way define or affect the meaning, construction or scope of any of the provisions of this Non-Competition Agreement.

(c) Governing Law. This Non-Competition Agreement will be construed under the laws of the Commonwealth of Pennsylvania, without regard to its conflict of law provisions, and the parties consent and agree that the federal and state courts of the Commonwealth of Pennsylvania will have exclusive jurisdiction over any dispute relating to this Non- Competition Agreement.

(d) Supplemental Nature of this Non-Competition Agreement. The restrictions set forth in

paragraph 1 of this Non-Competition Agreement will be in addition to any other such restrictive covenants agreed to through separate agreements, if any, between Grantee and the Company and will survive the exercise of the equity award evidenced by the Agreement.

- (e) Waiver. The failure by the Company to enforce any right or remedy available to it under this Non-Competition Agreement will not be construed to be a waiver of such right or remedy with respect to any other prior, concurrent or subsequent breach or failure. No waiver of rights under this Non-Competition Agreement will be effective unless made in writing with specific reference to this Non-Competition Agreement.
- (f) Notification. Grantee agreed that the Company may notify any third party about Grantee's obligations under this Non-Competition Agreement until such time as Grantee has performed all of Grantee's obligations hereunder. Upon the Company's request, Grantee agrees to provide the Company with information, including, but not limited to, supplying details of Grantee's subsequent employment, sufficient to verify that Grantee has not breached, or is not breaching, any covenant in this Non-Competition Agreement.
- (g) Acknowledgments.
 - (i) Grantee acknowledges and agrees that this Non-Competition Agreement is in consideration of, (A) the grant evidenced by the Agreement, (B) access to Confidential/Proprietary Trade Secret Information, as required by Grantee's job duties, and (C) access to important customer relationships and the associated customer goodwill of the Company.
 - (ii) Grantee acknowledges that he or she has carefully read and considered the provisions of this Non-Competition Agreement, and that this Non-Competition Agreement is reasonable as to time and scope and activities prohibited, given the Company's need to protect its interests and given the consideration provided to Grantee in the form of the grant evidenced by the Agreement.
 - (iii) Grantee acknowledges that he or she has had an opportunity to consult with an independent legal counsel of Grantee's choosing, and accept the grant contained in the Agreement and continuing employment on the terms set forth in this Non-Competition Agreement.

EXHIBIT B

Additional Terms and Conditions for International Employees

TERMS AND CONDITIONS

This Exhibit B (this "Exhibit"), which is part of the Agreement, contains additional terms and conditions that govern the RSUs granted to the Grantee under the Plan if he or she resides outside the United States. The terms and conditions in Part A apply to **all** Grantees outside the United States. The country-specific terms and conditions and/or notifications in Part B will also apply to the Grantee if he or she resides in one of the countries listed below. Unless otherwise defined, capitalized terms used but not defined in this Exhibit have the meanings set forth in the Plan and/or the Agreement.

NOTIFICATIONS

This Exhibit also includes information regarding exchange controls and certain other issues of which the Grantee should be aware with respect to participation in the Plan. The information is based on the exchange control, securities and other laws in effect in the respective countries as of November 2017. Such laws are often complex and change frequently. As a result, the Company strongly recommends that the Grantee not rely on the information in this Exhibit as the only source of information relating to the consequences of his or her participation in the Plan because the information may be out of date at the time that the Grantee vests in the RSUs or sell shares of Common Stock acquired under the Plan.

In addition, the information contained herein is general in nature and may not apply to the Grantee's particular situation, and the Company is not in a position to assure the Grantee of a particular result. Accordingly, the Grantee is advised to seek appropriate professional advice as to how the relevant laws in his or her country may apply to the Grantee's situation.

Finally, if the Grantee is a citizen or resident, or is considered a resident, of a country other than the one in which he or she is currently working, or transferred employment after the RSUs were granted to him or her, the information contained herein may not be applicable. In addition, the Company shall, in its sole discretion, determine to what extent the additional terms and conditions included herein will apply to you under these circumstances.

A. ALL NON-U.S. COUNTRIES ADDITIONAL TERMS AND CONDITIONS

The following additional terms and conditions will apply to the Grantee if he or she resides in any country outside the United States.

Responsibility for Taxes. The following section replaces Section 8 of the Agreement in its entirety:

The Grantee acknowledges that, regardless of any action taken by the Company or, if different, the Grantee's employer (the "Employer"), the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related

items related to the Grantee's participation in the Plan and legally applicable to the Grantee ("Tax-Related Items") is and remains the Grantee's responsibility and may exceed the amount actually withheld by the Company or the Employer. The Grantee further acknowledges that the Company and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the RSU, including, but not limited to, the grant, vesting or settlement of the RSUs, the subsequent sale of shares of Common Stock acquired pursuant to such settlement and the receipt of any dividends and/or any dividend equivalents; and (2) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the RSUs to reduce or eliminate the Grantee's liability for Tax-Related Items or achieve any particular tax result. Further, if the Grantee is subject to Tax-Related Items in more than one jurisdiction between the Date of Grant and the date of any relevant taxable or tax withholding event, as applicable, the Grantee acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to any relevant taxable or tax withholding event, as applicable, the Grantee agrees to make adequate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items. In this regard, the Grantee authorizes the Company and/or the Employer to satisfy the obligations with regard to all Tax-Related Items by one or a combination of the following methods: (i) requiring payment by the Grantee to the Company, on demand, by cash, check or other method of payment as may be determined acceptable by the Company; or (ii) withholding from the Grantee's wages or other cash compensation paid to the Grantee by the Company and/or the Employer; or (iii) withholding from proceeds of the sale of shares of Common Stock acquired at vesting of the RSUs either through a voluntary sale or through a mandatory sale arranged by the Company (on the Grantee's behalf pursuant to this authorization) without further consent; or (iv) withholding shares of Common Stock issuable at vesting of the RSUs.

Depending on the withholding method, the Company and/or the Employer may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding rates or other applicable withholding rates, including maximum applicable rates, in which case the Grantee will receive a refund of any over-withheld amount in cash and will have no entitlement to the Common Stock equivalent. If the obligation for Tax-Related Items is satisfied by withholding in shares of Common Stock, for tax purposes, the Grantee is deemed to have been issued the full number of shares of Common Stock subject to the vested RSUs, notwithstanding that a number of the shares of Common Stock are held back solely for the purpose of paying the Tax-Related Items.

Finally, the Grantee agrees to pay the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of the Grantee's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver the shares or the proceeds of the sale of shares of Common Stock, if the Grantee fails to comply with the Grantee's obligations in connection with the Tax-Related Items.

Nature of Grant. In accepting the grant, the Grantee acknowledges, understands and agrees that: (1) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any

time, to the extent permitted by the Plan; (2) all decisions with respect to future RSU or other grants, if any, will be at the sole discretion of the Company; (3) the Grantee is voluntarily participating in the Plan; (4) the RSU and the shares of Common Stock subject to the RSU are not intended to replace any pension rights or compensation; (5) the future value of the underlying shares of Common Stock is unknown, indeterminable and cannot be predicted with certainty; (6) no claim or entitlement to compensation or damages shall arise from forfeiture of the RSUs resulting from the termination of the Grantee's employment or other service relationship (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Grantee is employed or the terms of the Grantee's employment agreement, if any), and in consideration of the grant of the RSUs to which the Grantee is otherwise not entitled, the Grantee irrevocably agrees never to institute any claim against the Company, any of its Subsidiaries or the Employer, waives the Grantee's ability, if any, to bring any such claim, and releases the Company, its Subsidiaries and the Employer from any such claim; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by participating in the Plan, the Grantee shall be deemed irrevocably to have agreed not to pursue such claim and agree to execute any and all documents necessary to request dismissal or withdrawal of such claim; (7) for purposes of the RSUs, the Grantee's employment or service relationship will be considered terminated as of the date the Grantee is no longer actively providing services to the Company or one of its Subsidiaries (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Grantee is employed or providing services or the terms of the Grantee's employment or service agreement, if any) and unless otherwise expressly provided in these Terms and Conditions or determined by the Company, the Grantee's right to vest in the RSUs under the Plan, if any, will terminate as of such date and will not be extended by any notice period (e.g., the Grantee's period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where the Grantee is employed or providing services or the terms of the Grantee's employment or service agreement, if any); the Company shall have the exclusive discretion to determine when the Grantee is no longer actively providing services for purposes of the Grantee's RSU grant (including whether the Grantee may still be considered to be providing services while on an approved leave of absence); (8) unless otherwise provided in the Plan or by the Company in its discretion, the RSUs and the benefits evidenced by these Terms and Conditions do not create any entitlement to have the RSUs or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the shares of the Company; (9) the RSUs and the shares of Common Stock subject to the RSUs, and the income and value of same, are not part of normal or expected compensation for any purpose, including, without limitation, calculating severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement or welfare benefits or similar payments; and (10) the Grantee acknowledges and agrees that neither the Company, the Employer nor any subsidiary or affiliate of the Company shall be liable for any foreign exchange rate fluctuation between the Grantee's local currency and the United States Dollar that may affect the value of the RSUs or of any amounts due to the Grantee pursuant to the settlement of the RSUs or the subsequent sale of any shares of Common Stock acquired upon settlement.

No Advice Regarding Grant. The Company is not providing any tax, legal or financial

advice, nor is the Company making any recommendations regarding the Grantee's participation in the Plan, or the Grantee's acquisition or sale of the underlying shares of Common Stock. The Grantee is hereby advised to consult with the Grantee's own personal tax, legal and financial advisors regarding the Grantee's participation in the Plan before taking any action related to the Plan.

Data Privacy. The Grantee hereby explicitly and unambiguously consents to the collection, use and transfer, in electronic or other form, including email, of the Grantee's personal data as described in the Agreement and any other RSU grant materials ("Data") by and among, as applicable, the Employer, the Company and its subsidiaries and affiliates for the exclusive purpose of implementing, administering and managing the Grantee's participation in the Plan.

The Grantee understands that the Company and the Employer may hold certain personal information about the Grantee, including, but not limited to, the Grantee's name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company, details of all RSUs or any other entitlement to shares of stock awarded, canceled, exercised, vested, unvested or outstanding in the Grantee's favor, for the exclusive purpose of implementing, administering and managing the Plan.

The Grantee understands that Data will be transferred to the Company's stock transfer agent and/or broker, or such other stock plan service provider as may be selected by the Company in the future, which is assisting the Company with the implementation, administration and management of the Plan. The Grantee understands that the recipients of the Data may be located in the United States or elsewhere (including outside the EEA), and that the recipients' country (e.g., the United States) may have different data privacy laws and protections than the Grantee's country. The Grantee understands that the Grantee may request a list with the names and addresses of any potential recipients of the Data by contacting the Grantee's local human resources representative. The Grantee authorizes the Company, the Company's stock transfer agent and/or broker, and any other possible recipients which may assist the Company (presently or in the future) with implementing, administering and managing the Plan to receive, possess, use, retain and transfer the Data, in electronic or other form, for the sole purpose of implementing, administering and managing the Grantee's participation in the Plan. The Grantee understands that Data will be held only as long as is necessary to implement, administer and manage the Grantee's participation in the Plan. The Grantee understands that the Grantee may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing the Grantee's local human resources representative. Further, the Grantee understands that the Grantee is providing the consents herein on a purely voluntary basis. If the Grantee does not consent, or if the Grantee later seeks to revoke the Grantee's consent, the Grantee's employment status or service and career with the Employer will not be adversely affected; the only adverse consequence of refusing or withdrawing the Grantee's consent is that the Company would not be able to grant the Grantee RSUs or other equity awards or

administer or maintain such awards. Therefore, the Grantee understands that refusing or withdrawing the Grantee's consent may affect the Grantee's ability to participate in the Plan. For more information on the consequences of the Grantee's refusal to consent or withdrawal of consent, the Grantee understands that the Grantee may contact the Grantee's local human resources representative.

Governing Law and Venue. The RSU grant and the provisions of the Agreement are governed by, and subject to, the internal substantive laws of the State of Delaware in the United States of America (with the exception of its conflict of law provisions).

For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this grant or the Agreement, the parties hereby submit to and consent to the exclusive jurisdiction of the Commonwealth of Pennsylvania in the United States of America and agree that such litigation shall be conducted only in the courts of Cumberland County, the Commonwealth of Pennsylvania, or the federal courts for the United States of America for the Middle District of Pennsylvania, and no other courts, where this grant is made and/or to be performed.

Compliance with Law. The following section supplements Section 9 of the Agreement: Notwithstanding any other provision of the Plan or the Agreement, unless there is an available exemption from any registration, qualification or other legal requirement applicable to the shares of Common Stock, the Company shall not be required to deliver any shares issuable upon settlement of the RSUs prior to the completion of any registration or qualification of the shares under any local, state, federal or foreign securities or exchange control law or under rulings or regulations of the U.S. Securities and Exchange Commission ("SEC") or of any other governmental regulatory body, or prior to obtaining any approval or other clearance from any local, state, federal or foreign governmental agency, which registration, qualification or approval the Company shall, in its absolute discretion, deem necessary or advisable. The Grantee understands that the Company is under no obligation to register or qualify the shares with the SEC or any state or foreign securities commission or to seek approval or clearance from any governmental authority for the issuance or sale of the shares. Further, the Grantee agrees that Company shall have unilateral authority to amend the Plan and the Agreement without the Grantee's consent to the extent necessary to comply with securities or other laws applicable to issuance of shares.

Language. If the Grantee has received the Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means, including email. The Grantee hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

Severability. The provisions of these Terms and Conditions are severable and if any one or

more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable.

Imposition of Other Requirements. Subject to Section 14 of the Agreement, the Company reserves the right to impose other requirements on the Grantee's participation in the Plan, on the RSUs and on any shares of Common Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require the Grantee to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

Waiver. The Grantee acknowledges that a waiver by the Company of breach of any provision of these Terms and Conditions shall not operate or be construed as a waiver of any other provision of these Terms and Conditions, or of any subsequent breach by the Grantee or any other Participant.

B. COUNTRY-SPECIFIC ADDITIONAL TERMS AND CONDITIONS AND NOTIFICATIONS

AUSTRALIA

TERMS AND CONDITIONS

Settlement of RSUs. Notwithstanding anything to the contrary in the Agreement, due to local regulatory requirements, upon the vesting of the RSUs, the Grantee will receive a cash payment in an amount equal to the value of the shares of Common Stock underlying the vested RSUs on a vesting date. As long as the Grantee resides in Australia, he or she may not receive or hold shares of Common Stock in connection with the RSUs under the Plan. Accordingly, any provisions in the Agreement referring to issuance of shares of Common Stock shall not be applicable to the Grantee as long as he or she resides in Australia.

NOTIFICATIONS

Exchange Control Information. Exchange control reporting is required for cash transactions exceeding \$10,000 and international fund transfers. The Australian bank assisting with the transaction will file the report. If there is no Australian bank involved in the transfer, Grantee will be required to file the report.

BELGIUM

NOTIFICATIONS

Tax Reporting Information. Grantee is required to report any bank accounts opened and maintained outside of Belgium on his or her annual Belgian tax return.

BRAZIL

TERMS AND CONDITIONS

Compliance with Law. By accepting the RSUs, the Grantee acknowledges that he or she agrees to comply with applicable Brazilian laws and pay any and all applicable taxes associated with the vesting of the RSUs, the receipt of any dividends, and the sale of shares of Common Stock acquired under the Plan.

NOTIFICATIONS

Exchange Control Information. If the Grantee is resident or domiciled in Brazil, he or she will be required to submit annually a declaration of assets and rights held outside of Brazil to the Central Bank of Brazil if the aggregate value of such assets and rights is equal to or greater than US \$100,000. Assets and rights that must be reported include shares of Common Stock.

