UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

	FORM 10	-Q	
(Mark One)			
☑ QUARTERLY REPORT	PURSUANT TO SECTION 13 OR 15	(d) OF THE SECURITIES EXCHANGE ACT O	F 1934
	For the quarterly period end OR	led June 30, 2018	
☐ TRANSITION REPORT	PURSUANT TO SECTION 13 OR 15	(d) OF THE SECURITIES EXCHANGE ACT O	F 1934
	For the transition period fro Commission file num	om to ber: 1-6003	
	FEDERA!	L SIGNAL	
FI	EDERAL SIGNAL C (Exact name of registrant as spec		
	ware	36-1063330	
(State or other jurisdiction of	incorporation or organization)	(I.R.S. Employer Identification No.)	
	22nd Street, ok, Illinois	60523	
	al executive offices)	(Zip code)	
Re	gistrant's telephone number includi	ng area code: (630) 954-2000	
Securities Exchange Act of 193	4 during the preceding 12 months (or	required to be filed by Section 13 or 15(d) of the for such shorter period that the registrant was requ for the past 90 days. Yes 🗹 No 🗆	ired to
Interactive Data File required to	be submitted and posted pursuant to	cally and posted on its corporate Website, if any, eRule 405 of Regulation S-T (§232.405 of this chargistrant was required to submit and post such	
reporting company, or an emerg	e e	ler, an accelerated filer, a non-accelerated filer, a sons of "large accelerated filer," "accelerated filer," le 12b-2 of the Exchange Act.	
Large accelerated filer	lacksquare	Accelerated filer	
Non-accelerated filer	☐ (Do not check if a smaller rep	orting company) Smaller reporting company	
Emerging growth company			
	ndicate by check mark if the registrant has accounting standards provided pursuant to	elected not to use the extended transition period for cor Section 13(a) of the Exchange Act. \square	nplying
Indicate by check mark whethe Act). Yes □ No ☑	r the registrant is a shell company (as o	defined in Rule 12b-2 of the Exchange	
As of July 31, 2018, the numbe	r of shares outstanding of the registran	t's common stock was 60,199,716.	

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FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q ("Form 10-Q") is being filed by Federal Signal Corporation and its subsidiaries (referred to collectively as the "Company," "we," "our" or "us" herein, unless the context otherwise indicates) with the United States ("U.S.") Securities and Exchange Commission (the "SEC"), and includes comments made by management that may contain words such as "may," "will," "believe," "expect," "anticipate," "intend," "plan," "project," "estimate" and "objective" or similar terminology, or the negative thereof, concerning the Company's future financial performance, business strategy, plans, goals and objectives. These expressions are intended to identify forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the Private Securities Litigation Reform Act of 1995. Forward-looking statements include information concerning the Company's possible or assumed future performance or results of operations and are not guarantees. While these statements are based on assumptions and judgments that management has made in light of industry experience as well as perceptions of historical trends, current conditions, expected future developments and other factors believed to be appropriate under the circumstances, they are subject to risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to be materially different.

These risks and uncertainties, some of which are beyond the Company's control, include the risk factors described under Part I, Item 1A, *Risk Factors*, of the Company's Annual Report on Form 10-K for the year ended December 31, 2017, which was filed with the SEC on February 28, 2018. These factors may not constitute all factors that could cause actual results to differ materially from those discussed in any forward-looking statement. The Company operates in a continually changing business environment and new factors emerge from time to time. The Company cannot predict such factors, nor can it assess the impact, if any, of such factors on its results of operations, financial condition or cash flow. Accordingly, forward-looking statements should not be relied upon as a predictor of actual results. The Company disclaims any responsibility to update any forward-looking statement provided in this Form 10-Q.

ADDITIONAL INFORMATION

The Company is subject to the reporting and information requirements of the Exchange Act and, as a result, is obligated to file Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other reports and information with the SEC, as well as amendments to those reports. The Company makes these filings available free of charge through our website at www.federalsignal.com as soon as reasonably practicable after such materials are filed with, or furnished to, the SEC. Information on our website does not constitute part of this Form 10-Q. In addition, the SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding issuers that file electronically. All materials that we file with, or furnish to, the SEC may also be read or copied at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited).

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

	Three Months Ended June 30,					nded		
(in millions, except per share data)		2018		2017		2018		2017
Net sales	\$	291.0	\$	224.4	\$	540.7	\$	402.2
Cost of sales		211.8		169.7		399.6		303.9
Gross profit		79.2		54.7		141.1		98.3
Selling, engineering, general and administrative expenses		40.7		34.8		82.5		66.2
Acquisition and integration-related expenses		0.4		1.0		0.9		1.5
Restructuring		_		0.1		_		0.4
Operating income		38.1		18.8		57.7		30.2
Interest expense		2.5		1.3		5.0		1.9
Other expense (income), net		0.4		(0.1)		0.5		(0.3)
Income before income taxes		35.2		17.6		52.2		28.6
Income tax expense		8.3		6.1		12.4		9.9
Income from continuing operations		26.9		11.5		39.8		18.7
Loss from discontinued operations and disposal, net of income tax		_		(0.1)		_		_
Net income	\$	26.9	\$	11.4	\$	39.8	\$	18.7
Basic earnings per share:								
Earnings from continuing operations	\$	0.45	\$	0.19	\$	0.67	\$	0.31
Loss from discontinued operations and disposal, net of tax		_		_		_		_
Net earnings per share	\$	0.45	\$	0.19	\$	0.67	\$	0.31
Diluted earnings per share:								
Earnings from continuing operations	\$	0.44	\$	0.19	\$	0.65	\$	0.31
Loss from discontinued operations and disposal, net of tax		_		_		_		_
Net earnings per share	\$	0.44	\$	0.19	\$	0.65	\$	0.31
Weighted average common shares outstanding:								
Basic		59.9		59.7		59.9		59.7
Diluted		61.0		60.3		60.9		60.3
Cash dividends declared per common share	\$	0.08	\$	0.07	\$	0.15	\$	0.14

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (Unaudited)

	Three Months Ended June 30,					Six Months Ende June 30,			
(in millions)		2018		2017		2018		2017	
Net income	\$	26.9	\$	11.4	\$	39.8	\$	18.7	
Other comprehensive (loss) income:									
Change in foreign currency translation adjustment		(5.2)		5.0		(3.2)		6.2	
Change in unrecognized net actuarial losses related to pension benefit plans, net of income tax expense of \$0.2, \$0.3, \$0.4 and \$0.5, respectively		1.7		(0.1)		1.8		0.1	
Change in unrealized net gain on derivatives, net of income tax expense of \$0.1, \$0.2, \$0.3 and \$0.2, respectively		0.2		0.2		1.0		0.2	
Total other comprehensive (loss) income		(3.3)		5.1		(0.4)		6.5	
Comprehensive income	\$	23.6	\$	16.5	\$	39.4	\$	25.2	

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES CONDENSED CONSOLIDATED BALANCE SHEETS

Name		June 30, 2018		Dec	cember 31, 2017
Current assets: \$ 36.0 \$ 37.5 Accounts receivable, net of allowances for doubtful accounts of \$1.3 and \$1.1, respectively 131.2 118.2 Inventories 147.7 137.2 Prepaid expenses and other current assets 10.1 10.9 Total current assets 325.0 303.8 Properties and equipment, net of accumulated depreciation of \$113.9 and \$108.9, respectively 61.0 60.1 Rental equipment, net of accumulated depreciation of \$22.3 and \$20.0, respectively 94.2 87.2 Goodwill 376.0 377.3 Intangible assets, net of accumulated amortization of \$9.5 and \$5.5, respectively 147.4 151.8 Deferred tax assets 4.6 6.2 Deferred charges and other assets 7.5 5.4 Long-term assets of discontinued operations 0.5 0.5 Total assets \$1,016.2 \$992.3 LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: \$0.3 \$0.3 Current portion of long-term borrowings and capital lease obligations \$0.3 \$0.3 Accounts payable 66.3 51.5 </th <th>(in millions, except per share data)</th> <th>(U</th> <th>naudited)</th> <th></th> <th></th>	(in millions, except per share data)	(U	naudited)		
Cash and cash equivalents \$ 36.0 \$ 37.5 Accounts receivable, net of allowances for doubtful accounts of \$1.3 and \$1.1, respectively 131.2 118.2 Inventories 147.7 137.2 Prepaid expenses and other current assets 10.1 10.9 Total current assets 325.0 303.8 Properties and equipment, net of accumulated depreciation of \$113.9 and \$108.9, respectively 61.0 60.1 Rental equipment, net of accumulated depreciation of \$22.3 and \$20.0, respectively 94.2 87.2 Goodwill 376.0 377.3 Intangible assets, net of accumulated amortization of \$9.5 and \$5.5, respectively 147.4 151.8 Deferred tax assets 4.6 6.2 Deferred charges and other assets 7.5 5.4 Long-term assets of discontinued operations 0.5 0.5 Total assets \$ 1,016.2 \$ 992.3 LIABILITIES AND STOCKHOLDERS' EQUITY Current portion of long-term borrowings and capital lease obligations \$ 0.3 \$ 0.3 Accounts payable 66.3 51.5 Customer deposits 8.6 6.5 <th>ASSETS</th> <th></th> <th></th> <th></th> <th></th>	ASSETS				
Accounts receivable, net of allowances for doubtful accounts of \$1.3 and \$1.1, respectively 131.2 118.2 Inventories 147.7 137.2 Prepaid expenses and other current assets 10.1 10.9 Total current assets 325.0 303.8 Properties and equipment, net of accumulated depreciation of \$113.9 and \$108.9, respectively 61.0 60.1 Rental equipment, net of accumulated depreciation of \$22.3 and \$20.0, respectively 94.2 87.2 Goodwill 376.0 377.3 Intangible assets, net of accumulated amortization of \$9.5 and \$5.5, respectively 147.4 151.8 Deferred tax assets 4.6 6.2 Deferred charges and other assets 7.5 5.4 Long-term assets of discontinued operations 0.5 0.5 Total assets 0.5 0.5 Current liabilities: 20.5 992.3 Current portion of long-term borrowings and capital lease obligations \$ 0.3 \$ 0.3 Accounts payable 66.3 51.5 Customer deposits 8.6 6.5 Accrued liabilities: 22.1 22.2	Current assets:				
Inventories 147.7 137.2 Prepaid expenses and other current assets 10.1 10.9 Total current assets 325.0 303.8 Properties and equipment, net of accumulated depreciation of \$113.9 and \$108.9, respectively 61.0 60.1 Rental equipment, net of accumulated depreciation of \$22.3 and \$20.0, respectively 94.2 87.2 Goodwill 376.0 377.3 Intangible assets, net of accumulated amortization of \$9.5 and \$5.5, respectively 147.4 151.8 Deferred tax assets 4.6 6.2 Deferred charges and other assets 7.5 5.4 Long-term assets of discontinued operations 0.5 0.5 Total assets 1,016.2 \$ 992.3 LIABILITIES AND STOCKHOLDERS' EQUITY Current portion of long-term borrowings and capital lease obligations 0.3 0.3 Accounts payable 66.3 51.5 Customer deposits 8.6 6.5 Accrued liabilities: 22.1 22.2 Compensation and withholding taxes 22.1 22.2 Other current liabilities: </td <td>Cash and cash equivalents</td> <td>\$</td> <td>36.0</td> <td>\$</td> <td>37.5</td>	Cash and cash equivalents	\$	36.0	\$	37.5
Prepaid expenses and other current assets 10.1 10.9 Total current assets 325.0 303.8 Properties and equipment, net of accumulated depreciation of \$113.9 and \$108.9, respectively 61.0 60.1 Rental equipment, net of accumulated depreciation of \$22.3 and \$20.0, respectively 94.2 87.2 Goodwill 376.0 377.3 Intangible assets, net of accumulated amortization of \$9.5 and \$5.5, respectively 147.4 151.8 Deferred tax assets 4.6 6.2 Deferred charges and other assets 7.5 5.4 Long-term assets of discontinued operations 0.5 0.5 Total assets \$ 1,016.2 \$ 992.3 LIABILITIES AND STOCKHOLDERS' EQUITY Current portion of long-term borrowings and capital lease obligations \$ 0.3 \$ 0.3 Accounts payable 66.3 51.5 Customer deposits 8.6 6.5 Accrued liabilities: 22.1 22.2 Compensation and withholding taxes 22.1 22.2 Other current liabilities 53.4 36.1	Accounts receivable, net of allowances for doubtful accounts of \$1.3 and \$1.1, respectively		131.2		118.2
Total current assets 325.0 303.8 Properties and equipment, net of accumulated depreciation of \$113.9 and \$108.9, respectively 61.0 60.1 Rental equipment, net of accumulated depreciation of \$22.3 and \$20.0, respectively 94.2 87.2 Goodwill 376.0 377.3 Intangible assets, net of accumulated amortization of \$9.5 and \$5.5, respectively 147.4 151.8 Deferred tax assets 4.6 6.2 Deferred charges and other assets 7.5 5.4 Long-term assets of discontinued operations 0.5 0.5 Total assets 1,016.2 992.3 LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Current portion of long-term borrowings and capital lease obligations \$ 0.3 \$ 0.3 Accounts payable 66.3 51.5 Customer deposits 8.6 6.5 Accrued liabilities: 22.1 22.2 Compensation and withholding taxes 22.1 22.2 Other current liabilities 53.4 36.1	Inventories		147.7		137.2
Properties and equipment, net of accumulated depreciation of \$113.9 and \$108.9, respectively 61.0 60.1 Rental equipment, net of accumulated depreciation of \$22.3 and \$20.0, respectively 94.2 87.2 Goodwill 376.0 377.3 Intangible assets, net of accumulated amortization of \$9.5 and \$5.5, respectively 147.4 151.8 Deferred tax assets 4.6 6.2 Deferred charges and other assets 7.5 5.4 Long-term assets of discontinued operations 0.5 0.5 Total assets \$1,016.2 \$992.3 LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Current portion of long-term borrowings and capital lease obligations \$0.3 0.3 Accounts payable 66.3 51.5 Customer deposits 8.6 6.5 Accrued liabilities: 22.1 22.2 Compensation and withholding taxes 22.1 22.2 Other current liabilities 53.4 36.1	Prepaid expenses and other current assets		10.1		10.9
Rental equipment, net of accumulated depreciation of \$22.3 and \$20.0, respectively 94.2 87.2 Goodwill 376.0 377.3 Intangible assets, net of accumulated amortization of \$9.5 and \$5.5, respectively 147.4 151.8 Deferred tax assets 4.6 6.2 Deferred charges and other assets 7.5 5.4 Long-term assets of discontinued operations 0.5 0.5 Total assets \$1,016.2 \$992.3 LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Current portion of long-term borrowings and capital lease obligations \$0.3 \$0.3 Accounts payable 66.3 51.5 Customer deposits 8.6 6.5 Accrued liabilities: 22.1 22.2 Compensation and withholding taxes 22.1 22.2 Other current liabilities 53.4 36.1	Total current assets		325.0		303.8
Goodwill 376.0 377.3 Intangible assets, net of accumulated amortization of \$9.5 and \$5.5, respectively 147.4 151.8 Deferred tax assets 4.6 6.2 Deferred charges and other assets 7.5 5.4 Long-term assets of discontinued operations 0.5 0.5 Total assets \$ 1,016.2 \$ 992.3 LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Current portion of long-term borrowings and capital lease obligations \$ 0.3 \$ 0.3 Accounts payable 66.3 51.5 Customer deposits 8.6 6.5 Accrued liabilities: 22.1 22.2 Compensation and withholding taxes 22.1 22.2 Other current liabilities 53.4 36.1	Properties and equipment, net of accumulated depreciation of \$113.9 and \$108.9, respectively		61.0		60.1
Intangible assets, net of accumulated amortization of \$9.5 and \$5.5, respectively Deferred tax assets Deferred charges and other assets Long-term assets of discontinued operations Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Current portion of long-term borrowings and capital lease obligations Accounts payable Customer deposits Accrued liabilities: Compensation and withholding taxes Cother current liabilities Cother current liabilities Cother current liabilities Substitute of accumulated amortization of \$9.5 and \$5.5, respectively 147.4 151.8 16.2 16.2 16.2 16.2 16.2 16.2 16.3 1	Rental equipment, net of accumulated depreciation of \$22.3 and \$20.0, respectively		94.2		87.2
Deferred tax assets 4.6 6.2 Deferred charges and other assets 7.5 5.4 Long-term assets of discontinued operations 0.5 0.5 Total assets \$ 1,016.2 \$ 992.3 LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Current portion of long-term borrowings and capital lease obligations \$ 0.3 \$ 0.3 Accounts payable 66.3 51.5 Customer deposits 8.6 6.5 Accrued liabilities: 22.1 22.2 Compensation and withholding taxes 22.1 22.2 Other current liabilities 53.4 36.1	Goodwill		376.0		377.3
Deferred charges and other assets7.55.4Long-term assets of discontinued operations0.50.5Total assets\$ 1,016.2\$ 992.3LIABILITIES AND STOCKHOLDERS' EQUITYCurrent liabilities:Current portion of long-term borrowings and capital lease obligations\$ 0.3\$ 0.3Accounts payable66.351.5Customer deposits8.66.5Accrued liabilities:8.66.5Compensation and withholding taxes22.122.2Other current liabilities53.436.1	Intangible assets, net of accumulated amortization of \$9.5 and \$5.5, respectively		147.4		151.8
Long-term assets of discontinued operations0.50.5Total assets\$ 1,016.2\$ 992.3LIABILITIES AND STOCKHOLDERS' EQUITYCurrent liabilities:Current portion of long-term borrowings and capital lease obligations\$ 0.3\$ 0.3Accounts payable66.351.5Customer deposits8.66.5Accrued liabilities:22.122.2Compensation and withholding taxes22.122.2Other current liabilities53.436.1	Deferred tax assets		4.6		6.2
Total assets LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Current portion of long-term borrowings and capital lease obligations Accounts payable Customer deposits Accrued liabilities: Compensation and withholding taxes Compensation and withholding taxes Other current liabilities 53.4 36.1	Deferred charges and other assets		7.5		5.4
Current liabilities: Current portion of long-term borrowings and capital lease obligations Accounts payable Customer deposits Accrued liabilities: Compensation and withholding taxes Other current liabilities LIABILITIES AND STOCKHOLDERS' EQUITY \$ 0.3 \$ 0.3 \$ 0.3 \$ 0.3 \$ 0.3 \$ 0.5 \$	Long-term assets of discontinued operations		0.5		0.5
Current liabilities:Current portion of long-term borrowings and capital lease obligations\$ 0.3 \$ 0.3Accounts payable66.3 51.5Customer deposits8.6 6.5Accrued liabilities:22.1 22.2Other current liabilities53.4 36.1	Total assets	\$	1,016.2	\$	992.3
Current portion of long-term borrowings and capital lease obligations\$ 0.3 \$ 0.3Accounts payable66.3 51.5Customer deposits8.6 6.5Accrued liabilities:22.1 22.2Other current liabilities53.4 36.1	LIABILITIES AND STOCKHOLDERS' EQUITY				
Accounts payable66.351.5Customer deposits8.66.5Accrued liabilities:Compensation and withholding taxesCompensation and withholding taxes22.122.2Other current liabilities53.436.1	Current liabilities:				
Customer deposits Accrued liabilities: Compensation and withholding taxes Other current liabilities 53.4 6.5 22.1 22.2	Current portion of long-term borrowings and capital lease obligations	\$	0.3	\$	0.3
Accrued liabilities: Compensation and withholding taxes Other current liabilities 22.1 22.2 36.1	Accounts payable		66.3		51.5
Compensation and withholding taxes22.122.2Other current liabilities53.436.1	Customer deposits		8.6		6.5
Other current liabilities 53.4 36.1	Accrued liabilities:				
	Compensation and withholding taxes		22.1		22.2
	Other current liabilities		53.4		36.1
Current liabilities of discontinued operations 0.5 0.5	Current liabilities of discontinued operations		0.5		0.5
Total current liabilities 151.2 117.1	Total current liabilities		151.2		117.1
Long-term borrowings and capital lease obligations 247.8 277.4	Long-term borrowings and capital lease obligations		247.8		277.4
Long-term pension and other postretirement benefit liabilities 53.3 56.6	Long-term pension and other postretirement benefit liabilities		53.3		56.6
Deferred gain 7.8 8.7	Deferred gain		7.8		8.7
Deferred tax liabilities 46.8 45.4	Deferred tax liabilities		46.8		45.4
Other long-term liabilities 15.4 28.2	Other long-term liabilities		15.4		28.2
Long-term liabilities of discontinued operations 1.5 1.5	Long-term liabilities of discontinued operations		1.5		1.5
Total liabilities 523.8 534.9	Total liabilities		523.8		534.9
Stockholders' equity:	Stockholders' equity:				
Common stock, \$1 par value per share, 90.0 shares authorized, 66.3 and 66.1 shares issued, respectively 66.3 66.1			66.3		66.1
Capital in excess of par value 212.7 207.7	Capital in excess of par value		212.7		207.7
Retained earnings 377.4 346.6	1				
Treasury stock, at cost, 6.1 and 6.1 shares, respectively (86.7) (86.1)	•				
Accumulated other comprehensive loss (77.3) (76.9)					. ,
Total stockholders' equity 492.4 457.4	•				
Total liabilities and stockholders' equity \$ 1,016.2 \$ 992.3	<u> </u>	\$		\$	