CHINA

TERMS AND CONDITIONS

Settlement of RSUs. Notwithstanding anything to the contrary in the Agreement, due to local regulatory requirements, upon the vesting of the RSUs, the Grantee will receive a cash payment in China via the Company's local Chinese payroll in an amount equal to the value of the shares of Common Stock underlying the vested RSUs on a vesting date. As long as the Grantee resides in China, he or she may not receive or hold shares of Common Stock in connection with the RSUs under the Plan. Accordingly, any provisions in the Agreement referring to issuance of shares of Common Stock shall not be applicable to the Grantee as long as he or she resides in China.

FRANCE

TERMS AND CONDITIONS

Consent to Receive Information in English. By accepting the grant of the RSUs, the Grantee confirms having read and understood the Plan and the Agreement, which were provided in the English language. The Grantee accepts the terms of those documents accordingly.

En acceptant cette attribution gratuite d'actions, le Grantee confirme avoir lu et compris le Plan et ce Contrat, incluant tous leurs termes et conditions, qui ont été transmis en langue anglaise. Le Grantee accepte les dispositions de ces documents en connaissance de cause.

NOTIFICATIONS

Tax Notification. The RSUs are not intended to be French tax-qualified. Please be aware that the Company intends that any outstanding RSUs granted to you pursuant to the 1995 Executive Incentive Compensation Plan Sub-plan for Restricted Stock Units Granted to Participants in France will continue to meet the requirements for qualified status under French law; therefore, different terms and conditions will apply to such outstanding RSUs. Please refer to the Restricted Stock Unit Agreement for Employees in France applicable to your grant for further details.

Exchange Control Notification. The Grantee may hold shares of Common Stock acquired under the Plan outside of France provided that he or she declares all foreign accounts (including any accounts that were opened or closed during the tax year) on his or her annual French income tax return.

GERMANY

TERMS AND CONDITIONS

Parties to the Agreement. The Agreement is exclusively concluded between Harsco Corporation and the Grantee. The local Harsco entity employing the Grantee is not in any way party to the Agreement or entitled/committed hereby.

Vesting of RSUs. Notwithstanding anything to the contrary in the Agreement or in the Plan, the Grantee shall be considered "Disabled" for the purposes of this Agreement, if the Grantee's employment contract ends as a consequence of the Grantee being granted a permanent statutory pension for full occupational disability (*unbefristete Rente wegen voller Erwerbsminderung*) by the competent authorities.

Non-Competition Agreement. Notwithstanding anything to the contrary in the Non-Competition Agreement, it is exclusively concluded between Harsco Corporation and the Grantee. The employer of the Grantee is not in any way party to the Non-Competition Agreement or entitled/committed hereby. The Non-Competition Agreement does not affect in any way a separate non-competition agreement concluded between the Grantee and his/her employer.

INDIA

TERMS AND CONDITIONS

The Grantee hereby agrees that it shall hold the shares of the Common Stock pursuant to this Agreement and the Plan, at all times in accordance with the applicable laws in India, including but not limited to the (Indian) Foreign Exchange Management (Transfer or Issue of Any Foreign Security) Regulations, 2004 (and as amended or replaced), relevant master circulars, directions, notifications issued in this regard by the Reserve Bank of India from time to time and shall carry out the necessary reporting with the Reserve Bank of India at all stages of granting and vesting, if and as may be required. The Grantee agrees to indemnify the Company and/or Subsidiary of the Company with respect to any non-compliance and/or non-adherence by the Grantee of any of the applicable laws in India arising out of holding of the shares of the Common Stock by the Grantee.

The Grantee shall declare the holding of shares of the Common Stock, if and as may be necessary, in its income for taxation purposes and agrees to indemnify the Company and/or Subsidiary of the Company with respect to any and all taxes that it shall be obligated to pay with respect to the shares of the Common Stock such as including but not limited to income tax, capital gain taxes etc., under this Agreement and which may arise as a result of the sale of the shares of the Common Stock and the transactions contemplated hereunder.

LUXEMBOURG

NOTIFICATIONS

Exchange Control Information. Grantee understands that Grantee is required to report any inward remittances of funds to the Banque Centrale de Luxembourg and/or the Service

Central de la Statistique et des Études Économiques within 15 working days following the month during which the transaction occurred unless such payment is reported by a Luxembourg-resident financial institution.

THE NETHERLANDS

TERMS AND CONDITIONS

Non-Competition Agreement. The non-competition agreement entered into between the Company and the Grantee shall be in addition to any non-compete arrangements between the Grantee and his or her employer.

SWITZERLAND

TERMS AND CONDITIONS

Vesting: With the acceptance of a Grant, the Grantee expressly acknowledges that any RSU, PSU and/or SAR shall not give the Grantee any right or entitlement until such Grant is fully vested. The Grant remains fully discretionary until full vesting.

Continuous Employment: In Switzerland, "continuously employed" (or substantially similar term) means the absence of any interruption or termination (issuance of termination notice) of the Grantee's employment with the Company or with a Subsidiary of the Company. Continuous employment shall not be considered interrupted or terminated in the case of sick leave, military leave or any other leave of absence approved by the Company for which compensation needs to be paid by the Company or salary replacement benefits are granted by any insurance or in the case of transfers between locations of the Company and its Subsidiaries. For the avoidance of any doubt, continuous employment ends in any case with the end of the employment, even if any salary replacement benefits continue to be paid by any insurance, pension scheme or social security.

Retirement: For the purpose of the Plan, only a retirement under the rules and conditions of the Swiss pension scheme of the Subsidiary employing the Grantee shall qualify as retirement for the purpose of vesting of RSU, PSU or termination of SAR, and only if such retirement is (A) at age 62 or older while employed by the Company or any of its Subsidiaries; or (B) at or after such time as the Grantee's age (minimum of age 55), plus full years of continuous employment by the Company or any of its Subsidiaries, equals 75.

Disability: For purposes of the Plan, the Grantee shall be considered "Disabled" if the Grantee is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or qualifies as permanent full disability under the applicable Swiss social security and/or pension laws.

Non-Competition Agreement: For the avoidance of any doubt, any non-competition agreement entered into between the Grantee and the Company in connection with the Plan and grants thereunder shall be in addition to any non-competition agreement agreed between the Grantee and the employing Subsidiary and shall not replace such non-competition agreement.

NOTIFICATIONS

Exchange Control Notification. The Grantee may hold shares of Common Stock acquired under the Plan outside of Switzerland provided that he or she declares all foreign accounts (including any accounts that were opened or closed during the tax year) on his or her annual Swiss tax declaration.

UNITED ARAB EMIRATES

NOTIFICATIONS

Securities Law Notice. RSUs under the Plan are granted only to select executive officers and other employees of the Company and its subsidiaries for the purpose of providing such eligible persons with incentives and rewards for performance. The Agreement, including this Exhibit, the Plan and any documents the Grantee may receive in connection with the RSUs are intended for distribution to such eligible persons and must not be delivered to, or relied on, by any other person.

The Emirates Securities and Commodities Authority, the Central Bank, the Ministry of Economy and the Dubai Department of Economic Development do not have any responsibility for reviewing or verifying any documents in connection with the Plan nor have they reviewed or approved the Plan or the Agreement. The securities to which this statement relates may be illiquid and/or subject to restrictions on their resale. The Grantee and/or prospective purchasers of the securities offered should conduct their own due diligence on the securities.

If the Grantee does not understand the contents of the Agreement, including this Exhibit, or the Plan, the Grantee should consult an authorized financial adviser.

UNITED KINGDOM

TERMS AND CONDITIONS

U.K. Sub-Plan. The terms of the U.K. Sub-plan apply to the RSUs.

HARSCO CORPORATION

PERFORMANCE SHARE UNITS AGREEMENT (FORM)

This PERFORMANCE SHARE UNITS AGREEMENT (this "**Agreement**") is made as of March 6, 2019, by and between Harsco Corporation, a Delaware corporation, and [Participant Name:First Name Last Name] (the "**Grantee**").

1. Certain Definitions. Capitalized terms used, but not otherwise defined, in this Agreement will have the meanings given to such terms in the Company's 2013 Equity and Incentive Compensation Plan, as amended by Amendment No. 1 to the 2013 Equity and Incentive Compensation Plan (the "**Plan**").

2. Grant of PSUs. Subject to and upon the terms, conditions and restrictions set forth in this Agreement, including, without limitation, **Exhibit A** attached hereto (the "**Non-Competition Agreement**"), any additional terms and conditions for the Grantee's country (Grantees outside the United States only) set forth in the attached **Exhibit B** which forms part of this Agreement, and in the Plan, the Company grants to the Grantee, as of March 6, 2019 (the "**Date of Grant**"), a target number of [Granted:Target] performance-based Restricted Stock Units ("**PSUs**"). Notwithstanding anything in this **Section 2** or otherwise in this Agreement to the contrary, the Grantee acknowledges and agrees to be bound by the restrictive covenant terms, conditions and provisions in the Non-Competition Agreement as a "Grantee" as referred to therein.

3. Restrictions on Transfer of PSUs. Subject to **Section 15** of the Plan, neither the PSUs granted hereby nor any interest therein or in the Common Stock related thereto shall be transferable prior to payment to the Grantee pursuant to **Section 5** hereof other than by will or pursuant to the laws of descent and distribution.

4. Vesting of PSUs.

(a) Subject to the terms and conditions of **Section 4** and **Section 5** hereof and **Exhibit C** hereto, the Grantee's right to receive Common Stock in settlement of the PSUs shall become nonforfeitable with respect to (i) 0% to 200% of the PSUs on the basis of the RTSR achievement during the Performance Period as set forth in the Statement of Management Objectives attached hereto as **Exhibit C** (the "**Earned PSUs**"). The Earned PSUs will be determined on the date following the end of the Performance Period on which the Committee determines the level of attainment of the Management Objectives for the Performance Period, which date must occur within 60 days after the end of the Performance Period (the "**Committee Determination Date**"). Except as otherwise provided herein, the Grantee's right to receive Common Stock in settlement of the PSUs is contingent upon his or her remaining in the continuous employ of the Company or a Subsidiary through the end of the Performance Period.

(b) For purposes of this Agreement:

(i) "Continuously employed" (or substantially similar term) means the absence of any interruption or termination of the Grantee's employment with the Company or with a Subsidiary of the Company. Continuous employment shall not be considered interrupted or terminated in the case of sick leave, military leave or

any other leave of absence approved by the Company or in the case of transfers between locations of the Company and its Subsidiaries;

- (ii) "Management Objectives" means the threshold, target and maximum goals established by the Committee for the Performance Period with respect to RTSR, as described in the Statement of Management Objectives. No adjustment of the Management Objectives shall be permitted in respect of any PSUs granted to the Grantee if at the Date of Grant he or she is a Covered Employee if such adjustment would result in the PSUs failing to qualify as a Qualified Performance-Based Award.
 - (iii) "Performance Period" means the three-year period commencing January 1, 2019 and ending on December 31, 2021.
 - (iv) "Relative Total Stockholder Return" or "RTSR" has the meaning as set forth in the Statement of Management Objectives.
- (c) Notwithstanding the other provisions of this **Section 4**:
- (i) If the Grantee dies or becomes Disabled during any calendar year of the Performance Period while the Grantee is continuously employed by the Company or any of its Subsidiaries (the "**Death/Disability Year**"), provided that the PSUs have not previously been forfeited or become nonforfeitable at such time, then (notwithstanding anything in the Statement of Management Objectives to the contrary): (A) the Performance Period will be deemed to end on December 31 of the Death/Disability Year (the "**Death/Disability Measurement Date**"); (B) the PSUs will continue to be eligible to become nonforfeitable (and payable in accordance with **Section 5** hereof) as if the Grantee continued to be employed until the end of the Death/Disability Measurement Date; (C) the Earned PSUs will be determined based on RTSR achievement from the start of the Performance Period through the Death/Disability Measurement Date based on the S&P600® Industrials Index as constituted on the first day of the Performance Period; (D) the ending stock price for Total Stockholder Return determination purposes will be based on the average closing stock price for the 30 calendar days immediately preceding the January 1st immediately following the Death/Disability Measurement Date on the principal stock exchange on which the stock then trades; and (E) the Earned PSUs will be determined on the date following the Death/Disability Measurement Date on which the Committee determines the level of attainment of the Management Objectives for the shortened Performance Period, which date must occur within 60 days after the Death/Disability Measurement Date.
 - (ii) If the Grantee retires from the Company prior to the end of the Performance Period (A) at age 62 or older while continuously employed by the Company or any of its Subsidiaries or (B) at or after such time as the Grantee's age (minimum of age 55), plus full years of continuous employment by the Company or any of its Subsidiaries, equals 75, provided that the PSUs have not previously been forfeited or become nonforfeitable at such time, then the PSUs will continue to be eligible to become nonforfeitable in accordance with this **Section 4** (and payable in accordance with **Section 5** hereof) as if the Grantee continued to be employed until the end of the Performance Period.
- (d) (i) Notwithstanding **Section 4(a)** or **Section 4(c)** above, if at any time before the Committee Determination Date or forfeiture of the PSUs, and while the Grantee is

continuously employed by the Company or a Subsidiary, a Change in Control occurs, provided that the PSUs have not previously been forfeited or become nonforfeitable at such time, then (except to the extent that a Replacement Award is provided to the Grantee in accordance with **Section 4(d)(ii)** to continue, replace or assume the PSUs covered by this Agreement (the "**Replaced Award**") the PSUs will become nonforfeitable and payable to the Grantee in accordance with **Section 5** hereof as follows (notwithstanding anything in the Statement of Management Objectives to the contrary): (A) the Performance Period will be deemed to have ended on the date of the Change in Control (the "**CIC Measurement Date**"); (B) the Earned PSUs will be determined based on RTSR achievement from the start of the Performance Period through the CIC Measurement Date based on the S&P600® Industrials Index as constituted on the first day of the Performance Period; (C) the ending stock price for Total Stockholder Return determination purposes will be based on the average closing stock price for the 30 calendar days immediately preceding the CIC Measurement Date on the principal stock exchange on which the stock then trades; and (D) the Earned PSUs will be determined on the date of the Change in Control.

(ii) For purposes of this Agreement, a "Replacement Award" means an award (A) of the same type (*e.g.*, performance-based restricted stock units) as the Replaced Award, (B) that has a value at least equal to the value of the Replaced Award, (C) that relates to publicly traded equity securities of the Company or its successor in the Change in Control or another entity that is affiliated with the Company or its successor following the Change in Control or is payable solely in cash, (D) if the Grantee holding the Replaced Award is subject to U.S. federal income tax under the Code, the tax consequences of which to such Grantee under the Code are not less favorable to such Grantee than the tax consequences of the Replaced Award, and (E) the other terms and conditions of which are not less favorable to the Grantee holding the Replaced Award than the terms and conditions of the Replaced Award (including the provisions that would apply in the event of a subsequent Change in Control). A Replacement Award may be granted only to the extent it does not result in the Replaced Award or Replacement Award failing to comply with or be exempt from Section 409A of the Code. Without limiting the generality of the foregoing, the Replacement Award may take the form of a continuation of the Replaced Award if the requirements of the two preceding sentences are satisfied. The determination of whether the conditions of this **Section 4(d)(ii)** are satisfied will be made by the Committee, as constituted immediately before the Change in Control, in its sole discretion.

(iii) If, upon receiving a Replacement Award, the Grantee's employment with the Company or a Subsidiary (or any of their successors) (as applicable, the "**Successor**") is subsequently terminated by the Grantee for Good Reason or by the Successor without Cause within a period of two years after the Change in Control, 100% of the Replacement Award will become nonforfeitable and payable with respect to the performance-based restricted stock units covered by such Replacement Award.