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

	Six Months E June 30,			,		
(in millions)	20	18		2017		
Operating activities:						
Net income	\$	39.8	\$	18.7		
Adjustments to reconcile net income to net cash provided by operating activities:						
Depreciation and amortization		17.6		12.3		
Deferred financing costs		0.2		0.2		
Deferred gain		(0.9)		(1.0)		
Stock-based compensation expense		4.0		2.7		
Pension expense, net of funding		(3.2)		(2.8)		
Changes in fair value of contingent consideration and deferred payment		0.6		0.5		
Deferred income taxes		2.0		2.8		
Changes in operating assets and liabilities		(22.3)		12.4		
Net cash provided by continuing operating activities		37.8		45.8		
Net cash used for discontinued operating activities		_		(0.3)		
Net cash provided by operating activities		37.8		45.5		
Investing activities:						
Purchases of properties and equipment		(7.0)		(2.7)		
Proceeds from (payments for) acquisition-related activity		3.0		(269.2)		
Other, net		0.1		0.1		
Net cash used for continuing investing activities		(3.9)		(271.8)		
Net cash used for discontinued investing activities		_		(1.1)		
Net cash used for investing activities		(3.9)		(272.9)		
Financing activities:						
(Decrease) increase in revolving lines of credit, net		(26.6)		223.0		
Payments of debt financing fees		_		(0.2)		
Redemptions of common stock to satisfy withholding taxes related to stock-based compensation		(0.3)		(2.4)		
Cash dividends paid to stockholders		(9.0)		(8.4)		
Proceeds from stock-based compensation activity		0.9		1.2		
Other, net		0.1		(0.2)		
Net cash (used for) provided by continuing financing activities	-	(34.9)		213.0		
Net cash used for discontinued financing activities		` <u> </u>		_		
Net cash (used for) provided by financing activities		(34.9)		213.0		
Effects of foreign exchange rate changes on cash and cash equivalents		(0.5)		0.7		
Decrease in cash and cash equivalents		(1.5)		(13.7)		
Cash and cash equivalents at beginning of year		37.5		50.7		
Cash and cash equivalents at end of period	\$	36.0	\$	37.0		

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (Unaudited)

(in millions)	ommon Stock	Capital in Excess of Par Value		Excess of Par		Excess of Par		Excess of Par		Retained Earnings										Other Comprehensive		Total
Balance at January 1, 2018	\$ 66.1	\$	207.7	\$	346.6	\$	(86.1)	\$	(76.9)	\$ 457.4												
Net income					39.8					39.8												
Total other comprehensive loss									(0.4)	(0.4)												
Cash dividends declared					(9.0)					(9.0)												
Stock-based payments:																						
Stock-based compensation			3.3							3.3												
Stock option exercises and other	0.2		1.7				(0.6)			1.3												
Balance at June 30, 2018	\$ 66.3	\$	212.7	\$	377.4	\$	(86.7)	\$	(77.3)	\$ 492.4												
(in millions)	 ommon Stock	E	apital in xcess of Par Value		etained arnings		reasury Stock		cumulated Other prehensive Loss	Total												
Balance at January 1, 2017	\$ 65.4	\$	200.3	\$	301.8	\$	(81.4)	\$	(92.0)	\$ 394.1												
Net income					18.7					18.7												
Total other comprehensive income									6.5	6.5												
Cash dividends declared					(8.4)					(8.4)												
Stock-based payments:																						
Stock-based compensation			2.1							2.1												
Stock option exercises and other	0.3		2.2				(1.2)			1.3												
Stock option exercises and other	0.3		2.2				(1.2)			1.5												
Performance share unit transactions	0.3		(0.2)				(1.9)			(1.9)												

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization and Description of the Business

Federal Signal Corporation was founded in 1901 and was reincorporated as a Delaware corporation in 1969. References herein to the "Company," "we," "our" or "us" refer collectively to Federal Signal Corporation and its subsidiaries.

Products manufactured and supplied, and services rendered by the Company are divided into two operating segments: the Environmental Solutions Group and the Safety and Security Systems Group. The individual operating businesses are organized as such because they share certain characteristics, including technology, marketing, distribution and product application, which create long-term synergies. The Company's reportable segments are consistent with its operating segments. These segments are discussed in Note 10 – Segment Information.

Basis of Presentation and Consolidation

The accompanying unaudited condensed consolidated financial statements represent the consolidation of Federal Signal Corporation and its subsidiaries included herein and have been prepared by the Company pursuant to the rules and regulations of the United States ("U.S.") Securities and Exchange Commission (the "SEC"). Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles ("GAAP") have been condensed or omitted pursuant to such rules and regulations, although the Company believes that the disclosures presented herein are adequate to ensure the information presented is not misleading. Except as otherwise noted, these condensed consolidated financial statements have been prepared in accordance with the Company's accounting policies described in the Company's Annual Report on Form 10-K for the year ended December 31, 2017, and should be read in conjunction with those consolidated financial statements and the notes thereto.

These condensed consolidated financial statements include all normal and recurring adjustments that we considered necessary to present a fair statement of our results of operations, financial condition and cash flow. Intercompany balances and transactions have been eliminated in consolidation. In addition, certain prior year amounts have been reclassified to conform to current year presentation.

The results reported in these condensed consolidated financial statements should not be regarded as necessarily indicative of results that may be expected for the entire year. While we label our quarterly information using a calendar convention whereby our first, second and third quarters are labeled as ending on March 31, June 30 and September 30, respectively, it is our longstanding practice to establish interim quarterly closing dates based on a 13-week period ending on a Saturday, with our fiscal year ending on December 31. The effects of this practice are not material and exist only within a reporting year.

Recent Accounting Pronouncements and Accounting Changes

In May 2014, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers* ("*Topic 606*"), which supersedes the revenue recognition requirements in Accounting Standards Codification ("ASC") 605, *Revenue Recognition*. Topic 606 is based on the principle that revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Topic 606 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments, and assets recognized from costs incurred to obtain or fulfill a contract. The Company adopted this guidance effective January 1, 2018 using the modified retrospective transition method. See Note 2 – Revenue Recognition for further details.

In February 2016, the FASB issued ASU No. 2016-02, *Leases ("Topic 842")*, which supersedes the lease accounting requirements in ASC 840, *Leases ("Topic 840")*. Topic 842 requires organizations that are lessees in operating lease arrangements to recognize right-of-use assets and lease liabilities on the balance sheet and requires disclosure of key qualitative and quantitative information about leasing arrangements by both lessors and lessees. Topic 842 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. As originally issued, entities would have been required to recognize and measure operating leases at the beginning of the earliest period presented using a modified retrospective approach. In July 2018, the FASB issued ASU No. 2018-11, *Leases (Topic*)

842): Targeted Improvements, which provides entities with an alternative transition method that permits application of the new guidance at the beginning of the period of adoption, with comparative periods continuing to be reported under Topic 840.

In preparation for the adoption of the new standard, the Company has established a project management team responsible for the implementation of Topic 842. The project management team is currently assessing the transition methods and impact that the adoption of this guidance will have on the Company's consolidated financial statements. This assessment includes the evaluation of the Company's current lease contracts and other contracts that may contain lease components. In addition, the Company is in the process of designing and implementing internal controls over gathering and reporting the information required to support the expanded disclosure requirements. Based on the implementation procedures performed to date, in addition to the expanded disclosure requirements, the Company currently anticipates the most significant adoption impacts will include (i) the recognition of right-of-use assets and lease liabilities on its consolidated balance sheets, and (ii) the recognition of the remaining deferred gain associated with the sale-leaseback transactions that the Company entered into in July 2008 for its Elgin, Illinois and University Park, Illinois plant locations as a cumulative effect adjustment to opening retained earnings. As disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2017, the deferred gain as of December 31, 2017 totaled \$10.6 million and is currently being amortized over the 15-year life of the respective leases.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230), Classification of Certain Cash Receipts and Payments, which provides additional guidance on the financial statement presentation of certain activities in the statement of cash flows. The activities addressed by this guidance that may be relevant to the Company include cash payments for debt prepayment or debt extinguishment costs, contingent consideration payments made after a business combination, proceeds from the settlement of insurance claims and proceeds from the settlement of corporate-owned life insurance policies, and the application of the predominance principle. The amendments in this ASU are effective for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years. The amendments in this ASU should be applied using a retrospective transition method to each period presented. If it is impracticable to apply the amendments retrospectively for some of the issues, the amendments for those issues would be applied prospectively as of the earliest date practicable. The Company adopted this guidance effective January 1, 2018 and concluded that it did not have a material impact on its historical cash flow presentation.

In October 2016, the FASB issued ASU No. 2016-16, *Income Taxes (Topic 740)*, *Intra-Entity Transfers of Assets Other Than Inventory*. This guidance requires the income tax consequences of an intra-entity transfer of an asset other than inventory to be recognized when the transfer occurs, instead of when the asset is sold to an outside party. The pronouncement is effective for annual reporting periods beginning after December 15, 2017, including interim reporting periods within those annual reporting periods, with early adoption permitted. The amendments in this ASU should be applied on a modified retrospective basis, with an adjustment reflecting the cumulative effect of adoption being recorded directly to retained earnings as of the beginning of the period of adoption. The Company adopted this guidance effective January 1, 2018 and concluded that it did not have a material impact on its consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles – Goodwill and Other (Topic 350)*, *Simplifying the Test for Goodwill Impairment*, which eliminates the second step of the two-step quantitative approach for testing goodwill for potential impairment. An entity will therefore perform the goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount, and recognize an impairment charge for the amount by which the carrying amount exceeds the fair value, not to exceed the total amount of goodwill allocated to the reporting unit. An entity still has the option to perform a qualitative assessment to determine if the quantitative impairment test is necessary. ASU 2017-04 is effective for fiscal years beginning after December 15, 2019 on a prospective basis, with early adoption permitted. The Company adopted this guidance effective January 1, 2018, and will be applying the revised guidance prospectively to future goodwill impairment tests.

In March 2017, the FASB issued ASU No. 2017-07, Compensation – Retirement Benefits (Topic 715), Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost. This guidance requires that entities present the service cost component of net periodic pension expense in the same income statement line items as other employee compensation costs. All other components of net periodic pension cost should be reported separately from the service cost component and outside a subtotal of operating income. The Company adopted this guidance effective January 1, 2018 following the retrospective method of adoption. The Condensed Consolidated Statements of Operations have been recast to present components of net periodic pension cost other than service cost within Other expense (income), net.

The following table summarizes the impact of ASU 2017-07 on the Company's previously reported Condensed Consolidated Statements of Operations:

	Th	ree Mon	ths E	nded Ju	ne 3	0, 2017	Si	x Month	e 30, 2017		
(in millions)	Re	As ported		pact of option	Ad	As justed		As ported	 oact of option		As justed
Selling, engineering, general and administrative expenses	\$	34.9	\$	(0.1)	\$	34.8	\$	66.4	\$ (0.2)	\$	66.2
Other expense (income), net		(0.2)		0.1		(0.1)		(0.5)	0.2		(0.3)

In August 2017, the FASB issued ASU No. 2017-12, *Derivatives and Hedging (Topic 815), Targeted Improvements to Accounting for Hedging Activities*, which intends to better align risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and presentation of hedge results. The amendments also make certain targeted improvements to simplify the application of the hedge accounting guidance by easing certain documentation and assessment requirements. ASU 2017-12 is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. The amendments in this ASU should be applied on a modified retrospective or prospective basis, depending on the area covered by the update. The Company adopted this guidance effective January 1, 2018 and concluded that it did not have a material impact on its consolidated financial statements.

In February 2018, the FASB issued ASU No. 2018-02, *Income Statement – Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income,* that permits entities to reclassify tax effects stranded in accumulated other comprehensive income as a result of the Tax Cuts and Jobs Act (the "2017 Tax Act") to retained earnings. ASU 2018-12 is effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. The amendments in this ASU may be applied retrospectively or in the period of adoption. The Company is currently evaluating the impact that the adoption of this guidance will have on its consolidated financial statements.

In March 2018, the FASB issued ASU No. 2018-05, *Income Taxes (Topic 740): Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118* ("SAB 118"), which provides guidance on the accounting for the tax impact of the 2017 Tax Act. Under SAB 118, a company that has not completed its accounting for the effects of the 2017 Tax Act by its financial reporting deadline may report provisional amounts based on reasonable estimates for items for which the accounting is incomplete. Those amounts will be subject to adjustment during a measurement period of up to one year. As discussed in Note 5 – Income Taxes, the condensed consolidated financial statements for the three and six months ended June 30, 2018 include the Company's provisional estimates of the impact of the 2017 Tax Act, in accordance with SAB 118. The Company may adjust the provisional amounts throughout the measurement period as the Company's calculations are refined and additional interpretive guidance becomes available.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect (i) the reported amounts of assets and liabilities, (ii) the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and (iii) the reported amounts of revenues and expenses during the reporting period. Significant estimates and assumptions are used for, but are not limited to, revenue recognition, workers' compensation and product liability reserves, asset impairment, pension and other post-retirement benefit obligations, income tax contingency accruals and valuation allowances, and litigation-related accruals. Actual results could differ from those estimates.

Significant Accounting Policies

As described in Note 2 – Revenue Recognition, the Company's revenue recognition accounting policy has been updated to reflect the adoption of Topic 606 on January 1, 2018. There have been no other changes to the Company's significant accounting policies as disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2017.

NOTE 2 – REVENUE RECOGNITION

Impact of the Adoption of Topic 606

On January 1, 2018, the Company adopted Topic 606 following the modified retrospective method of adoption applied to those contracts which were not completed as of the date of adoption. In accordance with the Topic 606 transition guidance, the financial information in the comparative periods presented herein has not been restated and continues to be reported under the accounting standards in effect for those periods.

The adoption of Topic 606 did not have a material impact on the Company's financial position, results of operations or cash flows. While the impact of adoption was not material, the Company's Condensed Consolidated Statements of Operations for both the three and six months ended June 30, 2018 include a reduction in Net sales of approximately 1% within the Environmental Solutions Group based on a revised "Principal vs. Agent" analysis resulting in a change from gross to net presentation, with a corresponding reduction in Cost of sales.

The following table summarizes the impact of the adoption of Topic 606 on the Company's Condensed Consolidated Statements of Operations for the three and six months ended June 30, 2018:

	Three Months Ended June 30, 2018							Six Months Ended June 30, 2018							
(in millions)	As	Reported	V Ad	alances Vithout option of opic 606		Effect of Change	As	Reported	V Ad	alances Vithout option of opic 606		ffect of Change			
Net sales	\$	291.0	\$	295.3	\$	(4.3)	\$	540.7	\$	548.2	\$	(7.5)			
Cost of sales		211.8		216.1		(4.3)		399.6		407.1		(7.5)			
Gross profit	\$	79.2	\$	79.2	\$	_	\$	141.1	\$	141.1	\$	_			

Revenue Recognition

Revenue is recognized when performance obligations under the terms of a contract with the customer are satisfied; generally this occurs at a point in time, with the transfer of control of the Company's products or services to customers. For most of the Company's product sales, these criteria are met at the time the product is shipped; however, occasionally control passes later or earlier than shipment due to customer contract or letter of credit terms. In circumstances where credit is extended, payment terms generally range from 30 to 120 days and customer deposits may be required.

Revenue is measured as the amount of consideration the Company expects to be entitled to in exchange for transferring products or providing services. Expected returns and allowances are estimated and recognized based primarily on an analysis of historical experience, with Net sales presented net of such returns and allowances.

The Company enters into sales arrangements that may provide for multiple performance obligations to a customer. These arrangements may include software and non-software components that function together to deliver the products' essential functionality. The Company identifies all performance obligations that are to be delivered separately under the sales arrangement and allocates revenue to each performance obligation based on its relative standalone selling price. The Company uses an observable price to determine the standalone selling price or a cost plus margin approach when one is not available. In general, performance obligations include hardware, integration and installation services. The allocated revenue for each performance obligation is recognized as such performance obligations are satisfied.

Net sales include sales of products and billed freight related to product sales. Freight has not historically comprised a material component of Net sales. The Company has elected to account for such shipping and handling activities as a fulfillment cost and not as a separate performance obligation. Taxes collected from customers and remitted to governmental authorities are recorded on a net basis and are excluded from Net sales.

The following table presents the Company's Net sales disaggregated by geographic region, based on the location of the end customer, and by major product line:

(in millions)	Ionths Ended e 30, 2018	onths Ended e 30, 2018
Geographic Region:		
U.S.	\$ 220.7	\$ 417.3
Canada	45.8	78.2
Europe/Other	 24.5	45.2
Total net sales	\$ 291.0	\$ 540.7
Major Product Line:		
Environmental Solutions		
Vehicles and equipment (a)	\$ 185.2	\$ 340.8
Parts	32.4	62.2
Rental income (b)	11.6	19.4
Other (c)	4.1	7.5
Total	\$ 233.3	\$ 429.9
Safety and Security Systems		
Public safety and security equipment	\$ 36.7	\$ 67.3
Industrial signaling equipment	13.5	26.7
Warning systems	 7.5	16.8
Total	\$ 57.7	\$ 110.8
Total net sales	\$ 291.0	\$ 540.7

- (a) Includes net sales from the sale of new and used vehicles and equipment, including sales of rental equipment.
- (b) Represents income from vehicle and equipment lease arrangements with customers, recognized in accordance with Topic 840.
- c) Primarily includes revenues from services such as maintenance and repair work and the sale of extended warranty contracts.

Contract Balances

The Company recognizes contract liabilities when cash payments, such as customer deposits, are received in advance of the Company's satisfaction of the related performance obligations. Contract liabilities are recognized as Net sales when the related performance obligations are satisfied, which generally occurs within three to six months of the cash receipt. Contract liability balances are not materially impacted by any other factors. The Company's contract liabilities were \$10.9 million and \$8.9 million, as of June 30, 2018 and December 31, 2017, respectively. Contract assets, such as unbilled receivables, were not material as of any of the periods presented herein.

Practical Expedients

As the Company's standard payment terms are less than a year, the Company has elected the practical expedient under ASC 606-10-32-18 to not assess whether a contract has a significant financing component.

The Company has also elected the practical expedient under ASC 340-40-25-4 and recognizes the incremental costs of obtaining a contract, such as sales commissions, as expense when incurred as the amortization period of the asset that otherwise would have been recognized is one year or less.

Further, as permitted by ASC 606-10-50-14, the Company does not disclose the value of its remaining performance obligations for contracts with an original expected duration of one year or less.

NOTE 3 – INVENTORIES

The following table summarizes the components of Inventories:

(in millions)	 June 30, 2018	mber 31, 2017
Finished goods	\$ 73.7	\$ 74.3
Raw materials	61.7	52.6
Work in process	12.3	10.3
Total inventories	\$ 147.7	\$ 137.2

NOTE 4 - DEBT

The following table summarizes the components of Long-term borrowings and capital lease obligations:

(in millions)	J	une 30, 2018	December 31, 2017		
Amended 2016 Credit Agreement (a)	\$	247.3	\$	277.0	
Capital lease obligations		0.8		0.7	
Total long-term borrowings and capital lease obligations, including current portion		248.1		277.7	
Less: Current capital lease obligations		0.3		0.3	
Total long-term borrowings and capital lease obligations	\$	247.8	\$	277.4	

⁽a) Defined as the Amended and Restated Credit Agreement, dated January 27, 2016, as amended on June 2, 2017.

As more fully described within Note 11 – Fair Value Measurements, the Company uses a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. The fair value of long-term debt is based on interest rates that we believe are currently available to us for issuance of debt with similar terms and remaining maturities (Level 2 input).