(iv) A termination by the Grantee for "Good Reason" means Grantee's termination of his or her employment with the Successor as a result of the occurrence of any of the following: (A) a change in the Grantee's principal location of employment that is greater than 50 miles from such location as of the date of this Agreement without the Grantee's consent; provided, however, that

the Grantee hereby acknowledges that the Grantee may be required to engage in travel in connection with the performance of the Grantee's duties and that such travel shall not constitute a change in the Grantee's principal location of employment for purposes hereof; (B) a material diminution in the Grantee's base compensation; (C) a change in the Grantee's position with the Successor without the Grantee's consent such that there is a material diminution in the Grantee's authority, duties or responsibilities; or (D) any other action or inaction that constitutes a material breach by the Successor of the agreement, if any, under which the Grantee provides services to the Successor or its subsidiaries. Notwithstanding the foregoing, the Grantee's termination of the Grantee's employment with the Successor as a result of the occurrence of any of the foregoing shall not constitute a termination for "Good Reason" unless (X) the Grantee gives the Successor written notice of such occurrence within 90 days of such occurrence and such occurrence is not cured by the Successor within 30 days of the date on which such written notice is received by the Successor and (Y) the Grantee actually terminates his or her employment with the Successor prior to the 365th day following such occurrence.

(v) A termination by the Successor without "Cause" means the Successor's termination of the Grantee's employment with the Successor under circumstances that do not involve or relate to the occurrence of any of the following: (A) an act or acts of personal dishonesty taken by the Grantee and intended to result in substantial personal enrichment of the Grantee at the expense of the Company; (B) repeated failure by the Grantee to devote reasonable attention and time during normal business hours to the business and affairs of the Company or to use the Grantee's reasonable best efforts to perform faithfully and efficiently the responsibilities assigned to the Grantee (provided that such failure is demonstrated to be willful and deliberate on the Grantee's part and is not remedied in a reasonable period of time after receipt of written notice from the Company); or (C) the conviction of the Grantee of a felony.

- (e) The PSUs shall be forfeited to the extent they fail to become nonforfeitable as of the Committee Determination Date and, except as otherwise provided in this **Section 4**, if the Grantee ceases to be employed by the Company or a Subsidiary at any time prior to such PSUs becoming nonforfeitable, or to the extent they are forfeited under **Section 16** hereof.

5. Form and Time of Payment of Earned PSUs.

- (a) Payment for the PSUs, after and to the extent they have become nonforfeitable, shall be made in the form of shares of Common Stock. Payment shall be made within 70 days following the date that the PSUs become nonforfeitable pursuant to **Section 4** hereof.
- (b) Except to the extent provided by Section 409A of the Code and permitted by the Committee, no Common Stock may be issued to the Grantee at a time earlier than otherwise expressly provided in this Agreement.

6. The Company's obligations to the Grantee with respect to the PSUs will be satisfied in full upon the issuance of Common Stock corresponding to such PSUs.

7. Dividend Equivalents, Voting, and Other Rights.

- (a) The Grantee shall have no rights of ownership in the Common Stock underlying the

PSUs and no right to vote the Common Stock underlying the PSUs until the date on which the shares of Common Stock underlying the PSUs are issued or transferred to the Grantee pursuant to **Section 5** above.

- (b) From and after the Date of Grant and until the earlier of (i) the time when the PSUs become nonforfeitable and are paid in accordance with **Section 5** hereof or (ii) the time when the Grantee's right to receive Common Stock in payment of the PSUs is forfeited in accordance with **Section 4** hereof, on the date that the Company pays a cash dividend (if any) to holders of Common Stock generally, the Grantee shall become entitled to receive (subject to the following sentence) a number of additional whole PSUs determined by dividing (x) the product of (1) the dollar amount of the cash dividend paid per share of Common Stock on such date and (2) the total number of PSUs (including dividend equivalents) previously credited to the Grantee as of such date, by (y) the Market Value per Share on such date. Such dividend equivalents (if any) shall be subject to the same terms and conditions and shall be paid or forfeited in the same manner and at the same time as the PSUs to which the dividend equivalents were credited.
- (c) The obligations of the Company under this Agreement will be merely that of an unfunded and unsecured promise of the Company to deliver shares of Common Stock in the future, and the rights of the Grantee will be no greater than that of an unsecured general creditor. No assets of the Company will be held or set aside as security for the obligations of the Company under this Agreement.

8. Adjustments. The PSUs and their terms under this Agreement are subject to mandatory adjustment under the terms of **Section 11** of the Plan.

9. Withholding Taxes. To the extent that the Company is required to withhold federal, state, local or foreign taxes in connection with the delivery to the Grantee of Common Stock or any other payment to the Grantee or any other payment or vesting event under this Agreement, the Grantee hereby authorizes withholding from payroll and any other amounts payable to the Grantee, including amounts payable hereunder, and otherwise agrees to make adequate provision for, any sums required to satisfy such tax withholding obligations of the Company. The Company shall have no obligation to make delivery or payment hereunder until the tax withholding obligations of the Company have been satisfied by the Grantee. If all or any part of such withholding requirement be satisfied by retention by the Company of a portion of the Common Stock to be delivered to the Grantee or by delivering to the Company other shares of Common Stock held by the Grantee, the shares so retained shall be credited against such withholding requirement at the Market Value per Share of such Common Stock on the date of such delivery. In no event will the market value of the Common Stock to be withheld and/or delivered pursuant to this **Section 9** to satisfy applicable withholding taxes exceed the minimum amount of taxes required to be withheld, unless otherwise agreed to by the Grantee, provided, however, that such amount shall not exceed the statutory maximum withholding rates.

10. Compliance With Law. The Company shall make reasonable efforts to comply with all applicable federal and state securities laws; provided, however, notwithstanding any other provision of the Plan and this Agreement, the Company shall not be obligated to issue any Common Stock pursuant to this Agreement if the issuance thereof would result in a violation of any such law.

11. Compliance With Section 409A of the Code. To the extent applicable, it is intended that this Agreement and the Plan comply with the provisions of Section 409A of the Code. This Agreement and the Plan shall be administered in a manner consistent with this intent, and any provision that would cause this Agreement or the Plan to fail to satisfy Section 409A of the Code shall have no force or effect until amended to comply with Section 409A of the Code (which amendment may be retroactive to the extent permitted by Section 409A of the Code and may be made by the Company without the consent of the Grantee).

12. Interpretation. Any reference in this Agreement to Section 409A of the Code will also include any proposed, temporary or final regulations, or any other guidance, promulgated with respect to such Section by the U.S. Department of the Treasury or the Internal Revenue Service. Except as expressly provided in this Agreement, capitalized terms used herein will have the meaning ascribed to such terms in the Plan.

13. No Employment Rights. The grant of the PSUs under this Agreement to the Grantee is a voluntary, discretionary award being made on a one-time basis and it does not constitute a commitment to make any future awards. The grant of the PSUs and any payments made hereunder will not be considered salary or other compensation for purposes of any severance pay or similar allowance, except as otherwise required by law. Nothing contained in this Agreement shall confer upon the Grantee any right to be employed or remain employed by the Company or any of its Subsidiaries, nor limit or affect in any manner the right of the Company or any of its Subsidiaries to terminate the employment or adjust the compensation of the Grantee.

14. Relation to Other Benefits. Any economic or other benefit to the Grantee under this Agreement or the Plan shall not be taken into account in determining any benefits to which the Grantee may be entitled under any profit-sharing, retirement or other benefit or compensation plan maintained by the Company or any of its Subsidiaries and shall not affect the amount of any life insurance coverage available to any beneficiary under any life insurance plan covering employees of the Company or any of its Subsidiaries.

15. Amendments. Any amendment to the Plan shall be deemed to be an amendment to this Agreement to the extent that the amendment is applicable hereto; provided, however, that (a) no amendment shall adversely affect the rights of the Grantee under this Agreement without the Grantee's written consent, and (b) the Grantee's consent shall not be required to an amendment that is deemed necessary by the Company to ensure compliance with Section 409A of the Code.

16. Severability. In the event that one or more of the provisions of this Agreement shall be invalidated for any reason by a court of competent jurisdiction, any provision so invalidated shall be deemed to be separable from the other provisions hereof, and the remaining provisions hereof shall continue to be valid and fully enforceable.

17. Relation to Plan. This Agreement is subject to the terms and conditions of the Plan. In the event of any inconsistency between the provisions of this Agreement and the Plan, the Plan shall govern. The Committee acting pursuant to the Plan, as constituted from time to time, shall, except as expressly provided otherwise herein or in the Plan, have the right to determine any questions which arise in connection with this Agreement. In addition, the PSUs shall be subject to the terms and conditions of the Company's clawback policy in effect on the Date of Grant as if such PSUs were "Incentive-Based Compensation" (as such term is defined in such clawback policy).

18. Successors and Assigns. Without limiting Section 3 hereof, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, administrators, heirs, legal representatives and assigns of the Grantee, and the successors and assigns of the Company.

19. Acknowledgement. The Grantee acknowledges that the Grantee (a) has received a copy of the Plan, (b) has had an opportunity to review the terms of this Agreement and the Plan, (c) understands the terms and conditions of this Agreement and the Plan and (d) agrees to such terms and conditions.

20. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same agreement.

[signature page follows]

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed on its behalf by its duly authorized officer and the Grantee has executed this Agreement, effective as of the day and year first above written.

HARSCO CORPORATION

By: /s/ F. Nicholas Grasberger III
Name: F. Nicholas Grasberger III
Title Chairman, President and CEO

The undersigned hereby acknowledges receipt of an executed version of this Agreement and accepts the award of PSUs granted hereunder on the terms and conditions set forth herein and in the Plan (including the terms of the Non-Competition Agreement, attached hereto as **Exhibit A**).

Grantee

By: _____
Name:

EXHIBIT A

Non-Competition Agreement

1. Grant. Grantee acknowledges that Grantee has access to the confidential and proprietary trade secret information of Harsco Corporation, including its subsidiaries, joint ventures, and operating divisions (the "Company"), as further described below ("Confidential/Proprietary Trade Secret Information"). Further, Grantee acknowledges that Grantee derives significant value from the Company and from the Confidential/Proprietary Trade Secret Information provided during the term of employment with the Company, which enables Grantee to optimize the performance of the Company's performance and Grantee's own personal, professional, and financial benefit. In consideration of the grant described in the award agreement (the "Agreement") to which these terms, conditions and provisions (the "Non-Competition Agreement") are attached as an exhibit, Grantee agrees that, during Grantee's employment by the Company, and for a period of twelve (12) months after the cessation of such employment for any reason (both such periods collectively referred to as the "Restricted Period"), Grantee will not, directly or indirectly, engage in any of the following competitive activities:
 - (a) For Grantee or on behalf of any other corporation, business, partnership, individual, or other entity, directly or indirectly solicit, divert, contract with, or attempt to solicit, divert, or contract with, any customer with whom Grantee had Material Contact during the final two (2) years of Grantee's employment with the Company concerning any products or services that are similar to those that Grantee was responsible for or were otherwise involved with during Grantee's employment with the Company. For purposes of this Non-Competition Agreement, the Grantee will have had "Material Contact" with a customer if: (i) Grantee had business dealings with the customer on the Company's behalf; (ii) Grantee was responsible for supervising or coordinating the dealings between the Company and the customer; or (iii) Grantee obtained Confidential/Proprietary Trade Secret Information about the customer as a result of Grantee's association with the Company;
 - (b) Within the geographic territory where Grantee was employed by the Company, obtained knowledge of Confidential/Proprietary Trade Secret Information, or had contact with the Company's customers, become employed by or otherwise render services to (as a director, employee, contractor or consultant) or have any ownership interest in any business which is engaged in offering the same or similar products or services as, or otherwise competes with those Company, including its subsidiaries and operating unit(s) with which Grantee was employed or in any way involved during the last twelve (12) months of employment with the Company; or
 - (c) (i) induce, offer, assist, encourage or suggest that another business or enterprise offer employment to or enter into a consulting arrangement with any employee, agent or representative of the Company or (ii) induce, offer, assist, encourage or suggest that any employee, agent or representative of the Company, including its subsidiaries and joint ventures, terminate his or her employment or business affiliation with the Company or accept employment with any other business or enterprise.
 - (d) Confidential/Proprietary Trade Secret Information.
 - (i) Grantee agrees to keep secret and confidential all Confidential/Proprietary Trade Secret Information (further described below) acquired by Grantee while employed by the Company or concerning the business and affairs of the Company, its vendors, its customers, and its affiliates (whether of a business, commercial or technological nature), and further agrees that Grantee will not disclose any such Confidential/Proprietary Trade Secret

Information so acquired to any individual, partner, company, firm, corporation or other person or use the same in any manner other than in connection with the business and affairs of the Company and its affiliates. Except in the performance of services for the Company, the Grantee will not, for so long as the Confidential/Proprietary Trade Secret Information remains so designated under applicable law, use, disclose, reproduce, distribute, transmit, reverse engineer, decompile, disassemble, or transfer the Confidential/Proprietary Trade Secret Information or any portion thereof.

- (ii) For purposes of this Non-Competition Agreement, "Confidential/Proprietary Trade Secret Information" includes all information of a confidential or proprietary nature that relates to the business, products, services, research or development of the Company, and its affiliates or their respective suppliers, distributors, customers, independent contractors or other business relations. Confidential/Proprietary Trade Secret Information also includes, but is not limited to, the following: (A) internal business information (including information relating to strategic and staffing plans and practices, business, training, financial, marketing, promotional and sales plans and practices, cost, rate and pricing structures, accounting and business methods and customer and supplier lists); (B) identities of, individual requirements of, specific contractual arrangements with and information about, the Company's suppliers, distributors, customers, independent contractors or other business relations and their confidential information; (C) trade secrets, copyrightable works and other confidential information (including ideas, formulas, recipes, compositions, inventions, innovations, improvements, developments, methods, know-how, manufacturing and production processes and techniques, research and development information, compilations of data and analyses, data and databases relating thereto, techniques, systems, records, manuals, documentation, models, drawings, specifications, designs, plans, proposals, reports and all similar or related information whether patentable or unpatentable and whether or not reduced to practice); (D) other intellectual property rights of the Company, or any of its affiliates; and (E) any other information that would constitute a trade secret under the Pennsylvania Uniform Trade Secrets Act, as amended from time to time (or any successor). The term "Confidential/Proprietary Trade Secret Information" also includes any information or data described above which the Company obtains from another party and which the Company treats as proprietary or designates as trade secrets, whether or not owned or developed by the Company.
- (iii) All documents and materials supplied to Grantee or developed by Grantee in the course of, or as a result of Grantee's employment at the Company whether in hard copy, electronic format or otherwise shall be the sole property of the Company. Grantee will at any time upon the request of the Company and in any event promptly upon termination of Grantee's employment or relationship with the Company, but in any event no later than five (5) business days after such termination, deliver all such materials to the Company and will not retain any originals or copies of such materials, whether in hard copy form or as computerized and/or electronic records. Except to the extent approved by the Company or required by Grantee's bona fide job duties for the Company, the Grantee also agrees that Grantee will not copy or remove from the Company's place of business or the place of business of a customer of the Company, property or information belonging to the Company or the customer or entrusted to the Company or the customer. In addition, the Grantee agrees that Grantee will not provide any such materials to any competitor of or entity seeking to compete with the Company unless specifically approved in writing by the Company. Notwithstanding anything in paragraph 1(d)(3) of this Non-Competition Agreement to the contrary, if the Company needs to take legal action to secure such return delivery of such materials, Grantee shall be responsible for all legal fees, costs and expenses incurred by the Company in doing so.
- (iv) Grantee understands that nothing contained in this Agreement limits Grantee's ability to file a charge or complaint with any federal, state or local governmental agency or commission

(“Government Agencies”). Grantee further understands that this Agreement does not limit Grantee's ability to communicate with any Government Agencies or otherwise participate in any investigation or proceeding that may be commenced by any Government Agency including providing documents or other information without notice to the Company. This Agreement does not limit the Grantee's right to receive an award for information provided to any Government Agencies.

2. Subsequent Employment.

(a) Advise the Company of New Employment. In the event of a cessation of Grantee's employment with the Company, and during the Restricted Period described in paragraph 1 above, Grantee agrees to disclose to the Company, the name and address of any new employer or business affiliation within ten (10) calendar days of Grantee's accepting such position. In the event that Grantee fails to notify the Company of such new employment or business affiliation as required above, the Restricted Period will be extended by a period equal to the period of nondisclosure.

(b) Grantee's Ability to Earn Livelihood. Grantee acknowledges that, in the event of a cessation of Grantee's employment with the Company, for any reason and at any time, the provisions of paragraph 1 of this Non-Competition Agreement will not unreasonably restrict Grantee's ability to earn a living. Grantee and the Company acknowledge that Grantee's rights have been limited by this Non-Competition Agreement only to the extent reasonably necessary to protect the legitimate interests of the Company in its Confidential/Proprietary Trade Secret Information.

3. Enforcement. Grantee agrees that if Grantee violates the covenants and agreements set forth in this Non-Competition Agreement, the Company would suffer irreparable harm, and that such harm to the Company may be impossible to measure in monetary damages. Accordingly, in addition to any other remedies which the Company may have at law or in equity, the Company will have the right to have all obligations, undertakings, agreements, covenants and other provisions of this Non-Competition Agreement specifically performed by Grantee, and the Company will have the right to obtain preliminary and permanent injunctive relief to secure specific performance, and to prevent a breach or contemplated breach, of this Non-Competition Agreement. In such event, the Company will be entitled to an accounting and repayment of all profits, compensation, remunerations or benefits which Grantee or others, directly or indirectly, have realized or may realize as a result of, growing out of, or in conjunction with any violation of this Non-Competition Agreement. Such remedies will be an addition to and not in limitation of any injunctive relief or other rights or remedies to which the Company is or may be entitled at law or in equity. In the event that the Company obtains any requested relief in any action brought to enforce the terms of this Non-Competition Agreement through court proceedings, the Company will be entitled to reimbursement for all legal fees, costs and expenses incident to enforcement.

4. Severability. If any section, paragraph, term or provision of this Non-Competition Agreement, or the application thereof, is determined by a competent court or tribunal to be invalid or unenforceable, then the other parts of such section, paragraph, term or provision will not be affected thereby and will be given full force and effect without regard to the invalid or unenforceable portions, and the section, paragraph, term or provision of this Non-Competition Agreement will be deemed modified to the extent necessary to render it valid and enforceable.

5. Miscellaneous.

(a) Employment.

(i) This Non-Competition Agreement does not constitute a guarantee of employment and termination of employment will not affect the enforceability of this Non-Competition Agreement.

- (ii) Grantee agrees that if Grantee is transferred from the entity or division which was Grantee's employer at the time Grantee signed this Non-Competition Agreement to employment by another division or another company that is a subsidiary or affiliate of Harsco Corporation, and Grantee has not entered into a superseding agreement with the new employer covering the subject matter of this Non-Competition Agreement, then this Non-Competition Agreement will continue in effect and the Grantee's new employer will be termed "the Company" for all purposes hereunder and will have the right to enforce this Non-Competition Agreement as Grantee's employer. In the event of any subsequent transfer, Grantee's new employer will succeed to all rights under this Non-Competition Agreement so long as such employer will be Harsco Corporation or one of its subsidiaries or affiliates and so long as this Non-Competition Agreement has not been superseded.
- (b) Headings. The headings contained in this Non-Competition Agreement are inserted for convenience of reference only, and will not be deemed to be a part of this Non-Competition Agreement for any purposes, and will not in any way define or affect the meaning, construction or scope of any of the provisions of this Non-Competition Agreement.
- (c) Governing Law. This Non-Competition Agreement will be construed under the laws of the Commonwealth of Pennsylvania, without regard to its conflict of law provisions, and the parties consent and agree that the federal and state courts of the Commonwealth of Pennsylvania will have exclusive jurisdiction over any dispute relating to this Non-Competition Agreement.
- (d) Supplemental Nature of this Non-Competition Agreement. The restrictions set forth in paragraph 1 of this Non-Competition Agreement will be in addition to any other such restrictive covenants agreed to through separate agreements, if any, between Grantee and the Company and will survive the exercise of the equity award evidenced by the Agreement.
- (e) Waiver. The failure by the Company to enforce any right or remedy available to it under this Non-Competition Agreement will not be construed to be a waiver of such right or remedy with respect to any other prior, concurrent or subsequent breach or failure. No waiver of rights under this Non-Competition Agreement will be effective unless made in writing with specific reference to this Non-Competition Agreement.
- (f) Notification. Grantee agreed that the Company may notify any third party about Grantee's obligations under this Non-Competition Agreement until such time as Grantee has performed all of Grantee's obligations hereunder. Upon the Company's request, Grantee agrees to provide the Company with information, including, but not limited to, supplying details of Grantee's subsequent employment, sufficient to verify that Grantee has not breached, or is not breaching, any covenant in this Non-Competition Agreement.
- (g) Acknowledgments.
- (i) Grantee acknowledges and agrees that this Non-Competition Agreement is in consideration of, (A) the grant evidenced by the Agreement, (B) access to Confidential/Proprietary Trade Secret Information, as required by Grantee's job duties, and (C) access to important customer relationships and the associated customer goodwill of the Company.
- (ii) Grantee acknowledges that he or she has carefully read and considered the provisions of this Non-Competition Agreement, and that this Non-Competition Agreement is reasonable as to time and scope and activities prohibited, given the Company's need to protect its interests and given the consideration provided to Grantee in the form of the grant evidenced by the Agreement.

(iii) Grantee acknowledges that he or she has had an opportunity to consult with an independent legal counsel of Grantee's choosing, and accept the grant contained in the Agreement and continuing employment on the terms set forth in this Non-Competition Agreement.

EXHIBIT B

Additional Terms and Conditions for International Employees

TERMS AND CONDITIONS

This Exhibit B (this "Exhibit"), which is part of the Agreement, contains additional terms and conditions that govern the PSUs granted to the Grantee under the Plan if he or she resides outside the United States. The terms and conditions in Part A apply to **all** Grantees outside the United States. The country-specific terms and conditions and/or notifications in Part B will also apply to the Grantee if he or she resides in one of the countries listed below. Unless otherwise defined, capitalized terms used but not defined in this Exhibit have the meanings set forth in the Plan and/or the Agreement.

NOTIFICATIONS

This Exhibit also includes information regarding exchange controls and certain other issues of which the Grantee should be aware with respect to participation in the Plan. The information is based on the exchange control, securities and other laws in effect in the respective countries as of November 2017. Such laws are often complex and change frequently. As a result, the Company strongly recommends that the Grantee not rely on the information in this Exhibit as the only source of information relating to the consequences of his or her participation in the Plan because the information may be out of date at the time that the Grantee vests in the PSUs or sell shares of Common Stock acquired under the Plan.

In addition, the information contained herein is general in nature and may not apply to the Grantee's particular situation, and the Company is not in a position to assure the Grantee of a particular result. Accordingly, the Grantee is advised to seek appropriate professional advice as to how the relevant laws in his or her country may apply to the Grantee's situation.

Finally, if the Grantee is a citizen or resident, or is considered a resident, of a country other than the one in which he or she is currently working, or transferred employment after the PSUs were granted to him or her, the information contained herein may not be applicable. In addition, the Company shall, in its sole discretion, determine to what extent the additional terms and conditions included herein will apply to you under these circumstances.

A. ALL NON-U.S. COUNTRIES ADDITIONAL TERMS AND CONDITIONS

The following additional terms and conditions will apply to the Grantee if he or she resides in any country outside the United States.

Responsibility for Taxes. The following section replaces Section 9 of the Agreement in its entirety:

The Grantee acknowledges that, regardless of any action taken by the Company or, if different, the Grantee's employer (the "Employer"), the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items related to the Grantee's participation in the Plan and legally applicable to the Grantee ("Tax-Related Items") is and remains the Grantee's responsibility and may exceed the amount actually withheld by the Company or the Employer. The Grantee further acknowledges that the Company and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the PSU, including, but not limited to, the grant, vesting or settlement of the PSUs, the subsequent sale of shares of Common Stock acquired pursuant to such settlement and the receipt of any dividends and/or any dividend equivalents; and (2) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the PSUs to reduce or eliminate the Grantee's

liability for Tax-Related Items or achieve any particular tax result. Further, if the Grantee is subject to Tax-Related Items in more than one jurisdiction between the Date of Grant and the date of any relevant taxable or tax withholding event, as applicable, the Grantee acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to any relevant taxable or tax withholding event, as applicable, the Grantee agrees to make adequate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items. In this regard, the Grantee authorizes the Company and/or the Employer to satisfy the obligations with regard to all Tax-Related Items by one or a combination of the following methods: (i) requiring payment by the Grantee to the Company, on demand, by cash, check or other method of payment as may be determined acceptable by the Company; or (ii) withholding from the Grantee's wages or other cash compensation paid to the Grantee by the Company and/or the Employer; or (iii) withholding from proceeds of the sale of shares of Common Stock acquired at vesting of the PSUs either through a voluntary sale or through a mandatory sale arranged by the Company (on the Grantee's behalf pursuant to this authorization) without further consent; or (iv) withholding shares of Common Stock issuable at vesting of the PSUs.

Depending on the withholding method, the Company and/or the Employer may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding rates or other applicable withholding rates, including maximum applicable rates, in which case the Grantee will receive a refund of any over-withheld amount in cash and will have no entitlement to the Common Stock equivalent. If the obligation for Tax-Related Items is satisfied by withholding in shares of Common Stock, for tax purposes, the Grantee is deemed to have been issued the full number of shares of Common Stock subject to the vested PSUs, notwithstanding that a number of the shares of Common Stock are held back solely for the purpose of paying the Tax-Related Items.

Finally, the Grantee agrees to pay the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of the Grantee's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver the shares or the proceeds of the sale of shares of Common Stock, if the Grantee fails to comply with the Grantee's obligations in connection with the Tax-Related Items.

Nature of Grant. In accepting the grant, the Grantee acknowledges, understands and agrees that: (1) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan; (2) all decisions with respect to future PSU or other grants, if any, will be at the sole discretion of the Company; (3) the Grantee is voluntarily participating in the Plan; (4) the PSU and the shares of Common Stock subject to the PSU are not intended to replace any pension rights or compensation; (5) the future value of the underlying shares of Common Stock is unknown, indeterminable and cannot be predicted with certainty; (6) no claim or entitlement to compensation or damages shall arise from forfeiture of the PSUs resulting from the termination of the Grantee's employment or other service relationship (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Grantee is employed or the terms of the Grantee's employment agreement, if any), and in consideration of the grant of the PSUs to which the Grantee is otherwise not entitled, the Grantee irrevocably agrees never to institute any claim against the Company, any of its Subsidiaries or the Employer, waives the Grantee's ability, if any, to bring any such claim, and releases the Company, its Subsidiaries and the Employer from any such claim; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by participating in the Plan, the Grantee shall be deemed irrevocably to have agreed not to pursue such claim and agree to execute any and all documents necessary to request dismissal or withdrawal of such claim; (7) for purposes of the PSUs, the Grantee's employment or service relationship will be

considered terminated as of the date the Grantee is no longer actively providing services to the Company or one of its Subsidiaries (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Grantee is employed or providing services or the terms of the Grantee's employment or service agreement, if any) and unless otherwise expressly provided in these Terms and Conditions or determined by the Company, the Grantee's right to vest in the PSUs under the Plan, if any, will terminate as of such date and will not be extended by any notice period (**e.g.**, the Grantee's period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where the Grantee is employed or providing services or the terms of the Grantee's employment or service agreement, if any); the Company shall have the exclusive discretion to determine when the Grantee is no longer actively providing services for purposes of the Grantee's PSU grant (including whether the Grantee may still be considered to be providing services while on an approved leave of absence); (8) unless otherwise provided in the Plan or by the Company in its discretion, the PSUs and the benefits evidenced by these Terms and Conditions do not create any entitlement to have the PSUs or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the shares of the Company; (9) the PSUs and the shares of Common Stock subject to the PSUs, and the income and value of same, are not part of normal or expected compensation for any purpose, including, without limitation, calculating severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement or welfare benefits or similar payments; and (10) the Grantee acknowledges and agrees that neither the Company, the Employer nor any subsidiary or affiliate of the Company shall be liable for any foreign exchange rate fluctuation between the Grantee's local currency and the United States Dollar that may affect the value of the PSUs or of any amounts due to the Grantee pursuant to the settlement of the PSUs or the subsequent sale of any shares of Common Stock acquired upon settlement.

No Advice Regarding Grant. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Grantee's participation in the Plan, or the Grantee's acquisition or sale of the underlying shares of Common Stock. The Grantee is hereby advised to consult with the Grantee's own personal tax, legal and financial advisors regarding the Grantee's participation in the Plan before taking any action related to the Plan.

Data Privacy. *The Grantee hereby explicitly and unambiguously consents to the collection, use and transfer, in electronic or other form, including email, of the Grantee's personal data as described in the Agreement and any other PSU grant materials ("Data") by and among, as applicable, the Employer, the Company and its subsidiaries and affiliates for the exclusive purpose of implementing, administering and managing the Grantee's participation in the Plan.*

The Grantee understands that the Company and the Employer may hold certain personal information about the Grantee, including, but not limited to, the Grantee's name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company, details of all PSUs or any other entitlement to shares of stock awarded, canceled, exercised, vested, unvested or outstanding in the Grantee's favor, for the exclusive purpose of implementing, administering and managing the Plan.

The Grantee understands that Data will be transferred to the Company's stock transfer agent and/or broker, or such other stock plan service provider as may be selected by the Company in the future, which is assisting the Company with the implementation, administration and management of the Plan. The Grantee understands that the recipients of the Data may be located in the United States or elsewhere (including outside the EEA), and that the recipients' country (e.g., the United States) may have different data privacy laws and protections than the

Grantee's country. The Grantee understands that the Grantee may request a list with the names and addresses of any potential recipients of the Data by contacting the Grantee's local human resources representative. The Grantee authorizes the Company, the Company's stock transfer agent and/or broker, and any other possible recipients which may assist the Company (presently or in the future) with implementing, administering and managing the Plan to receive, possess, use, retain and transfer the Data, in electronic or other form, for the sole purpose of implementing, administering and managing the Grantee's participation in the Plan. The Grantee understands that Data will be held only as long as is necessary to implement, administer and manage the Grantee's participation in the Plan. The Grantee understands that the Grantee may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing the Grantee's local human resources representative. Further, the Grantee understands that the Grantee is providing the consents herein on a purely voluntary basis. If the Grantee does not consent, or if the Grantee later seeks to revoke the Grantee's consent, the Grantee's employment status or service and career with the Employer will not be adversely affected; the only adverse consequence of refusing or withdrawing the Grantee's consent is that the Company would not be able to grant the Grantee PSUs or other equity awards or administer or maintain such awards. Therefore, the Grantee understands that refusing or withdrawing the Grantee's consent may affect the Grantee's ability to participate in the Plan. For more information on the consequences of the Grantee's refusal to consent or withdrawal of consent, the Grantee understands that the Grantee may contact the Grantee's local human resources representative.

Governing Law and Venue. The PSU grant and the provisions of the Agreement are governed by, and subject to, the internal substantive laws of the State of Delaware, United States of America (with the exception of its conflict of law provisions).

For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this grant or the Agreement, the parties hereby submit to and consent to the exclusive jurisdiction of the Commonwealth of Pennsylvania in the United States of America and agree that such litigation shall be conducted only in the courts of Cumberland County, the Commonwealth of Pennsylvania, or the federal courts for the United States of America for the Middle District of Pennsylvania, and no other courts, where this grant is made and/or to be performed.