The following table summarizes the carrying amounts and estimated fair values of the Company's long-term borrowings:

		June 30, 2018 Decem				December	December 31, 201		
in millions)	= :	otional mount		Fair Value		otional mount		Fair Value	
g-term borrowings (a)	\$	\$ 248.1 \$ 2		248.1	\$	277.7	\$	277.7	

⁽a) Long-term borrowings includes current portions of long-term debt and current portions of capital lease obligations of \$0.3 million and \$0.3 million as of June 30, 2018 and December 31, 2017, respectively.

Borrowings under the Amended 2016 Credit Agreement bear interest, at the Company's option, at a base rate or a LIBOR rate, plus, in each case, an applicable margin. The applicable margin ranges from 0.00% to 1.25% for base rate borrowings and 1.00% to 2.25% for LIBOR borrowings. The Company must also pay a commitment fee to the lenders ranging between 0.15% to 0.30% per annum on the unused portion of the \$400 million revolving credit facility along with other standard fees. Letter of credit fees are payable on outstanding letters of credit in an amount equal to the applicable LIBOR margin plus other customary fees.

The Company is subject to certain leverage ratio and interest coverage ratio financial covenants under the Amended 2016 Credit Agreement that are to be measured at each fiscal quarter-end. The Company was in compliance with all such covenants as of June 30, 2018.

As of June 30, 2018, there was \$247.3 million of cash drawn and \$12.4 million of undrawn letters of credit under the Amended 2016 Credit Agreement, with \$140.3 million of net availability for borrowings. As of December 31, 2017, there was \$277.0 million cash drawn and \$17.1 million of undrawn letters of credit under the Amended 2016 Credit Agreement, with \$105.9 million of net availability for borrowings.

As of June 30, 2018 and December 31, 2017, there were no borrowings against the Company's non-U.S. lines of credit which provide for borrowings of up to \$0.1 million.

For the six months ended June 30, 2018, gross borrowings under the Amended 2016 Credit Agreement were \$8.0 million, while there were \$34.6 million of gross payments. For the six months ended June 30, 2017, gross borrowings and gross payments were \$243.0 million and \$20.0 million, respectively.

Interest Rate Swap

On June 2, 2017, the Company entered into an interest rate swap (the "Swap") with a notional amount of \$150.0 million, as a means of fixing the floating interest rate component on \$150.0 million of its variable-rate debt. The Swap is designated as a cash flow hedge, with a termination date of June 2, 2020. As a result of the application of hedge accounting treatment, all unrealized gains and losses related to the derivative instrument are recorded in Accumulated other comprehensive loss and are reclassified into operations in the same period in which the hedged transaction affects earnings. Hedge effectiveness is assessed quarterly. We do not use derivative instruments for trading or speculative purposes.

As more fully described within Note 11 – Fair Value Measurements, the Company uses a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. The fair value of the Swap is derived from a discounted cash flow analysis based on the terms of the contract and the interest rate curve (Level 2 inputs) and measured on a recurring basis in our Consolidated Balance Sheet. At June 30, 2018, the fair value of the Swap, included in Deferred charges and other assets on the Condensed Consolidated Balance Sheets, was \$2.9 million. During the three and six months ended June 30, 2018, unrealized pre-tax gains of \$0.3 million and \$1.3 million, respectively, were recorded in Accumulated other comprehensive loss. During the three and six months ended June 30, 2017, an unrealized pre-tax gain of \$0.4 million was recorded in Accumulated other comprehensive loss.

NOTE 5 – INCOME TAXES

The Company recognized income tax expense of \$8.3 million and \$6.1 million for the three months ended June 30, 2018 and 2017, respectively. The increase in tax expense in the current-year quarter is largely due to higher pre-tax income levels, offset by the impact of the lower U.S. federal corporate tax rate following the enactment of the 2017 Tax Act and the recognition of a \$0.5 million excess tax benefit from stock compensation activity. The effective tax rate for the three months ended June 30, 2018 was 23.6%, compared to 34.7% in the prior-year quarter, reflecting the lower U.S. federal corporate tax rate and the excess tax benefit.

For the six months ended June 30, 2018 and 2017, the Company recognized income tax expense of \$12.4 million and \$9.9 million, respectively. The increase in tax expense in the current year is largely due to higher pre-tax income levels, offset by the impact of the lower U.S. federal corporate tax rate following the enactment of the 2017 Tax Act and the recognition of a \$0.5 million excess tax benefit from stock compensation activity. The effective tax rate for the six months ended June 30, 2018 was 23.8%, compared to 34.6% in the prior-year period, reflecting the lower U.S. federal corporate tax rate and the excess tax benefit.

As discussed in Note 1 – Summary of Significant Accounting Policies, the condensed consolidated financial statements for the three and six months ended June 30, 2018 include the Company's provisional estimates of the impact of the 2017 Tax Act, in accordance with SAB 118. The Company may adjust the provisional amounts throughout the measurement period as the Company's calculations are refined and additional interpretive guidance becomes available. During the three and six months ended June 30, 2018, there have been no significant adjustments to the provisional amounts recorded at December 31, 2017.

Effective January 1, 2018, the 2017 Tax Act subjects a U.S. entity to tax on global intangible low-taxed income ("GILTI") earned by certain foreign subsidiaries. The FASB Staff Q&A, Topic 740, No. 5, Accounting for Global Intangible Low-Taxed Income, states that an entity can make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or provide for the tax expense related to GILTI in the year the tax is incurred as a period expense only. Given the complexity of the GILTI provisions, the Company is continuing to evaluate the effects of the GILTI provisions and has not yet determined its related accounting policy. As of June 30, 2018, the Company has included a provisional estimate of the GILTI related to current-year operations in its estimated annual effective tax rate.

The 2017 Tax Act also provides a one-time "transition tax" on untaxed post-1986 accumulated earnings and profits ("E&P") of a company's controlled foreign corporations ("CFC") determined as of November 2, 2017 or December 31, 2017 (whichever date on which there is more deferred E&P). Cash and cash equivalents are taxed at an effective rate of 15.5% and earnings in excess of the cash position are taxed at an effective rate of 8%. The 2017 Tax Act permits the netting of positive earnings of one CFC against deficits of others. At both November 2, 2017 and December 31, 2017, the accumulated undistributed earnings of the Company's foreign subsidiaries aggregated to an overall E&P deficit. Therefore, the Company estimates that no transition tax will be payable under the provisions of the 2017 Tax Act. As with other tax calculations surrounding the 2017 Tax Act, the Company's estimate of its transition tax liability as of June 30, 2018 is provisional due to complexities inherent in the computations that it expects to be addressed in whole, or in part, by regulations issued during 2018.

NOTE 6 – PENSIONS

The following table summarizes the components of net postretirement pension expense (benefit):

		U.S. Benefit Plan					Non-U.S. Benefit Plan									
	Th	ree Mor Jun	ths I e 30,	Ended	Six Months Ended June 30, Three Months Ended June 30,					Six Months Ended June 30,			ided			
(in millions)	2	2018	2	2017	- 2	2018	- 2	2017	2	2018	2	2017		2018	2	017
Service cost	\$		\$	_	\$		\$		\$		\$	0.1	\$	0.1	\$	0.1
Interest cost		1.6		1.9		3.2		3.8		0.4		0.4		0.7		0.7
Amortization of actuarial loss		0.7		0.6		1.5		1.2		0.1		0.1		0.3		0.3
Expected return on plan assets		(2.2)		(2.4)		(4.4)		(4.8)		(0.6)		(0.5)		(1.2)		(1.0)
Net postretirement pension expense (benefit)	\$	0.1	\$	0.1	\$	0.3	\$	0.2	\$	(0.1)	\$	0.1	\$	(0.1)	\$	0.1

In the six months ended June 30, 2018 and 2017, the Company contributed \$2.7 million and \$2.7 million to its U.S. defined benefit plan, respectively, and \$0.7 million and \$0.4 million to its non-U.S. defined benefit plan, respectively.

The Company expects to contribute up to \$6.9 million to the U.S. benefit plan and up to \$1.4 million to the non-U.S. benefit plan during 2018.

NOTE 7 – COMMITMENTS AND CONTINGENCIES

Financial Commitments

The Company provides indemnifications and other guarantees in the ordinary course of business, the terms of which range in duration and often are not explicitly defined. Specifically, the Company is occasionally required to provide letters of credit and bid and performance bonds to various customers, principally to act as security for retention levels related to casualty insurance policies and to guarantee the performance of subsidiaries that engage in export and domestic transactions. At June 30, 2018, the Company had outstanding performance and financial standby letters of credit, as well as outstanding bid and performance bonds, aggregating to \$17.2 million. If any such letters of credit or bonds are called, the Company would be obligated to reimburse the issuer of the letter of credit or bond. The Company believes the likelihood of any currently outstanding letter of credit or bond being called is remote.

The Company has transactions involving the sale of equipment to certain of its customers which include (i) guarantees to repurchase the equipment for a fixed price at a future date and (ii) guarantees to repurchase the equipment from the third-party lender in the event of default by the customer. As of June 30, 2018, the single year and maximum potential cash payments the Company could be required to make to repurchase equipment under these agreements were \$3.8 million and \$4.8 million, respectively. The Company's risk under these repurchase arrangements would be partially mitigated by the value of the products repurchased as part of the transaction. Further, pursuant to the terms of the June 3, 2016 acquisition of substantially all of the assets and operations of Joe Johnson Equipment, Inc. and Joe Johnson Equipment (USA), Inc. (collectively, "JJE"), the former owners of JJE have agreed to reimburse the Company for certain losses incurred resulting from the requirement to repurchase equipment that was sold prior to the acquisition date. Any such reimbursement would be withheld from the C\$8.0 million deferred payment to be made to the former owners of JJE on the third anniversary of the acquisition date. Historical cash requirements and losses associated with these obligations have not been significant, but could increase if customer defaults exceed current expectations.

Product Warranties

The Company issues product performance warranties to customers with the sale of its products. The specific terms and conditions of these warranties vary depending upon the product sold and country in which the Company does business, with warranty periods generally ranging from one to five years. The Company estimates the costs that may be incurred under its basic limited warranty and records a liability in the amount of such costs at the time the sale of the related product is recognized. Factors that affect the Company's warranty liability include (i) the number of units under warranty, (ii) historical and anticipated rates of warranty claims and (iii) costs per claim. The Company periodically assesses the adequacy of its recorded warranty liabilities and adjusts the amounts as necessary.

During the year ended December 31, 2017, the Company recognized an estimated liability within the Environmental Solutions Group in connection with a specific warranty matter. Although there were no significant changes to the liability during the three and six months ended June 30, 2018, it is reasonably possible that the Company's estimate may change in the near term as more information becomes available; however, the ultimate resolution of this matter is not expected to have a material adverse effect on the Company's results of operations, financial position or cash flow.

The following table summarizes the changes in the Company's warranty liabilities during the six months ended June 30, 2018 and 2017:

(in millions)	2	018	2	017
Balance at January 1	\$	8.4	\$	6.4
Provisions to expense		3.5		2.3
Acquisitions		_		1.5
Payments		(3.2)		(2.8)
Balance at June 30	\$	8.7	\$	7.4

Liabilities of Discontinued Operations

The Company retains certain liabilities for operations discontinued in prior periods, primarily for environmental remediation and product liability. Included in liabilities of discontinued operations on the Condensed Consolidated Balance Sheets as of June 30, 2018 and December 31, 2017, were reserves of \$0.4 million and \$0.5 million, respectively, related to environmental remediation at the Pearland, Texas facility previously used by the Company's discontinued Pauluhn business, and \$1.4 million related to estimated product liability obligations of the discontinued North American refuse truck body business.

Legal Proceedings

The Company is subject to various claims, including pending and possible legal actions for product liability and other damages, and other matters arising in the ordinary course of the Company's business. On a quarterly basis, the Company reviews uninsured material legal claims against the Company and accrues for the costs of such claims as appropriate in the exercise of management's best judgment and experience. However, due to a lack of factual information available to the Company about a claim, or the procedural stage of a claim, it may not be possible for the Company to reasonably assess either the probability of a favorable or unfavorable outcome of the claim or to reasonably estimate the amount of loss should there be an unfavorable outcome. Therefore, for many claims, the Company cannot reasonably estimate a range of loss.

The Company believes, based on current knowledge and after consultation with counsel, that the outcome of such claims and actions will not have a material adverse effect on the Company's results of operations or financial condition. However, in the event of unexpected future developments, it is possible that the ultimate resolution of such matters, if unfavorable, could have a material adverse effect on the Company's results of operations, financial condition or cash flow.

Hearing Loss Litigation

The Company has been sued for monetary damages by firefighters who claim that exposure to the Company's sirens has impaired their hearing and that the sirens are therefore defective. There were 33 cases filed during the period of 1999 through 2004, involving a total of 2,443 plaintiffs, in the Circuit Court of Cook County, Illinois. These cases involved more than 1,800 firefighter plaintiffs from locations outside of Chicago. In 2009, six additional cases were filed in Cook County, involving 299 Pennsylvania firefighter plaintiffs. During 2013, another case was filed in Cook County involving 74 Pennsylvania firefighter plaintiffs.

The trial of the first 27 of these plaintiffs' claims occurred in 2008, whereby a Cook County jury returned a unanimous verdict in favor of the Company.

An additional 40 Chicago firefighter plaintiffs were selected for trial in 2009. Plaintiffs' counsel later moved to reduce the number of plaintiffs from 40 to nine. The trial for these nine plaintiffs concluded with a verdict against the Company and for the plaintiffs in varying amounts totaling \$0.4 million. The Company appealed this verdict. On September 13, 2012, the Illinois Appellate Court rejected this appeal. The Company thereafter filed a petition for rehearing with the Illinois Appellate Court, which was denied on February 7, 2013. The Company sought further review by filing a petition for leave to appeal with the Illinois Supreme Court on March 14, 2013. On May 29, 2013, the Illinois Supreme Court issued a summary order declining to

accept review of this case. On July 1, 2013, the Company satisfied the judgments entered for these plaintiffs, which has resulted in final dismissal of these cases.

A third consolidated trial involving eight Chicago firefighter plaintiffs occurred during November 2011. The jury returned a unanimous verdict in favor of the Company at the conclusion of this trial.

Following this trial, on March 12, 2012 the trial court entered an order certifying a class of the remaining Chicago Fire Department firefighter plaintiffs for trial on the sole issue of whether the Company's sirens were defective and unreasonably dangerous. The Company petitioned the Illinois Appellate Court for interlocutory appeal of this ruling. On May 17, 2012, the Illinois Appellate Court accepted the Company's petition. On June 8, 2012, plaintiffs moved to dismiss the appeal, agreeing with the Company that the trial court had erred in certifying a class action trial in this matter. Pursuant to plaintiffs' motion, the Illinois Appellate Court reversed the trial court's certification order.

Thereafter, the trial court scheduled a fourth consolidated trial involving three firefighter plaintiffs, which began in December 2012. Prior to the start of this trial, the claims of two of the three firefighter plaintiffs were dismissed. On December 17, 2012, the jury entered a complete defense verdict for the Company.

Following this defense verdict, plaintiffs again moved to certify a class of Chicago Fire Department plaintiffs for trial on the sole issue of whether the Company's sirens were defective and unreasonably dangerous. Over the Company's objection, the trial court granted plaintiffs' motion for class certification on March 11, 2013 and scheduled a class action trial to begin on June 10, 2013. The Company filed a petition for review with the Illinois Appellate Court on March 29, 2013 seeking reversal of the class certification order.

On June 25, 2014, a unanimous three-judge panel of the First District Illinois Appellate Court issued its opinion reversing the class certification order of the trial court. Specifically, the Appellate Court determined that the trial court's ruling failed to satisfy the class-action requirements that the common issues of the firefighters' claims predominate over the individual issues and that there is an adequate representative for the class. During a status hearing on October 8, 2014, plaintiffs represented to the Court that they would again seek to certify a class of firefighters on the issue of whether the Company's sirens were defective and unreasonably dangerous. On January 12, 2015, plaintiffs filed motions to amend their complaints to add class action allegations with respect to Chicago firefighter plaintiffs as well as the approximately 1,800 firefighter plaintiffs from locations outside of Chicago. On March 11, 2015, the trial court granted plaintiff's motions to amend their complaints. On April 24, 2015, the cases were transferred to Cook County chancery court, which will decide all class certification issues. On March 23, 2018, plaintiffs filed a motion to certify as a class all firefighters from the Chicago Fire Department who have filed lawsuits in this matter. The Company has served discovery upon plaintiffs related to this motion and intends to continue its objections to any attempt at certification. A further status hearing on class certification issues has been scheduled for September 18, 2018.

The Company has also filed motions to dismiss cases involving firefighters who worked for fire departments located outside of the state of Illinois based on improper venue. On February 24, 2017, the Circuit Court of Cook County entered orders dismissing the cases of 1,770 such firefighter plaintiffs from the jurisdiction of the state of Illinois. Pursuant to these orders, these plaintiffs had six months thereafter to refile their cases in jurisdictions where these firefighters are located. Prior to this six-month deadline, some of the attorneys representing these plaintiffs contacted the Company regarding possible settlement of these cases. During the year ended December 31, 2017, the Company entered into a global settlement agreement with two attorneys who represented approximately 1,090 of these plaintiffs. Under the terms of the settlement agreement, the Company offered \$700 per plaintiff to settle these cases and 717 plaintiffs accepted this offer as a final settlement. The attorneys representing these plaintiffs agreed to withdraw from representing plaintiffs who did not respond to the settlement offer. It is the Company's position that the non-settling plaintiffs who failed to timely refile their cases following the February 2017 dismissal by the Circuit Court of Cook County are now barred from doing so by the statute of limitations. The Company also has filed a venue motion seeking to transfer to DuPage County cases involving 10 plaintiffs who reside and work in Illinois but outside of Cook County. The Court granted this motion on June 28, 2017.

The Company has also been sued on this issue outside of the Cook County, Illinois venue. In 2007 and through 2009, a total of 71 lawsuits involving 71 plaintiffs were filed in the Court of Common Pleas, Philadelphia County, Pennsylvania. Three of these cases were dismissed pursuant to pretrial motions filed by the Company. Another case was voluntarily dismissed. Prior to trial in four cases, the Company paid nominal sums to obtain dismissals.

Three trials occurred in Philadelphia involving these cases filed in 2007 through 2009. The first trial involving one of these plaintiffs occurred in 2010, when the jury returned a verdict for the plaintiff. In particular, the jury found that the Company's siren was not defectively designed, but that the Company negligently constructed the siren. The jury awarded damages in the

amount of \$0.1 million, which was subsequently reduced to \$0.08 million. The Company appealed this verdict. Another trial, involving nine Philadelphia firefighter plaintiffs, also occurred in 2010 when the jury returned a defense verdict for the Company as to all claims and all plaintiffs involved in that trial. The third trial, also involving nine Philadelphia firefighter plaintiffs, was completed during 2010 when the jury returned a defense verdict for the Company as to all claims and all plaintiffs involved in that trial.

Following defense verdicts in the last two Philadelphia trials, the Company negotiated settlements with respect to all remaining filed cases in Philadelphia at that time, as well as other firefighter claimants represented by the attorney who filed the Philadelphia cases. On January 4, 2011, the Company entered into a Global Settlement Agreement (the "Settlement Agreement") with the law firm of the attorney representing the Philadelphia claimants, on behalf of 1,125 claimants the firm represented (the "Claimants") and who had asserted product claims against the Company (the "Claims"). Three hundred eight of the Claimants had lawsuits pending against the Company in Cook County, Illinois.

The Settlement Agreement provided that the Company pay a total amount of \$3.8 million (the "Settlement Payment") to settle the Claims (including the costs, fees and other expenses of the law firm in connection with its representation of the Claimants), subject to certain terms, conditions and procedures set forth in the Settlement Agreement. In order for the Company to be required to make the Settlement Payment: (i) each Claimant who agreed to settle his or her claims had to sign a release acceptable to the Company (a "Release"), (ii) each Claimant who agreed to the settlement and who was a plaintiff in a lawsuit, had to dismiss his or her lawsuit with prejudice, (iii) by April 29, 2011, at least 93% of the Claimants identified in the Settlement Agreement must have agreed to settle their claims and provide a signed Release to the Company and (iv) the law firm had to withdraw from representing any Claimants who did not agree to the settlement, including those who filed lawsuits. If the conditions to the settlement were met, but less than 100% of the Claimants agreed to settle their Claims and sign a Release, the Settlement Payment would be reduced by the percentage of Claimants who did not agree to the settlement.