Compliance with Law. The following section supplements Section 10 of the Agreement: Notwithstanding any other provision of the Plan or the Agreement, unless there is an available exemption from any registration, qualification or other legal requirement applicable to the shares of Common Stock, the Company shall not be required to deliver any shares issuable upon settlement of the PSUs prior to the completion of any registration or qualification of the shares under any local, state, federal or foreign securities or exchange control law or under rulings or regulations of the U.S. Securities and Exchange Commission ("SEC") or of any other governmental regulatory body, or prior to obtaining any approval or other clearance from any local, state, federal or foreign governmental agency, which registration, qualification or approval the Company shall, in its absolute discretion, deem necessary or advisable. The Grantee understands that the Company is under no obligation to register or qualify the shares with the SEC or any state or foreign securities commission or to seek approval or clearance from any governmental authority for the issuance or sale of the shares. Further, the Grantee agrees that Company shall have unilateral authority to amend the Plan and the Agreement without the Grantee's consent to the extent necessary to comply with securities or other laws applicable to issuance of shares.

Language. If the Grantee has received the Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different

than the English version, the English version will control.

Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means, including email. The Grantee hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

Severability. The provisions of these Terms and Conditions are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable.

Imposition of Other Requirements. Subject to Section 15 of the Agreement, the Company reserves the right to impose other requirements on the Grantee's participation in the Plan, on the PSUs and on any shares of Common Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require the Grantee to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

Waiver. The Grantee acknowledges that a waiver by the Company of breach of any provision of these Terms and Conditions shall not operate or be construed as a waiver of any other provision of these Terms and Conditions, or of any subsequent breach by the Grantee or any other Participant.

B. COUNTRY-SPECIFIC ADDITIONAL TERMS AND CONDITIONS AND NOTIFICATIONS

AUSTRALIA

TERMS AND CONDITIONS

Settlement of PSUs. Notwithstanding anything to the contrary in the Agreement, due to local regulatory requirements, upon the vesting of the PSUs, the Grantee will receive a cash payment in an amount equal to the value of the shares of Common Stock underlying the vested PSUs on the vesting date. As long as the Grantee resides in Australia, he or she may not receive or hold shares of Common Stock in connection with the PSUs under the Plan. Accordingly, any provisions in the Agreement referring to issuance of shares of Common Stock shall not be

applicable to the Grantee as long as he or she resides in Australia.

NOTIFICATIONS

Exchange Control Information. Exchange control reporting is required for cash transactions exceeding \$10,000 and international fund transfers. The Australian bank assisting with the transaction will file the report. If there is no Australian bank involved in the transfer, Grantee will be required to file the report.

BELGIUM

NOTIFICATIONS

Tax Reporting Information. Grantee is required to report any bank accounts opened and maintained outside of Belgium on his or her annual Belgian tax return.

BRAZIL

TERMS AND CONDITIONS

Compliance with Law. By accepting the PSUs, the Grantee acknowledges that he or she agrees to comply with applicable Brazilian laws and pay any and all applicable taxes associated with the vesting of the PSUs, the receipt of any dividends, and the sale of shares of Common Stock acquired under the Plan.

NOTIFICATIONS

Exchange Control Information. If the Grantee is resident or domiciled in Brazil, he or she will be required to submit annually a declaration of assets and rights held outside of Brazil to the Central Bank of Brazil if the aggregate value of such assets and rights is equal to or greater than US \$100,000. Assets and rights that must be reported include shares of Common Stock.

CHINA

TERMS AND CONDITIONS

Settlement of PSUs. Notwithstanding anything to the contrary in the Agreement, due to local regulatory requirements, upon the vesting of the PSUs, the Grantee will receive a cash payment in China via the Company's local Chinese payroll in an amount equal to the value of the shares of Common Stock underlying the vested PSUs on the vesting date. As long as the Grantee resides in China, he or she may not receive or hold shares of Common Stock in connection with the PSUs under the Plan. Accordingly, any provisions in the Agreement referring to issuance of shares of Common Stock shall not be applicable to the Grantee as long as he or she resides in China.

FRANCE

TERMS AND CONDITIONS

Consent to Receive Information in English. By accepting the grant of the PSUs, the Grantee confirms having read and understood the Plan and the Agreement, which were provided in the English language. The Grantee accepts the terms of those documents accordingly.

En acceptant cette attribution gratuite d'actions, le Grantee confirme avoir lu et compris le Plan et ce Contrat, incluant tous leurs termes et conditions, qui ont été transmis en langue anglaise. Le Grantee accepte les dispositions de ces documents en connaissance de cause.

NOTIFICATIONS

Tax Notification. The PSUs are not intended to be French tax-qualified. Please be aware that the Company intends that any outstanding PSUs granted to you pursuant to the 1995 Executive Incentive Compensation Plan Sub-plan for Restricted Stock Units Granted to Participants in France will continue to meet the requirements for qualified status under French law; therefore, different terms and conditions will apply to such outstanding PSUs. Please refer to the Restricted Stock Unit Agreement for Employees in France applicable to your grant for further details.

Exchange Control Notification. The Grantee may hold shares of Common Stock acquired under the Plan outside of France provided that he or she declares all foreign accounts (including any accounts that were opened or closed during the tax year) on his or her annual French income tax return.

GERMANY

TERMS AND CONDITIONS

Parties to the Agreement. The Agreement is exclusively concluded between Harsco Corporation and the Grantee. The local Harsco entity employing the Grantee is not in any way party to the Agreement or entitled/committed hereby.

Vesting of PSUs. Notwithstanding anything to the contrary in the Agreement or in the Plan, the Grantee shall be considered "Disabled" for the purposes of this Agreement, if the Grantee's employment contract ends as a consequence of the Grantee being granted a permanent statutory pension for full occupational disability (*unbefristete Rente wegen voller Erwerbsminderung*) by the competent authorities.

Non-Competition Agreement. Notwithstanding anything to the contrary in the Non-Competition Agreement, it is exclusively concluded between Harsco Corporation and the Grantee. The employer of the Grantee is not in any way party to the Non-Competition Agreement or entitled/committed hereby. The Non-Competition Agreement does not affect in any way a separate non-competition agreement concluded between the Grantee and his/her employer.

INDIA

TERMS AND CONDITIONS

The Grantee hereby agrees that it shall hold the shares of the Common Stock pursuant to this Agreement and the Plan, at all times in accordance with the applicable laws in India, including but not limited to the (Indian) Foreign Exchange Management (Transfer or Issue of Any Foreign Security) Regulations, 2004 (and as amended or replaced), relevant master circulars, directions, notifications issued in this regard by the Reserve Bank of India from time to time and shall carry out the necessary reporting with the Reserve Bank of India at all stages of granting and vesting, if and as may be required. The Grantee agrees to indemnify the Company and/or Subsidiary of the Company with respect to any non-compliance and/or non-adherence by the Grantee of any of the applicable laws in India arising out of holding of the shares of the Common Stock by the Grantee.

The Grantee shall declare the holding of shares of the Common Stock, if and as may be necessary, in its income for taxation purposes and agrees to indemnify the Company and/or Subsidiary of the Company with respect to any and all taxes that it shall be obligated to pay with respect to the shares of the Common Stock such as including but not limited to income tax, capital gain taxes etc., under this Agreement and which may arise as a result of the sale of the shares of the Common Stock and the transactions contemplated hereunder.

LUXEMBOURG

NOTIFICATIONS

Exchange Control Information. Grantee understands that Grantee is required to report any inward remittances of funds to the Banque Centrale de Luxembourg and/or the Service Central de la Statistique et des Études Économiques within 15 working days following the month during which the transaction occurred unless such payment is reported by a Luxembourg-resident financial institution.

THE NETHERLANDS

TERMS AND CONDITIONS

Non-Competition Agreement. The non-competition agreement entered into between the Company and the Grantee shall be in addition to any non-compete arrangements between the Grantee and his or her employer.

SWITZERLAND

TERMS AND CONDITIONS

Vesting: With the acceptance of a Grant, the Grantee expressly acknowledges that any RSU, PSU and/or SAR shall not give the Grantee any right or entitlement until such Grant is fully vested. The Grant remains fully discretionary until full vesting.

Continuous Employment: In Switzerland, "continuously employed" (or substantially similar term) means the absence of any interruption or termination (issuance of termination notice) of the Grantee's employment with the Company or with a Subsidiary of the Company. Continuous employment shall not be considered interrupted or terminated in the case of sick leave, military leave or any other leave of absence approved by the Company for which compensation needs to be paid by the Company or salary replacement benefits are granted by any insurance or in the case of transfers between locations of the Company and its Subsidiaries. For the avoidance of any doubt, continuous employment ends in any case with the end of the employment, even if any salary replacement benefits continue to be paid by any insurance, pension scheme or social security.

Retirement: For the purpose of the Plan, only a retirement under the rules and conditions of the Swiss pension scheme of the Subsidiary employing the Grantee shall qualify as retirement for the purpose of vesting of RSU, PSU or termination of SAR, and only if such retirements is (A) at age 62 or older while employed by the Company or any of its Subsidiaries; or (B) at or after such time as the Grantee's age (minimum of age 55), plus full years of continuous employment by the Company or any of its Subsidiaries, equals 75.

Disability: For purposes of the Plan, the Grantee shall be considered "Disabled" if the Grantee is unable to engage in any substantial gainful activity by reason of any medically determinable

physical or mental impairment which can be expected to result in death or qualifies as permanent full disability under the applicable Swiss social security and/or pension laws.

Non-Competition Agreement: For the avoidance of any doubt, any non-competition agreement entered into between the Grantee and the Company in connection with the Plan and grants thereunder shall be in addition to any non-competition agreement agreed between the Grantee and the employing Subsidiary and shall not replace such non-competition agreement.

NOTIFICATIONS

Exchange Control Notification. The Grantee may hold shares of Common Stock acquired under the Plan outside of Switzerland provided that he or she declares all foreign accounts (including any accounts that were opened or closed during the tax year) on his or her annual Swiss tax declaration.

UNITED ARAB EMIRATES

NOTIFICATIONS

Securities Law Notice. PSUs under the Plan are granted only to select executive officers and other employees of the Company and its subsidiaries for the purpose of providing such eligible persons with incentives and rewards for performance. The Agreement, including this Exhibit, the Plan and any documents the Grantee may receive in connection with the PSUs are intended for distribution to such eligible persons and must not be delivered to, or relied on, by any other person.

The Emirates Securities and Commodities Authority, the Central Bank, the Ministry of Economy and the Dubai Department of Economic Development do not have any responsibility for reviewing or verifying any documents in connection with the Plan nor have they reviewed or approved the Plan or

the Agreement. The securities to which this statement relates may be illiquid and/or subject to restrictions on their resale. The Grantee and/or prospective purchasers of the securities offered should conduct their own due diligence on the securities.

If the Grantee does not understand the contents of the Agreement, including this Exhibit, or the Plan, the Grantee should consult an authorized financial adviser.

UNITED KINGDOM

TERMS AND CONDITIONS

U.K. Sub-Plan. The terms of the U.K. Sub-plan apply to the PSUs.

EXHIBIT C

Statement of Management Objectives

This Statement of Management Objectives applies to the performance-based Restricted Stock Units granted to the Grantee on the Date of Grant and applies with respect to the Performance Share Units Agreement between the Company and the Grantee (the "**Agreement**"). Capitalized terms used in the Agreement that are not specifically defined in this Statement of Management Objectives have the meanings assigned to them in the Agreement or in the Plan, as applicable.

Section 1. Definitions. For purposes hereof:

- "**Peer Group**" means S&P600® Industrials Index as constituted on the first day of the Performance Period.
- "**Relative Total Stockholder Return**" or "**RTSR**" means the percentile rank of the Company's Total Stockholder Return among the Total Stockholder Returns of all members of the Peer Group, ranked in descending order, at the end of the Performance Period.
- "**Total Stockholder Return**" means, with respect to the Common Stock and the common stock of each of the members of the Peer Group, a rate of return reflecting stock price appreciation, plus the reinvestment of dividends in additional shares of stock on the ex-dividend date, from the beginning of the Performance Period through the end of the Performance Period. For purposes of calculating Total Stockholder Return for each of the Company and the members of the Peer Group, the beginning stock price will be based on the average closing stock price for the 30 calendar days immediately preceding January 1, 2019 on the principal stock exchange on which the stock then traded and the ending stock price will be based on the average closing stock price for the 30 calendar days immediately preceding January 1, 2022 on the principal stock exchange on which the stock then trades.

Section 2. Performance Matrix.

From 0% to 200% of the PSUs will be earned based on achievement of the Management Objectives measured by RTSR during the Performance Period as follows:

Performance Level	Relative Total Stockholder Return	PSUs Earned
Below Threshold	Ranked below 25th percentile	0%
Threshold	Ranked at 25th percentile	25%
Target	Ranked at 50th percentile	100%
Maximum	Ranked at or above 75th percentile	200%

Notwithstanding anything in this Statement of Management Objectives or the Agreement to the contrary, if Total Stockholder Return for the Company for the Performance Period is negative the maximum amount of PSUs earned shall be 100% of the PSUs.

Section 3. Number of PSUs Earned. Following the Performance Period, on the Committee Determination Date, the Committee shall determine whether and to what extent the goals relating to the Management Objectives have been satisfied for the Performance Period and shall determine the number of PSUs that shall become nonforfeitable hereunder and under the Agreement on the basis

of the following:

- Below Threshold. If, upon the conclusion of the Performance Period, RTSR for the Performance Period falls below the threshold level, as set forth in the Performance Matrix, no PSUs shall become nonforfeitable.
- Threshold. If, upon the conclusion of the Performance Period, RTSR for the Performance Period equals the threshold level, as set forth in the Performance Matrix, 25% of the PSUs (rounded down to the nearest whole number of PSUs) shall become nonforfeitable.
- Between Threshold and Target. If, upon the conclusion of the Performance Period, RTSR for the Performance Period exceeds the threshold level, but is less than the target level, as set forth in the Performance Matrix, a percentage between 25% and 100% (determined on the basis of straight-line mathematical interpolation) of the PSUs (rounded down to the nearest whole number of PSUs) shall become nonforfeitable.
- Target. If, upon the conclusion of the Performance Period, RTSR for the Performance Period equals the target level, as set forth in the Performance Matrix, 100% of the PSUs shall become nonforfeitable.
- Between Target and Maximum. If, upon the conclusion of the Performance Period, RTSR for the Performance Period exceeds the target level, but is less than the maximum level, as set forth in the Performance Matrix, a percentage between 100% and 200% (determined on the basis of straight-line mathematical interpolation) of the PSUs (rounded down to the nearest whole number of PSUs) shall become nonforfeitable.
- Equals or Exceeds Maximum. If, upon the conclusion of the Performance Period, RTSR for the Performance Period equals or exceeds the maximum level, as set forth in the Performance Matrix, 200% of the PSUs shall become nonforfeitable.

Before all or any portion of any Qualified Performance-Based Award of PSUs shall become nonforfeitable or paid in accordance with this Statement of Management Objectives or the Agreement, the Committee shall determine in writing that the Management Objectives have been satisfied.

HARSCO CORPORATION

STOCK APPRECIATION RIGHTS AGREEMENT
(FORM)

This STOCK APPRECIATION RIGHTS AGREEMENT (this "**Agreement**") is made as of March 6, 2019, by and between Harsco Corporation, a Delaware corporation and [Participant Name:First Name Last Name] (the "**Grantee**").

1. **Certain Definitions.** Capitalized terms used, but not otherwise defined, in this Agreement will have the meanings given to such terms in the Company's 2013 Equity and Incentive Compensation Plan, as amended by Amendment No. 1 to the 2013 Equity and Incentive Compensation Plan (the "**Plan**"). In addition, for purposes of this Agreement, "Base Price" means [Price:Option Price] , which was the Market Value per Share of the Common Stock on March 6, 2019 (the "**Date of Grant**").