On April 22, 2011, the Company confirmed that the terms and conditions of the Settlement Agreement had been met and made a payment of \$3.6 million to conclude the settlement. The amount was based upon the Company's receipt of 1,069 signed releases provided by Claimants, which was 95.02% of all Claimants identified in the Settlement Agreement.

The Company generally denies the allegations made in the claims and lawsuits by the Claimants and denies that its products caused any injuries to the Claimants. Nonetheless, the Company entered into the Settlement Agreement for the purpose of minimizing its expenses, including legal fees, and avoiding the inconvenience, uncertainty and distraction of the claims and lawsuits.

During April through October 2012, 20 new cases were filed in the Court of Common Pleas, Philadelphia County, Pennsylvania. These cases were filed on behalf of 20 Philadelphia firefighters and involve various defendants in addition to the Company. Five of these cases were subsequently dismissed. The first trial involving these 2012 Philadelphia cases occurred during December 2014 and involved three firefighter plaintiffs. The jury returned a verdict in favor of the Company. Following this trial, all of the parties agreed to settle cases involving seven firefighter plaintiffs set for trial during January 2015 for nominal amounts per plaintiff.

In January 2015, plaintiffs' attorneys filed two new complaints in the Court of Common Pleas, Philadelphia, Pennsylvania on behalf of approximately 70 additional firefighter plaintiffs. The vast majority of the firefighters identified in these complaints are located outside of Pennsylvania. One of the complaints in these cases, which involves 11 firefighter plaintiffs from the District of Columbia, was removed to federal court in the Eastern District of Pennsylvania. Plaintiffs voluntarily dismissed all claims in this case on May 31, 2016. The Company thereafter moved to recover various fees and costs in this case, asserting that plaintiffs' counsel failed to properly investigate these claims prior to filing suit. The Court granted this motion on April 25, 2017, awarding \$0.1 million to the Company. After plaintiffs appealed this Order, the United States Court of Appeals for the Third Circuit affirmed the lower court decision awarding fees and costs to the Company.

With respect to claims of other out-of-state firefighters involved in these two cases, the Company moved to dismiss these claims as improperly filed in Pennsylvania. The Court granted this motion and dismissed these claims on November 5, 2015. During August through December 2015, another nine new cases were filed in the Court of Common Pleas, Philadelphia County, Pennsylvania. These cases involve a total of 193 firefighters, most of whom are located outside of Pennsylvania. The Company again moved to dismiss all claims filed by out-of-state firefighters in these cases as improperly filed in Pennsylvania. On May 24, 2016, the Court granted this motion and dismissed these claims. Plaintiffs have filed a notice of appeal regarding this decision. On May 13, 2016, four new cases were filed in Philadelphia state court, involving a total of 55 Philadelphia firefighters who live in Pennsylvania. During August 2016, the Company settled a case involving four Philadelphia firefighters that had been set for trial in Philadelphia state court during September 2016. During 2017, plaintiffs filed additional cases in the

Court of Common Pleas, Philadelphia County, involving over 100 Philadelphia firefighter plaintiffs. During January 2017, plaintiffs filed a motion to consolidate and bifurcate, similar to a motion filed in the Pittsburgh hearing loss cases, as described below. The Company has filed an opposition to this motion. These cases were then transferred to the mass tort program in Philadelphia for pretrial purposes. Plaintiffs' counsel thereafter dismissed several plaintiffs. During November 2017, a trial involving one Philadelphia firefighter occurred. The jury returned a verdict in favor of the Company in this trial. As of June 30, 2018, a total of 75 firefighters are involved in cases pending in the Philadelphia mass tort program.

During April through July 2013, additional cases were filed in Allegheny County, Pennsylvania on behalf of 247 plaintiff firefighters from Pittsburgh and against various defendants, including the Company. During May 2016, two additional cases were filed against the Company in Allegheny County involving 19 Pittsburgh firefighters. After the Company filed pretrial motions, the Court dismissed claims of 55 Pittsburgh firefighter plaintiffs. The Court scheduled trials for May, September and November 2016, for eight firefighters per trial. Prior to the first scheduled trial in Pittsburgh, the Court granted the Company's motion for summary judgment and dismissed all claims asserted by plaintiff firefighters involved in this trial. Plaintiffs have appealed this dismissal. The next trial for six Pittsburgh firefighters started on November 7, 2016. Shortly after this trial began, plaintiffs' counsel moved for a mistrial because a key witness suddenly became unavailable. The Court granted this motion and rescheduled this trial for March 6, 2017. During January 2017, plaintiffs also moved to consolidate and bifurcate trials involving Pittsburgh firefighters. In particular, plaintiffs sought one trial involving liability issues which will apply to all Pittsburgh firefighters who filed suit against the Company. The Company filed an opposition to this motion. On April 18, 2017, the trial court granted plaintiffs' motion to bifurcate the next Pittsburgh trial. Pursuant to a motion for clarification filed by the Company, the Court ruled that the bifurcation order would only apply to six plaintiffs who were part of the next trial group in Pittsburgh. The Company thereafter sought an interlocutory appeal of the Court's bifurcation order. The appellate court declined to accept the appeal at that time. A bifurcated trial began on September 27, 2017 in Allegheny County, Pennsylvania. Prior to and during trial, two plaintiffs were dismissed, resulting in four plaintiffs remaining for trial. After approximately two weeks of trial, the jury found that the Company's siren product was not defective or unreasonably dangerous and rendered a verdict in favor of the Company. A second trial involving Pittsburgh firefighters began during January 2018. At the outset of this trial, plaintiffs' attorneys requested that the Company consider settlement of various cases. This trial was continued to allow the parties to further discuss possible settlement.

During March 2018, the parties agreed in principle on a framework to resolve hearing loss claims and cases in all jurisdictions involved in the hearing loss litigation except in Cook County, Lackawanna County, and excluding one case involving one firefighter in New York City. The firefighters excluded from this settlement framework are represented by different attorneys. Pursuant to this settlement framework, the Company would pay \$700 to each firefighter who has filed a lawsuit and is eligible to be part of the settlement. The Company would pay \$300 to each firefighter who has not yet filed a case and is eligible to be part of the settlement. To be eligible for settlement, among other things, firefighters must provide proof that they have high frequency noise-induced hearing loss. There are approximately 3,700 firefighters whose claims may be considered as part of this settlement, including approximately 1,180 firefighters who have ongoing filed lawsuits. The parties are in the process of determining how many of these firefighters will be eligible to participate in the settlement. In order to minimize the parties' respective legal costs and expenses during this settlement process, on July 5, 2018, the parties entered into a tolling agreement whereby counsel for the settling firefighters agreed to dismiss the pending lawsuits in all jurisdictions except for the Alleghany County (Pittsburgh), Pennsylvania cases, and the Company agreed to a tolling of any statute of limitations applicable to the dismissed cases through October 31, 2018. The settlement framework will require plaintiffs' attorneys to withdraw from representing firefighters who elect not to participate in this settlement.

As of June 30, 2018, the Company has recognized an estimated liability for the potential settlement amount. While it is reasonably possible that the ultimate resolution of this matter may result in a loss in excess of the amount accrued, the incremental loss is not expected to be material.

During March 2014, an action also was brought in the Court of Common Pleas of Erie County, Pennsylvania on behalf of 61 firefighters. This case likewise involves various defendants in addition to the Company. After the Company filed pretrial motions, 33 Erie County firefighter plaintiffs voluntarily dismissed their claims. During August 2017, five cases involving 70 firefighter plaintiffs were filed in Lackawanna County, Pennsylvania. These cases involve firefighter plaintiffs who originally filed in Cook County and were dismissed pursuant to the Company's forum nonconveniens motion. As of June 30, 2018, a total of 263 firefighters are involved in cases filed in Allegheny and Lackawanna counties in Pennsylvania.

On September 17, 2014, 20 lawsuits, involving a total of 193 Buffalo Fire Department firefighters, were filed in the Supreme Court of the State of New York, Erie County. All of the cases filed in Erie County, New York have been removed to federal court in the Western District of New York. Plaintiffs have filed a motion to consolidate and bifurcate these cases, similar to the

motion filed in the Pittsburgh hearing loss cases, as described above. The Company has filed an opposition to the motion. During February 2015, a lawsuit involving one New York City firefighter plaintiff was filed in the Supreme Court of the State of New York, New York County. The plaintiff named the Company as well as several other parties as defendants. That case subsequently was transferred to federal court in the Northern District of New York and thereafter dismissed. During April 2015 through January 2016, 29 new cases involving a total of 235 firefighters were filed in various counties in the New York City area. During December 2016 through October 2017 additional cases were filed in these jurisdictions. On February 5, 2018, the Company was served with a complaint in an additional case filed in Kings County, New York. This case involves one plaintiff. As of June 30, 2018, a total of 536 firefighters are involved in cases filed in the state of New York.

During November 2015, the Company was served with a complaint filed in Union County, New Jersey state court, involving 34 New Jersey firefighters. This case has been transferred to federal court in the District of New Jersey. During the period from January through May 2016, eight additional cases were filed in various New Jersey state courts. Most of the firefighters in these cases reside in New Jersey and work or worked at New Jersey fire departments. During December 2016, a case involving one New Jersey firefighter was filed in the United States District Court of New Jersey. As of June 30, 2018, a total of 61 firefighters are currently involved in cases filed in New Jersey. On May 2, 2017, plaintiffs filed a motion to consolidate and bifurcate in the pending federal court case in New Jersey. This motion is similar to bifurcation motions filed by plaintiffs in Pittsburgh, Buffalo and Philadelphia. The Court has denied this motion as premature. Pursuant to a petition filed by both parties, all New Jersey state court cases have been consolidated for pretrial purposes.

During May through October 2016, nine cases were filed in Suffolk County, Massachusetts state court, naming the Company as a defendant. These cases involve 194 firefighters who lived and worked in the Boston area. During August 2017, plaintiffs filed additional cases in Suffolk County court. The Company has moved to transfer various cases filed in Suffolk county to other counties in Massachusetts where plaintiffs reside and work. As of June 30, 2018, a total of 218 firefighters are involved in cases filed in Massachusetts.