2. **Grant of SARs.** Subject to and upon the terms, conditions and restrictions set forth in this Agreement, including, without limitation, **Exhibit A** attached hereto (the "**Non-Competition Agreement**"), any additional terms and conditions for the Grantee's country (Grantees outside the United States only) set forth in the attached **Exhibit B** which forms part of this Agreement, and in the Plan the Company grants to the Grantee, as of the Date of Grant, [Granted:Options Granted] Free-Standing Appreciation Rights ("**SARs**"). The SARs represent the right of the Grantee to receive shares of Common Stock in an amount equal to 100% of the Spread on the date on which the SARs are exercised. Notwithstanding anything in this **Section 2** or otherwise in this Agreement to the contrary, the Grantee acknowledges and agrees to be bound by the restrictive covenant terms, conditions and provisions in the Non-Competition Agreement as a "Grantee" as referred to therein.

3. **Vesting of SARs.**

(a) Subject to the terms and conditions of this Agreement and the Plan, the SARs covered by this Agreement shall become exercisable as described in this Section. One-third of the SARs shall become exercisable on the first anniversary of the Date of Grant if the Grantee remains in the continuous employ of the Company or one of its Subsidiaries from the Date of Grant through such first anniversary. An additional one-third of the SARs shall become exercisable on each subsequent anniversary of the Date of Grant, through the third anniversary of the Date of Grant, when the remaining SARs shall have become exercisable, if the Grantee remains in the continuous employ of the Company or one of its Subsidiaries from the Date of Grant through each such anniversary. For purposes of this Agreement, "continuous employ" (or substantially similar term) means the absence of any interruption or termination of the Grantee's employment with the Company or with a Subsidiary of the Company. Continuous employment shall not be considered interrupted or terminated in the case of sick leave, military leave or any other leave of absence approved by the Company or in the case of transfers between locations of the Company and its Subsidiaries.

(b) Notwithstanding **Section 3(a)** above, the SARs granted hereby shall become immediately exercisable in full if at any time during the continuous employment of the Grantee with the Company or a Subsidiary of the Company and prior to the termination of the SARs any of the following events occur:

- (i) the Grantee's death or becoming Disabled while the Grantee is continuously employed by the Company or any of its Subsidiaries; or
- (ii) the Grantee's retirement (A) at age 62 or older while continuously employed by the Company or any of its Subsidiaries; or (B) at or after such time as the Grantee's age (minimum of age 55), plus full years of continuous employment by the Company or any of its Subsidiaries, equals 75.

(c) For purposes of this **Section 3**, the Grantee shall be considered "Disabled" if the Grantee is: (i) unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve months, or (ii) by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve months, receiving income replacement benefits for a period of not less than three months under an accident and health plan covering employees of the Company.

(d) (i) Notwithstanding **Section 3(a)** above, if at any time before the third anniversary of the Date of Grant or the termination of the SARs, and while the Grantee is continuously employed by the Company or a Subsidiary, a Change in Control occurs, then the SARs will become fully exercisable, except to the extent that a Replacement Award is provided to the Grantee in accordance with **Section 3(d)(ii)** to continue, replace or assume the SARs covered by this Agreement (the "**Replaced Award**").

(ii) For purposes of this Agreement, a "Replacement Award" means an award (A) of the same type (**e.g.**, time-based stock appreciation rights) as the Replaced Award, (B) that has a value at least equal to the value of the Replaced Award, (C) that relates to publicly traded equity securities of the Company or its successor in the Change in Control or another entity that is affiliated with the Company or its successor following the Change in Control or is payable solely in cash, (D) if the Grantee holding the Replaced Award is subject to U.S. federal income tax under the Code, the tax consequences of which to such Grantee under the Code are not less favorable to such Grantee than the tax consequences of the Replaced Award, and (E) the other terms and conditions of which are not less favorable to the Grantee holding the Replaced Award than the terms and conditions of the Replaced Award (including the provisions that would apply in the event of a subsequent Change in Control). A Replacement Award may be granted only to the extent it does not result in the Replaced Award or Replacement Award failing to comply with or be exempt from Section 409A of the Code. Without limiting the generality of the foregoing, the Replacement Award may take the form of a continuation of the Replaced Award if the requirements of the two preceding sentences are satisfied. The

determination of whether the conditions of this **Section 3(d)(ii)** are satisfied will be made by the Committee, as constituted immediately before the Change in Control, in its sole discretion.

(iii) If, upon receiving a Replacement Award, the Grantee's employment with the Company or a Subsidiary (or any of their successors) (as applicable, the "**Successor**") is subsequently terminated by the Grantee for Good Reason or by the Successor without Cause within a period of two years after the Change in Control, 100% of the Replacement Award will become exercisable with respect to the time-based stock appreciation rights covered by such Replacement Award.

(iv) A termination by the Grantee for "Good Reason" means Grantee's termination of his or her employment with the Successor as a result of the occurrence of any of the following: (A) a change in the Grantee's principal location of employment that is greater than 50 miles from such location as of the date of this Agreement without the Grantee's consent; provided, however, that the Grantee hereby acknowledges that the Grantee may be required to engage in travel in connection with the performance of the Grantee's duties and that such travel shall not constitute a change in the Grantee's principal location of employment for purposes hereof; (B) a material diminution in the Grantee's base compensation; (C) a change in the Grantee's position with the Successor without the Grantee's consent such that there is a material diminution in the Grantee's authority, duties or responsibilities; or (D) any other action or inaction that constitutes a material breach by the Successor of the agreement, if any, under which the Grantee provides services to the Successor or its subsidiaries. Notwithstanding the foregoing, the Grantee's termination of the Grantee's employment with the Successor as a result of the occurrence of any of the foregoing shall not constitute a termination for "Good Reason" unless (X) the Grantee gives the Successor written notice of such occurrence within 90 days of such occurrence and such occurrence is not cured by the Successor within 30 days of the date on which such written notice is received by the Successor and (Y) the Grantee actually terminates his or her employment with the Successor prior to the 365th day following such occurrence.

(v) A termination by the Successor without "Cause" means the Successor's termination of the Grantee's employment with the Successor under circumstances that do not involve or relate to the occurrence of any of the following: (A) an act or acts of personal dishonesty taken by the Grantee and intended to result in substantial personal enrichment of the Grantee at the expense of the Company; (B) repeated failure by the Grantee to devote reasonable attention and time during normal business hours to the business and affairs of the Company or to use the Grantee's reasonable best efforts to perform faithfully and efficiently the responsibilities assigned to the Grantee (provided that such failure is demonstrated to be willful and deliberate on the Grantee's part and is not remedied in a reasonable period of time after receipt of written notice from the Company); or (C) the conviction of the Grantee of a

felony.

4. **Exercise of SARs.**

(a) To the extent exercisable as provided in **Section 3** of this Agreement, the SARs may be exercised in whole or in part by delivery to the Company of a notice in form and substance satisfactory to the Company specifying the number of SARs to be exercised and the date of exercise.

(b) Upon exercise, the Company will issue to the Grantee, with respect to the number of SARs that are exercised, the number of shares of Common Stock that equals the Market Value per Share of Common Stock on the date of exercise divided into the Spread, rounded down to the nearest whole share.

5. **Termination of SARs.** Both exercisable and nonexercisable SARs shall terminate, as provided below, after the end of the earliest to occur of the following periods:

(a) 90 days after the Grantee ceases to be an employee of the Company or a Subsidiary, unless the Grantee ceases to be such employee in a manner described in clause (b), (c), (d) or (e) of this Section;

(b) One year after the Grantee's becoming Disabled, if the Grantee becomes Disabled while continuously employed by the Company or a Subsidiary;

(c) One year after the death of the Grantee, if the Grantee dies while continuously employed by the Company or a Subsidiary or within the period specified in clause (a) above or clause (d) below if applicable to the Grantee;

(d) One year after the Grantee retires from continuous employment with the Company or a Subsidiary if (i) the Grantee is at the time of such retirement at least age 62, or (ii) when the Grantee retires, the Grantee's age, plus full years of continuous employment by the Company or any of its Subsidiaries, equals 75;

(e) One year after the Grantee ceases to be an employee of the Successor under the conditions specified in **Section 3(d)** of this Agreement; and

(f) Ten years from the Date of Grant.

6. **Transferability.** Subject to **Section 15** of the Plan, no SAR or any interest therein shall be transferable prior to exercise pursuant to **Section 4** hereof other than by will or pursuant to the laws of descent and distribution and may be exercised during the Grantee's lifetime only by the Grantee or, in the event of the Grantee's legal incapacity to do so, by the Grantee's guardian or legal representative acting on behalf of the Grantee in a fiduciary capacity under state law or court supervision.

7. **Compliance with Law.** The SARs shall not be exercisable if such exercise would involve a violation of any applicable federal or state securities law, and the Company hereby agrees to make reasonable efforts to comply with any applicable federal and state

securities laws.

8. **Adjustments.** The SARs are subject to mandatory adjustment under the terms of **Section 11** of the Plan.

9. **Withholding Taxes.** To the extent that the Company is required to withhold federal, state, local or foreign taxes in connection with the delivery to the Grantee of Common Stock or any other payment to the Grantee or any other payment or vesting event under this Agreement, the Grantee hereby authorizes withholding from payroll and any other amounts payable to the Grantee, including amounts payable hereunder, and otherwise agrees to make adequate provision for, any sums required to satisfy such tax withholding obligations of the Company. The Company shall have no obligation to make delivery or payment hereunder until the tax withholding obligations of the Company have been satisfied by the Grantee. If all or any part of such withholding requirement be satisfied by retention by the Company of a portion of the Common Stock to be delivered to the Grantee or by delivering to the Company other shares of Common Stock held by the Grantee, the shares so retained shall be credited against such withholding requirement at the Market Value per Share of such Common Stock on the date of such delivery. In no event will the market value of the Common Stock to be withheld and/or delivered pursuant to this **Section 9** to satisfy applicable withholding taxes exceed the minimum amount of taxes required to be withheld, unless otherwise agreed to by the Grantee, provided, however, that such amount shall not exceed the statutory maximum withholding rates.

10. **No Employment Rights.** The grant of the SARs under this Agreement to the Grantee is a voluntary, discretionary award being made on a one-time basis and it does not constitute a commitment to make any future awards. The grant of the SARs and any payments made hereunder will not be considered salary or other compensation for purposes of any severance pay or similar allowance, except as otherwise required by law. Nothing in this Agreement will give the Grantee any right to continue employment with the Company or any Subsidiary, as the case may be, or interfere in any way with the right of the Company or a Subsidiary to terminate the employment of the Grantee at any time.

11. **Relation to Other Benefits.** Any economic or other benefit to the Grantee under this Agreement or the Plan shall not be taken into account in determining any benefits to which the Grantee may be entitled under any profitsharing, retirement or other benefit or compensation plan maintained by the Company or a Subsidiary and shall not affect the amount of any life insurance coverage available to any beneficiary under any life insurance plan covering employees of the Company or a Subsidiary.

12. **Amendments.** Any amendment to the Plan shall be deemed to be an amendment to this Agreement to the extent that the amendment is applicable hereto; provided, however, that (a) no amendment shall adversely affect the rights of the Grantee under this Agreement without the Grantee's written consent, and (b) the Grantee's consent shall not be required to an amendment that is deemed necessary by the Company to ensure compliance with Section 409A of the Code.

13. **Severability.** In the event that one or more of the provisions of this Agreement shall be invalidated for any reason by a court of competent jurisdiction, any provision so

invalidated shall be deemed to be separable from the other provisions hereof, and the remaining provisions hereof shall continue to be valid and fully enforceable.

14. **Relation to Plan.** This Agreement is subject to the terms and conditions of the Plan. In the event of any inconsistency between the provisions of this Agreement and the Plan, the Plan shall govern. The Committee acting pursuant to the Plan, as constituted from time to time, shall, except as expressly provided otherwise herein or in the Plan, have the right to determine any questions which arise in connection with this Agreement. In addition, the SARs shall be subject to the terms and conditions of the Company's clawback policy in effect on the Date of Grant as if such SARs were "Incentive-Based Compensation" (as such term is defined in such clawback policy).

15. **Successors and Assigns.** Without limiting **Section 6** hereof, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, administrators, heirs, legal representatives and assigns of the Grantee, and the successors and assigns of the Company.

16. **Acknowledgement.** The Grantee acknowledges that the Grantee (a) has received a copy of the Plan, (b) has had an opportunity to review the terms of this Agreement and the Plan, (c) understands the terms and conditions of this Agreement and the Plan and (d) agrees to such terms and conditions.

17. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same Agreement.

[signature page follows]

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed on its behalf by its duly authorized officer and the Grantee has executed this Agreement, effective as of the day and year first above written.

HARSCO CORPORATION

/s/ F. Nicholas Grasberger
By: III
Name: F. Nicholas Grasberger III
Chairman, President and
Title CEO

The undersigned hereby acknowledges receipt of an executed version of this Agreement and accepts the award of SARs granted hereunder on the terms and conditions set forth herein and in the Plan (including the terms of the Non-Competition Agreement, attached hereto as **Exhibit A**).

Grantee

By: _____
Name:

EXHIBIT A

Non-Competition Agreement

1. Grant. Grantee acknowledges that Grantee has access to the confidential and proprietary trade secret information of Harsco Corporation, including its subsidiaries, joint ventures, and operating divisions (the "Company"), as further described below ("Confidential/Proprietary Trade Secret Information"). Further, Grantee acknowledges that Grantee derives significant value from the Company and from the Confidential/Proprietary Trade Secret Information provided during the term of employment with the Company, which enables Grantee to optimize the performance of the Company's performance and Grantee's own personal, professional, and financial benefit. In consideration of the grant described in the award agreement (the "Agreement") to which these terms, conditions and provisions (the "Non-Competition Agreement") are attached as an exhibit, Grantee agrees that, during Grantee's employment by the Company, and for a period of twelve (12) months after the cessation of such employment for any reason (both such periods collectively referred to as the "Restricted Period"), Grantee will not, directly or indirectly, engage in any of the following competitive activities:
 - (a) For Grantee or on behalf of any other corporation, business, partnership, individual, or other entity, directly or indirectly solicit, divert, contract with, or attempt to solicit, divert, or contract with, any customer with whom Grantee had Material Contact during the final two (2) years of Grantee's employment with the Company concerning any products or services that are similar to those that Grantee was responsible for or were otherwise involved with during Grantee's employment with the Company. For purposes of this Non-Competition Agreement, the Grantee will have had "Material Contact" with a customer if: (i) Grantee had business dealings with the customer on the Company's behalf; (ii) Grantee was responsible for supervising or coordinating the dealings between the Company and the customer; or (iii) Grantee obtained Confidential/Proprietary Trade Secret Information about the customer as a result of Grantee's association with the Company;
 - (b) Within the geographic territory where Grantee was employed by the Company, obtained knowledge of Confidential/Proprietary Trade Secret Information, or had contact with the Company's customers, become employed by or otherwise render services to (as a director, employee, contractor or consultant) or have any ownership interest in any business which is engaged in offering the same or similar products or services as, or otherwise competes with those Company, including its subsidiaries and operating unit(s) with which Grantee was employed or in any way involved during the last twelve (12) months of employment with the Company; or
 - (c) (i) induce, offer, assist, encourage or suggest that another business or enterprise offer employment to or enter into a consulting arrangement with any employee, agent or representative of the Company or (ii) induce, offer, assist, encourage or suggest that any employee, agent or representative of the Company, including its subsidiaries and joint ventures, terminate his or her employment or business affiliation with the Company or accept employment with any other business or enterprise.

(d) Confidential/Proprietary Trade Secret Information.

- (i) Grantee agrees to keep secret and confidential all Confidential/Proprietary Trade Secret Information (further described below) acquired by Grantee while employed by the Company or concerning the business and affairs of the Company, its vendors, its customers, and its affiliates (whether of a business, commercial or technological nature), and further agrees that Grantee will not disclose any such Confidential/Proprietary Trade Secret Information so acquired to any individual, partner, company, firm, corporation or other person or use the same in any manner other than in connection with the business and affairs of the Company and its affiliates. Except in the performance of services for the Company, the Grantee will not, for so long as the Confidential/Proprietary Trade Secret Information remains so designated under applicable law, use, disclose, reproduce, distribute, transmit, reverse engineer, decompile, disassemble, or transfer the Confidential/Proprietary Trade Secret Information or any portion thereof.
- (ii) For purposes of this Non-Competition Agreement, "Confidential/Proprietary Trade Secret Information" includes all information of a confidential or proprietary nature that relates to the business, products, services, research or development of the Company, and its affiliates or their respective suppliers, distributors, customers, independent contractors or other business relations. Confidential/Proprietary Trade Secret Information also includes, but is not limited to, the following: (A) internal business information (including information relating to strategic and staffing plans and practices, business, training, financial, marketing, promotional and sales plans and practices, cost, rate and pricing structures, accounting and business methods and customer and supplier lists); (B) identities of, individual requirements of, specific contractual arrangements with and information about, the Company's suppliers, distributors, customers, independent contractors or other business relations and their confidential information; (C) trade secrets, copyrightable works and other confidential information (including ideas, formulas, recipes, compositions, inventions, innovations, improvements, developments, methods, know-how, manufacturing and production processes and techniques, research and development information, compilations of data and analyses, data and databases relating thereto, techniques, systems, records, manuals, documentation, models, drawings, specifications, designs, plans, proposals, reports and all similar or related information whether patentable or unpatentable and whether or not reduced to practice); (D) other intellectual property rights of the Company, or any of its affiliates; and (E) any other information that would constitute a trade secret under the Pennsylvania Uniform Trade Secrets Act, as amended from time to time (or any successor). The term "Confidential/Proprietary Trade Secret Information" also includes any information or data described above which the Company obtains from another party and which the Company treats as proprietary or designates as trade secrets, whether or not owned or developed by the Company.
- (iii) All documents and materials supplied to Grantee or developed by Grantee in the course of, or as a result of Grantee's employment at the Company whether in hard copy, electronic format or otherwise shall be the sole property of the Company. Grantee will at any time upon the request of the Company and in any event promptly upon termination of Grantee's employment or relationship with the Company, but in any

event no later than five (5) business days after such termination, deliver all such materials to the Company and will not retain any originals or copies of such materials, whether in hard copy form or as computerized and/or electronic records. Except to the extent approved by the Company or required by Grantee's bona fide job duties for the Company, the Grantee also agrees that Grantee will not copy or remove from the Company's place of business or the place of business of a customer of the Company, property or information belonging to the Company or the customer or entrusted to the Company or the customer. In addition, the Grantee agrees that Grantee will not provide any such materials to any competitor of or entity seeking to compete with the Company unless specifically approved in writing by the Company. Notwithstanding anything in paragraph 1(d)(3) of this Non-Competition Agreement to the contrary, if the Company needs to take legal action to secure such return delivery of such materials, Grantee shall be responsible for all legal fees, costs and expenses incurred by the Company in doing so.

- (iv) Grantee understands that nothing contained in this Agreement limits Grantee's ability to file a charge or complaint with any federal, state or local governmental agency or commission ("Government Agencies"). Grantee further understands that this Agreement does not limit Grantee's ability to communicate with any Government Agencies or otherwise participate in any investigation or proceeding that may be commenced by any Government Agency including providing documents or other information without notice to the Company. This Agreement does not limit the Grantee's right to receive an award for information provided to any Government Agencies.

2. Subsequent Employment.

- (a) Advise the Company of New Employment. In the event of a cessation of Grantee's employment with the Company, and during the Restricted Period described in paragraph 1 above, Grantee agrees to disclose to the Company, the name and address of any new employer or business affiliation within ten (10) calendar days of Grantee's accepting such position. In the event that Grantee fails to notify the Company of such new employment or business affiliation as required above, the Restricted Period will be extended by a period equal to the period of nondisclosure.
- (b) Grantee's Ability to Earn Livelihood. Grantee acknowledges that, in the event of a cessation of Grantee's employment with the Company, for any reason and at any time, the provisions of paragraph 1 of this Non-Competition Agreement will not unreasonably restrict Grantee's ability to earn a living. Grantee and the Company acknowledge that Grantee's rights have been limited by this Non-Competition Agreement only to the extent reasonably necessary to protect the legitimate interests of the Company in its Confidential/Proprietary Trade Secret Information.

- 3. Enforcement. Grantee agrees that if Grantee violates the covenants and agreements set forth in this Non-Competition Agreement, the Company would suffer irreparable harm, and that such harm to the Company may be impossible to measure in monetary damages. Accordingly, in addition to any other remedies which the Company may have at law or in equity, the Company will have the right to have all obligations, undertakings, agreements, covenants and other provisions of this Non-Competition Agreement specifically performed by Grantee,

and the Company will have the right to obtain preliminary and permanent injunctive relief to secure specific performance, and to prevent a breach or contemplated breach, of this Non- Competition Agreement. In such event, the Company will be entitled to an accounting and repayment of all profits, compensation, remunerations or benefits which Grantee or others, directly or indirectly, have realized or may realize as a result of, growing out of, or in conjunction with any violation of this Non-Competition Agreement. Such remedies will be an addition to and not in limitation of any injunctive relief or other rights or remedies to which the Company is or may be entitled at law or in equity. In the event that the Company obtains any requested relief in any action brought to enforce the terms of this Non-Competition Agreement through court proceedings, the Company will be entitled to reimbursement for all legal fees, costs and expenses incident to enforcement.

4. Severability. If any section, paragraph, term or provision of this Non-Competition Agreement, or the application thereof, is determined by a competent court or tribunal to be invalid or unenforceable, then the other parts of such section, paragraph, term or provision will not be affected thereby and will be given full force and effect without regard to the invalid or unenforceable portions, and the section, paragraph, term or provision of this Non-Competition Agreement will be deemed modified to the extent necessary to render it valid and enforceable.

5. Miscellaneous.

(a) Employment.

(i) This Non-Competition Agreement does not constitute a guarantee of employment and termination of employment will not affect the enforceability of this Non-Competition Agreement.

(ii) Grantee agrees that if Grantee is transferred from the entity or division which was Grantee's employer at the time Grantee signed this Non-Competition Agreement to employment by another division or another company that is a subsidiary or affiliate of Harsco Corporation, and Grantee has not entered into a superseding agreement with the new employer covering the subject matter of this Non-Competition Agreement, then this Non-Competition Agreement will continue in effect and the Grantee's new employer will be termed "the Company" for all purposes hereunder and will have the right to enforce this Non-Competition Agreement as Grantee's employer. In the event of any subsequent transfer, Grantee's new employer will succeed to all rights under this Non- Competition Agreement so long as such employer will be Harsco Corporation or one of its subsidiaries or affiliates and so long as this Non-Competition Agreement has not been superseded.

(b) Headings. The headings contained in this Non-Competition Agreement are inserted for convenience of reference only, and will not be deemed to be a part of this Non-Competition Agreement for any purposes, and will not in any way define or affect the meaning, construction or scope of any of the provisions of this Non-Competition Agreement.

(c) Governing Law. This Non-Competition Agreement will be construed under the laws of the Commonwealth of Pennsylvania, without regard to its conflict of law provisions, and the parties consent and agree that the federal and state courts of the Commonwealth of Pennsylvania will have exclusive jurisdiction over any dispute relating to this Non- Competition Agreement.

- (d) Supplemental Nature of this Non-Competition Agreement. The restrictions set forth in paragraph 1 of this Non-Competition Agreement will be in addition to any other such restrictive covenants agreed to through separate Non-Competition Agreements, if any, between Grantee and the Company and will survive the vesting or exercise of the equity award evidenced by the Agreement.
- (e) Waiver. The failure by the Company to enforce any right or remedy available to it under this Non-Competition Agreement will not be construed to be a waiver of such right or remedy with respect to any other prior, concurrent or subsequent breach or failure. No waiver of rights under this Non-Competition Agreement will be effective unless made in writing with specific reference to this Non-Competition Agreement.
- (f) Notification. Grantee agreed that the Company may notify any third party about Grantee's obligations under this Non-Competition Agreement until such time as Grantee has performed all of Grantee's obligations hereunder. Upon the Company's request, Grantee agrees to provide the Company with information, including, but not limited to, supplying details of Grantee's subsequent employment, sufficient to verify that Grantee has not breached, or is not breaching, any covenant in this Non-Competition Agreement.
- (g) Acknowledgments.
- (i) Grantee acknowledges and agrees that this Non-Competition Agreement is in consideration of, (A) the grant evidenced by the Agreement, (B) access to Confidential/Proprietary Trade Secret Information, as required by Grantee's job duties, and (C) access to important customer relationships and the associated customer goodwill of the Company.
 - (ii) Grantee acknowledges that he or she has carefully read and considered the provisions of this Non-Competition Agreement, and that this Non-Competition Agreement is reasonable as to time and scope and activities prohibited, given the Company's need to protect its interests and given the consideration provided to Grantee in the form of the grant evidenced by the Agreement.
 - (iii) Grantee acknowledges that he or she has had an opportunity to consult with an independent legal counsel of Grantee's choosing, and accept the grant contained in the Agreement and continuing employment on the terms set forth in this Non-Competition Agreement.

EXHIBIT B

Additional Terms and Conditions for International Employees

TERMS AND CONDITIONS

This Exhibit B (this "Exhibit"), which is part of the Agreement, contains additional terms and conditions that govern the SARs granted to the Grantee under the Plan if he or she resides outside the United States. The terms and conditions in Part A apply to **all** Grantees outside the United States. The country-specific terms and conditions and/or notifications in Part B will also apply to the Grantee if he or she resides in one of the countries listed below. Unless otherwise defined, capitalized terms used but not defined in this Exhibit have the meanings set forth in the Plan and/or the Agreement.

NOTIFICATIONS

This Exhibit also includes information regarding exchange controls and certain other issues of which the Grantee should be aware with respect to participation in the Plan. The information is based on the exchange control, securities and other laws in effect in the respective countries as of November 2017. Such laws are often complex and change frequently. As a result, the Company strongly recommends that the Grantee not rely on the information in this Exhibit as the only source of information relating to the consequences of his or her participation in the Plan because the information may be out of date at the time that the Grantee exercises the SARs or sell shares of Common Stock acquired under the Plan.

In addition, the information contained herein is general in nature and may not apply to the Grantee's particular situation, and the Company is not in a position to assure the Grantee of a particular result. Accordingly, the Grantee is advised to seek appropriate professional advice as to how the relevant laws in his or her country may apply to the Grantee's situation.

Finally, if the Grantee is a citizen or resident, or is considered a resident, of a country other than the one in which he or she is currently working, or transferred employment after the SARs were granted to him or her, the information contained herein may not be applicable. In addition, the Company shall, in its sole discretion, determine to what extent the additional terms and conditions included herein will apply to you under these circumstances.

A. ALL NON-U.S. COUNTRIES ADDITIONAL TERMS AND CONDITIONS

The following additional terms and conditions will apply to the Grantee if he or she resides in any country outside the United States.

Responsibility for Taxes. The following section replaces Section 9 of the Agreement in its entirety:

The Grantee acknowledges that, regardless of any action taken by the Company or, if different, the Grantee's employer (the "Employer"), the ultimate liability for all income tax,

social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items related to the Grantee's participation in the Plan and legally applicable to the Grantee ("Tax-Related Items") is and remains the Grantee's responsibility and may exceed the amount actually withheld by the

Company or the Employer. The Grantee further acknowledges that the Company and/or the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the SARs, including, but not limited to, the grant, vesting or exercise of the SARs, the subsequent sale of shares of Common Stock acquired pursuant to such exercise and the receipt of any dividends; and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the SARs to reduce or eliminate the Grantee's liability for Tax-Related Items or achieve any particular tax result. Further, if the Grantee is subject to Tax-Related Items in more than one jurisdiction between the Date of Grant and the date of any relevant taxable or tax withholding event, as applicable, the Grantee acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to the relevant taxable or tax withholding event, as applicable, the Grantee agrees to make adequate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items. In this regard, the Grantee authorizes the Company and/or the Employer, or their respective agents, at their discretion, to satisfy the obligations with regard to all Tax-Related Items by any one or a combination of the following methods: (i) requiring payment by the Grantee to the Company, on demand, by cash, check or other method of payment as may be determined acceptable by the Company; or (ii) withholding from the Grantee's wages or other cash compensation paid to the Grantee by the Company and/or the Employer; or (iii) withholding from proceeds of the sale of shares of Common Stock acquired at exercise of the SARs either through a voluntary sale or through a mandatory sale arranged by the Company (on the Grantee's behalf pursuant to this authorization) without further consent; or (iv) withholding shares of Common Stock issuable at exercise of the SARs.

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding amounts or other applicable withholding rates, including maximum applicable rates, in which case the Grantee will receive a refund of any over-withheld amount in cash and will have no entitlement to the Common Stock equivalent. If the obligation for Tax-Related Items is satisfied by withholding in shares of Common Stock, for tax purposes, the Grantee is deemed to have been issued the full number of shares of Common Stock subject to the exercised SARs, notwithstanding that a number of the shares of Common Stock are held back solely for the purpose of paying the Tax-Related Items.

Finally, the Grantee agrees to pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of the Grantee's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver the shares or the proceeds of the sale of shares of Common Stock, if the Grantee fails to comply with his or her obligations in connection with the Tax-Related Items.

Nature of Grant. In accepting the SARs, the Grantee acknowledges, understands and agrees that: (1) the Plan is established voluntarily by the Company, it is discretionary in

nature, and may be amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan; (2) all decisions with respect to future SARs or other grants, if any, will be at the sole discretion of the Company; (3) the Grantee is voluntarily participating in the Plan; (4) the SARs and any shares of Common Stock acquired under the Plan are not intended to replace any pension rights or compensation; (5) the future value of the shares of Common Stock underlying the SARs is unknown, indeterminable and cannot be predicted with certainty; (6) if the underlying shares of Common Stock do not increase in value, the SARs will have no value; (7) if the Grantee exercises the SARs and acquires shares of Common Stock, the value of such shares of Common Stock may increase or decrease in value, even below the Base Price; (8) no claim or entitlement to compensation or damages shall arise from forfeiture of the SARs resulting from the termination of the Grantee's employment or other service relationship (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Grantee is employed or providing services or the terms of the Grantee's employment or service agreement, if any), and in consideration of the grant of the SARs to which the Grantee is otherwise not entitled, the Grantee irrevocably agrees never to institute any claim against the Company, any of its subsidiaries or affiliates or the Employer, waives his or her ability, if any, to bring any such claim, and releases the Company, its subsidiaries and affiliates and the Employer from any such claim; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by participating in the Plan, the Grantee shall be deemed irrevocably to have agreed not to pursue such claim and agrees to execute any and all documents necessary to request dismissal or withdrawal of such claim; (9) for purposes of the SARs, the Grantee's employment or service relationship will be considered terminated as of the date the Grantee is no longer actively providing services to the Company or one of its subsidiaries and affiliates (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Grantee is employed or providing services or the terms of the Grantee's employment or service agreement, if any), and unless otherwise expressly provided in the Agreement or determined by the Company, (i) the Grantee's right to vest in the SARs under the Plan, if any, will terminate as of such date and will not be extended by any notice period (**e.g.**, the Grantee's period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where the Grantee is employed or providing services or the terms of the Grantee's employment or service agreement, if any); and (ii) the period (if any) during which the Grantee may exercise the SARs after such termination of the Grantee's employment or service relationship will commence on the date the Grantee ceases to actively provide services and will not be extended by any notice period mandated under employment laws in the jurisdiction where the Grantee is employed or providing services or terms of the Grantee's employment or service agreement, if any; and (iii) the Company shall have the exclusive discretion to determine when the Grantee is no longer actively providing services for purposes of his or her SARs grant (including whether the Grantee may still be considered to be providing services while on a leave of absence); (10) unless otherwise provided in the Plan or by the Company in its discretion, the SARs and the benefits evidenced by the Agreement do not create any entitlement to have the SARs or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the shares of the Company; (11) the SARs and any shares of Common Stock acquired under the Plan and the income and value of same, are not part of normal or expected compensation for any purpose, including, without limitation, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments,

bonuses, long-service awards, pension, or retirement or welfare benefits or similar payments; and (12) the Grantee acknowledges and agrees that neither the Company, the Employer nor any Subsidiary of the Company shall be liable for any foreign exchange rate fluctuation between the Grantee's local currency and the United States Dollar that may affect the value of the SARs or of any amounts due to the Grantee pursuant to the exercise of the SARs or the subsequent sale of any shares of Common Stock acquired upon exercise of the SARs.

No Advice Regarding Grant. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Grantee's participation in the Plan, or the Grantee's acquisition or sale of the underlying shares of Common Stock. The Grantee is hereby advised to consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

Data Privacy. *The Grantee hereby explicitly and unambiguously consents to the collection, use and transfer, in electronic or other form, including email, of the Grantee's personal data as described in the Agreement and any other SARs grant materials ("Data") by and among, as applicable, the Employer, the Company and its subsidiaries and affiliates for the exclusive purpose of implementing, administering and managing the Grantee's participation in the Plan.*

The Grantee understands that the Company and the Employer may hold certain personal information about the Grantee, including, but not limited to, the Grantee's name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company, details of all SARs or any other entitlement to shares of stock awarded, canceled, exercised, vested, unvested or outstanding in the Grantee's favor, for the exclusive purpose of implementing, administering and managing the Plan.

The Grantee understands that Data will be transferred to the Company's stock transfer agent and/or broker, or such other stock plan service provider as may be selected by the Company in the future, which is assisting the Company with the implementation, administration and management of the Plan. The Grantee understands that the recipients of the Data may be located in the United States or elsewhere (including outside the EEA), and that the recipient's country (e.g., the United States) may have different data privacy laws and protections than the Grantee's country. The Grantee understands that he or she may request a list with the names and addresses of any potential recipients of the Data by contacting his or her local human resources representative. The Grantee authorizes the Company, the Company's stock transfer agent and /or broker, and any other possible recipients which may assist the Company (presently or in the future) with implementing, administering and managing the Plan to receive, possess, use, retain and transfer the Data, in electronic or other form, for the sole purposes of implementing, administering and managing the Grantee's participation in the Plan. The Grantee understands that Data will be held only as long as is necessary to implement, administer and manage the Grantee's participation in the Plan. The Grantee understands that he or she may, at any time, view Data, request additional information about the storage and processing of Data, require any

necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing his or her local human resources representative.

Further, the Grantee understands that he or she is providing the consents herein on a purely voluntary basis. If the Grantee does not consent, or if the Grantee later seeks to revoke his or her consent, his or her employment status or service and career with the Employer will not be adversely affected; the only adverse consequence of refusing or withdrawing the Grantee's consent is that the Company would not be able to grant the Grantee SARs or other equity awards or administer or maintain such awards. Therefore, the Grantee understands that refusing or withdrawing his or her consent may affect the Grantee's ability to participate in the Plan. For more information on the consequences of the Grantee's refusal to consent or withdrawal of consent, the Grantee understands that he or she may contact his or her local human resources representative.

Governing Law and Venue. The SARs grant and the provisions of the Agreement are governed by, and subject to, the internal substantive laws of the State of Delaware in the United States of America (with the exception of its conflict of law provisions).

For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this grant or the Agreement, the parties hereby submit to and consent to the exclusive jurisdiction of the Commonwealth of Pennsylvania in the United States of America and agree that such litigation shall be conducted only in the courts of Cumberland County, the Commonwealth of Pennsylvania, or the federal courts for the United States of America for the Middle District of Pennsylvania, and no other courts, where this grant is made and/or to be performed.

Compliance with Law. The following provision supplements Section 7 of the Agreement: Notwithstanding any other provision of the Plan or the Agreement, unless there is an available exemption from any registration, qualification or other legal requirement applicable to the shares of Common Stock, the Company shall not be required to deliver any shares of Common Stock issuable upon exercise of the SARs prior to the completion of any registration or qualification of the shares under any local, state, federal or foreign securities or exchange control law or under rulings or regulations of the U.S. Securities and Exchange Commission ("SEC") or of any other governmental regulatory body, or prior to obtaining any approval or other clearance from any local, state, federal or foreign governmental agency, which registration, qualification or approval the Company shall, in its absolute discretion, deem necessary or advisable. The Grantee understands that the Company is under no obligation to register or qualify the shares with the SEC or any state or foreign securities commission or to seek approval or clearance from any governmental authority for the issuance or sale of the shares. Further, the Grantee agrees that the Company shall have unilateral authority to amend the Plan and the Agreement without the Grantee's consent to the extent necessary to comply with securities or other laws applicable to issuance of shares.

Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means, including email. The Grantee hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic

system established and maintained by the Company or a third party designated by the Company.

Language. If the Grantee has received the Agreement or any other document related to the SARs and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

Severability. The provisions of the Agreement are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable.

Imposition of Other Requirements. The Company reserves the right to impose other requirements on the Grantee's participation in the Plan, on the SARs and on any shares of Common Stock purchased upon exercise of the SARs, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require the Grantee to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

Waiver. The Grantee acknowledges that a waiver by the Company of breach of any provision of the Agreement shall not operate or be construed as a waiver of any other provision of the Agreement, or of any subsequent breach by the Grantee or any other Participant.

B. COUNTRY-SPECIFIC ADDITIONAL TERMS AND CONDITIONS AND NOTIFICATIONS

AUSTRALIA

TERMS AND CONDITIONS

Settlement of SARs. Notwithstanding anything to the contrary in the Agreement, due to local regulatory requirements, upon the vesting of the SARs, the Grantee will receive a cash payment in an amount equal to the value of the shares of Common Stock underlying the vested SARs on a vesting date. As long as the Grantee resides in Australia, he or she may not receive or hold shares of Common Stock in connection with the SARs under the Plan. Accordingly, any provisions in the Agreement referring to issuance of shares of Common Stock shall not be applicable to the Grantee as long as he or she resides in Australia.

NOTIFICATIONS

Exchange Control Information. Exchange control reporting is required for cash transactions exceeding \$10,000 and international fund transfers. The Australian bank assisting with the transaction will file the report. If there is no Australian bank involved in the transfer, Grantee will be required to file the report.

BELGIUM

NOTIFICATIONS

Tax Reporting Information. Grantee is required to report any bank accounts opened and maintained outside of Belgium on his or her annual Belgian tax return.

BRAZIL

TERMS AND CONDITIONS

Compliance with Law. By accepting the SARs, the Grantee acknowledges that he or she agrees to comply with applicable Brazilian laws and pay any and all applicable taxes associated with the exercise of the SARs, the receipt of any dividends, and the sale of shares of Common Stock acquired under the Plan.

NOTIFICATIONS

Exchange Control Information. If the Grantee is resident or domiciled in Brazil, he or she will be required to submit annually a declaration of assets and rights held outside of Brazil to the Central Bank of Brazil if the aggregate value of such assets and rights is equal to or greater than US \$100,000. Assets and rights that must be reported include shares of Common Stock.

CHINA

TERMS AND CONDITIONS

Settlement of SARs. Notwithstanding anything to the contrary in the SARs Agreement, due to local regulatory requirements, upon the vesting of the SARs the Grantee will receive a cash payment in China via the Company local Chinese payroll in an amount equal to the value of the shares of Common Stock underlying the vested SARs on the vesting date. As long as the Grantee resides in China, he or she may not receive or hold shares of Common Stock in connection with the SARs under the Plan. Accordingly, any provisions in the Agreement referring to issuance of shares of Common Stock shall not be applicable to the Grantee as long as he or she resides in China.

GERMANY

TERMS AND CONDITIONS

Parties to the Agreement. The Agreement is exclusively concluded between Harsco Corporation and the Grantee. The local Harsco entity employing the Grantee is not in any way party to the Agreement or entitled/committed hereby.

Vesting of SARs. Notwithstanding anything to the contrary in the Agreement or in the Plan, the Grantee shall be considered "Disabled" for the purposes of this Agreement, if the Grantee's employment contract ends as a consequence of the Grantee being granted a permanent statutory pension for full occupational disability (unbefristete Rente wegen voller Erwerbsminderung) by the competent authorities.

Non-Competition Agreement. Notwithstanding anything to the contrary in the Non-Competition Agreement, it is exclusively concluded between Harsco Corporation and the Grantee. The employer of the Grantee is not in any way party to the Non-Competition Agreement or entitled/committed hereby. The Non-Competition Agreement does not affect in any way a separate non-competition agreement concluded between the Grantee and his/her

employer.

FRANCE

TERMS AND CONDITIONS

Consent to Receive Information in English. By accepting the grant of the SARs, the Grantee confirms having read and understood the Plan and the Agreement, which were provided in the English language. The Grantee accepts the terms of those documents accordingly.

En acceptant cette attribution gratuite d'actions, le Grantee confirme avoir lu et compris le Plan et ce Contrat, incluant tous leurs termes et conditions, qui ont été transmis en langue anglaise. Le Grantee accepte les dispositions de ces documents en connaissance de cause.

NOTIFICATIONS

Tax Notification. The SARs are not intended to be French tax-qualified.

Exchange Control Notification. The Grantee may hold shares of Common Stock acquired under the Plan outside of France provided that he or she declares all foreign accounts (including any accounts that were opened or closed during the tax year) on his or her annual French income tax return.

INDIA

TERMS AND CONDITIONS

The Grantee hereby agrees that it shall hold the shares of the Common Stock pursuant to this Agreement and the Plan, at all times in accordance with the applicable laws in India, including but not limited to the (Indian) Foreign Exchange Management (Transfer or Issue of Any Foreign Security) Regulations, 2004 (and as amended or replaced), relevant master circulars, directions, notifications issued in this regard by the Reserve Bank of India from time to time and shall carry out the necessary reporting with the Reserve Bank of India at all stages of granting and vesting, if and as may be required. The Grantee agrees to indemnify the Company and/or Subsidiary of the Company with respect to any non-compliance and/or non-adherence by the Grantee of any of the applicable laws in India arising out of holding of the shares of the Common Stock by the Grantee.

The Grantee shall declare the holding of shares of the Common Stock, if and as may be necessary, in its income for taxation purposes and agrees to indemnify the Company and/or Subsidiary of the Company with respect to any and all taxes that it shall be obligated to pay with respect to the shares of the Common Stock such as including but not limited to income tax, capital gain taxes etc., under this Agreement and which may arise as a result of the sale of the shares of the Common Stock and the transactions contemplated hereunder.

LUXEMBOURG

NOTIFICATIONS

Exchange Control Information. Grantee understands that Grantee is required to report any inward remittances of funds to the Banque Centrale de Luxembourg and/or the Service

Central de la Statistique et des Études Économiques within 15 working days following the month during which the transaction occurred unless such payment is reported by a Luxembourg-resident financial institution.

THE NETHERLANDS

TERMS AND CONDITIONS

Non-Competition Agreement. The non-competition agreement entered into between the Company and the Grantee shall be in addition to any non-compete arrangements between the Grantee and his or her employer.

SWITZERLAND

TERMS AND CONDITIONS

Vesting: With the acceptance of a Grant, the Grantee expressly acknowledges that any RSU, PSU and/or SAR shall not give the Grantee any right or entitlement until such Grant is fully vested. The Grant remains fully discretionary until full vesting.

Continuous Employment: In Switzerland, "continuously employed" (or substantially similar term) means the absence of any interruption or termination (issuance of termination notice) of the Grantee's employment with the Company or with a Subsidiary of the Company. Continuous employment shall not be considered interrupted or terminated in the case of sick leave, military leave or any other leave of absence approved by the Company for which compensation needs to be paid by the Company or salary replacement benefits are granted by any insurance or in the case of transfers between locations of the Company and its Subsidiaries. For the avoidance of any doubt, continuous employment ends in any case with the end of the employment, even if any salary replacement benefits continue to be paid by any insurance, pension scheme or social security.

Retirement: For the purpose of the Plan, only a retirement under the rules and conditions of the Swiss pension scheme of the Subsidiary employing the Grantee shall qualify as retirement for the purpose of vesting of RSU, PSU or termination of SAR, and only if such retirements is (A) at age 62 or older while employed by the Company or any of its Subsidiaries; or (B) at or after such time as the Grantee's age (minimum of age 55), plus full years of continuous employment by the Company or any of its Subsidiaries, equals 75.

Disability: For purposes of the Plan, the Grantee shall be considered "Disabled" if the Grantee is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or qualifies as permanent full disability under the applicable Swiss social security and/or pension laws.

Non-Competition Agreement: For the avoidance of any doubt, any non-competition agreement entered into between the Grantee and the Company in connection with the Plan and grants thereunder shall be in addition to any non-competition agreement agreed between the Grantee and the employing Subsidiary and shall not replace such non-competition agreement.

NOTIFICATIONS

Exchange Control Notification. The Grantee may hold shares of Common Stock acquired under the Plan outside of Switzerland provided that he or she declares all foreign accounts (including any accounts that were opened or closed during the tax year) on his or her annual Swiss tax declaration.

UNITED ARAB EMIRATES

NOTIFICATIONS

Securities Law Notice. SARs under the Plan are granted only to select executive officers and other employees of the Company and its subsidiaries for the purpose of providing such eligible persons with incentives and rewards for performance. The Agreement, including this Exhibit, the Plan and any documents the Grantee may receive in connection with the SARs are intended for distribution to such eligible persons and must not be delivered to, or relied on, by any other person.

The Emirates Securities and Commodities Authority, the Central Bank, the Ministry of Economy and the Dubai Department of Economic Development do not have any responsibility for reviewing or verifying any documents in connection with the Plan nor have they reviewed or approved the Plan or the Agreement. The securities to which this statement relates may be illiquid and/or subject to restrictions on their resale. The Grantee and/or prospective purchasers of the securities offered should conduct their own due diligence on the securities.

If the Grantee does not understand the contents of the Agreement, including this Exhibit, or the Plan, the Grantee should consult an authorized financial adviser.

UNITED KINGDOM

TERMS AND CONDITIONS

U.K. Sub-Plan. The terms of the U.K. Sub-plan apply to the SARs.

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

I, F. Nicholas Grasberger, III, certify that:

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

May 9, 2019

/s/ F. NICHOLAS GRASBERGER III

F. Nicholas Grasberger III

Chairman, President and Chief Executive Officer

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

I, Peter F. Minan, certify that:

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

May 9, 2019

/s/ PETER F. MINAN

Peter F. Minan

Senior Vice President and Chief Financial Officer

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

In connection with the Quarterly Report of Harsco Corporation (the "Company") on Form 10-Q for the period ending March 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of our knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 9, 2019

/s/ F. NICHOLAS GRASBERGER III

F. Nicholas Grasberger III

Chairman, President and Chief Executive Officer

/s/ PETER F. MINAN

Peter F. Minan

Senior Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to Harsco Corporation and will be retained by Harsco Corporation and furnished to the Securities and Exchange Commission or its staff upon request.