During August and September 2017, plaintiffs' attorneys filed additional hearing loss cases in Florida. The Company is the only named defendant. These cases have been filed in several different counties in Florida, including Tampa, Miami and Orlando municipalities. Plaintiffs have agreed to stipulate that they will not seek more than \$75,000 in damages in any individual plaintiff case. As of June 30, 2018, a total of 166 firefighters are involved in cases filed in Florida.

From 2007 through 2009, firefighters also brought hearing loss claims against the Company in New Jersey, Missouri, Maryland and Kings County, New York. All of those cases, however, were dismissed prior to trial, including four cases in the Supreme Court of Kings County, New York that were dismissed upon the Company's motion in 2008. On appeal, the New York appellate court affirmed the trial court's dismissal of these cases. Plaintiffs' attorneys have threatened to file additional lawsuits. The Company intends to vigorously defend all of these lawsuits, if filed.

The Company's ongoing negotiations with its insurer, CNA, over insurance coverage on these claims have resulted in reimbursements of a portion of the Company's defense costs. These reimbursements are recorded as a reduction of corporate operating expenses. For the six months ended June 30, 2018 and 2017, the Company recorded \$0.2 million and \$0.3 million of reimbursements from CNA related to legal costs, respectively.

NOTE 8 – EARNINGS PER SHARE

The Company computes earnings per share ("EPS") in accordance with ASC 260, *Earnings per Share*, which requires that nonvested restricted stock containing non-forfeitable dividend rights should be treated as participating securities pursuant to the two-class method. Under the two-class method, net income is reduced by the amount of dividends declared in the period for common stock and participating securities. The remaining undistributed earnings are then allocated to common stock and participating securities as if all of the net income for the period had been distributed. The amounts of distributed and undistributed earnings allocated to participating securities for the three and six months ended June 30, 2018 and 2017 were insignificant and did not materially impact the calculation of basic or diluted EPS.

Basic EPS is computed by dividing income or loss available to common stockholders by the weighted average number of shares of common stock and non-vested restricted stock awards outstanding for the period.

Diluted EPS is computed using the weighted average number of shares of common stock and non-vested restricted stock awards outstanding for the year plus the effect of dilutive potential common shares outstanding during the period. The dilutive effect of common stock equivalents is determined using the more dilutive of the two-class method or alternative methods. The Company uses the treasury stock method to determine the potentially dilutive impact of our employee stock options and restricted stock units, and the contingently issuable method for our performance-based restricted stock unit awards.

For the three and six months ended June 30, 2018, options to purchase 0.3 million of the Company's common stock had an anti-dilutive effect on EPS, and accordingly, are excluded from the calculation of diluted EPS. For the three and six months ended June 30, 2017, options to purchase 0.7 million and 1.2 million shares, respectively, of the Company's common stock had an anti-dilutive effect on EPS, and accordingly, are excluded from the calculation of diluted EPS.

The following table reconciles Net income to basic and diluted EPS:

	,	Three Moi Jun	nths E e 30,	Ended		ded		
(in millions, except per share data)		2018		2017		2018		2017
Income from continuing operations	\$	26.9	\$	11.5	\$	39.8	\$	18.7
Loss from discontinued operations and disposal, net of tax				(0.1)		_		_
Net income	\$	26.9	\$	11.4	\$	39.8	\$	18.7
Weighted average shares outstanding - Basic		59.9		59.7		59.9		59.7
Dilutive effect of common stock equivalents		1.1		0.6		1.0		0.6
Weighted average shares outstanding - Diluted		61.0		60.3		60.9		60.3
Basic earnings per share:								
Earnings from continuing operations	\$	0.45	\$	0.19	\$	0.67	\$	0.31
Loss from discontinued operations and disposal, net of tax		_		_		_		_
Net earnings per share	\$	0.45	\$	0.19	\$	0.67	\$	0.31
Diluted earnings per share:								
Earnings from continuing operations	\$	0.44	\$	0.19	\$	0.65	\$	0.31
Loss from discontinued operations and disposal, net of tax		_		_		_		_
Net earnings per share	\$	0.44	\$	0.19	\$	0.65	\$	0.31

NOTE 9 - STOCKHOLDERS' EQUITY

Dividends

On February 19, 2018, the Company's Board of Directors (the "Board") declared a quarterly cash dividend of \$0.07 per common share. The dividend totaled \$4.2 million and was distributed on March 19, 2018 to holders of record at the close of business on March 5, 2018.

On May 1, 2018, the Board declared a quarterly cash dividend of \$0.08 per common share payable. The dividend totaled \$4.8 million and was distributed on May 29, 2018 to holders of record at the close of business on May 15, 2018.

During the three and six months ended June 30, 2017, dividends of \$4.2 million and \$8.4 million were paid to stockholders.

On July 31, 2018, the Board declared a quarterly cash dividend of \$0.08 per common share payable on August 28, 2018 to holders of record at the close of business on August 14, 2018.

Accumulated Other Comprehensive Loss

The following tables summarize the changes in each component of Accumulated other comprehensive loss, net of tax:

(in millions) ^(a)	Actuarial Losses		Foreign Currency Translation		Unrealized Gain on Derivatives		Total
Balance at April 1, 2018	\$	(75.3)	\$	(0.5)	\$	1.8	\$ (74.0)
Other comprehensive income (loss) before reclassifications		1.1		(5.2)		0.3	(3.8)
Amounts reclassified from accumulated other comprehensive loss		0.6				(0.1)	0.5
Net current-period other comprehensive income (loss)		1.7		(5.2)		0.2	(3.3)
Balance at June 30, 2018	\$	(73.6)	\$	(5.7)	\$	2.0	\$ (77.3)

(in millions) ^(a)	Actuarial Losses		C	Foreign urrency anslation	G	realized ain on ivatives	Total
Balance at April 1, 2017	\$ (78.8)		\$ (11.8)		\$ —		\$ (90.6)
Other comprehensive (loss) income before reclassifications		(0.6)		5.0		0.2	4.6
Amounts reclassified from accumulated other comprehensive loss		0.5		_		_	0.5
Net current-period other comprehensive (loss) income		(0.1)		5.0		0.2	5.1
Balance at June 30, 2017	\$	(78.9)	\$	(6.8)	\$	0.2	\$ (85.5)
(in millions) ^(a)	Actuarial Losses		C	Foreign urrency anslation	Unrealized Gain on Derivatives		Total
Balance at January 1, 2018	\$	(75.4)	\$	(2.5)	\$	1.0	\$ (76.9)
Other comprehensive income (loss) before reclassifications		0.4		(3.2)		1.1	(1.7)
Amounts reclassified from accumulated other comprehensive loss		1.4		_		(0.1)	1.3
Net current-period other comprehensive income (loss)		1.8		(3.2)		1.0	(0.4)
Balance at June 30, 2018	\$	(73.6)	\$	(5.7)	\$	2.0	\$ (77.3)
(in millions) ^(a)	Actuarial Losses		Foreiş ıl Currei Transla		G	realized ain on ivatives	Total
Balance at January 1, 2017	\$	(79.0)	\$	(13.0)	\$	_	\$ (92.0)
Other comprehensive (loss) income before reclassifications		(0.9)		6.2		0.2	5.5
Amounts reclassified from accumulated other comprehensive loss		1.0		_		_	1.0
Net current-period other comprehensive income		0.1		6.2		0.2	6.5
Balance at June 30, 2017	\$	(78.9)	\$	(6.8)	\$	0.2	\$ (85.5)

⁽a) Amounts in parentheses indicate losses.

The following table summarizes the amounts reclassified from Accumulated other comprehensive loss, net of tax, in the three months ended June 30, 2018 and 2017 and the affected line item in the Condensed Consolidated Statements of Operations:

	Amount Reclassified from Accumulated Other Comprehensive Loss				Affected Line Item in Condensed Consolidated Statements of
Details about Accumulated Other Comprehensive Loss Components	2018		2017		Operations (a)
(in millions) (b)					
Amortization of actuarial losses of defined benefit pension plans	\$	(0.8)	\$	(0.7)	Other expense (income), net
Interest rate swap		0.2			Interest expense
Total before tax		(0.6)		(0.7)	
Income tax benefit		0.1		0.2	Income tax expense
Total reclassifications for the period, net of tax	\$	(0.5)	\$	(0.5)	

- (a) Continuing operations only.
- (b) Amounts in parentheses indicate losses.

The following table summarizes the amounts reclassified from Accumulated other comprehensive loss, net of tax, in the six months ended June 30, 2018 and 2017 and the affected line item in the Condensed Consolidated Statements of Operations:

		ount Recl Accumula Comprehe	ted	Other	Affected Line Item in Condensed Consolidated Statements of
Details about Accumulated Other Comprehensive Loss Components	2018			2017	Operations (a)
(in millions) (b)					
Amortization of actuarial losses of defined benefit pension plans	\$ (1.8) \$		\$	(1.5)	Other expense (income), net
Interest rate swap		0.2		_	Interest expense
Total before tax		(1.6)		(1.5)	
Income tax benefit		0.3		0.5	Income tax expense
Total reclassifications for the period, net of tax	\$ (1.3)		\$ (1.3) \$		

- (a) Continuing operations only.
- (b) Amounts in parentheses indicate losses.

NOTE 10 – SEGMENT INFORMATION

The Company has two operating segments, and the Company's reportable segments are consistent with those operating segments. Business units are organized under each segment because they share certain characteristics, such as technology, marketing, distribution and product application, which create long-term synergies. On June 2, 2017, the Company completed the acquisition of all of the shares of capital stock of GenNx/TBEI Intermediate Co. (collectively with its subsidiaries, "TBEI"). The Company expects that the acquisition will enable it to strengthen the Environmental Solutions Group's market position as a specialty vehicle manufacturer in maintenance and infrastructure end-markets, leveraging its expertise in building chassis-based vehicles. The Company has presented the financial statements of TBEI within the Environmental Solutions Group since the closing date and is in the process of determining the impact, if any, that the TBEI acquisition may have on its reportable segments.

The principal activities of the Company's operating segments are as follows:

Environmental Solutions — Our Environmental Solutions Group is a leading manufacturer and supplier of a full range of street sweeper vehicles, sewer cleaner and vacuum loader trucks, hydro-excavation trucks, high-performance waterblasting equipment, dump truck bodies and trailers. The Group manufactures vehicles and equipment in the U.S. and Canada that are sold under the Elgin[®], Vactor[®], Guzzler[®], WestechTM, Jetstream[®], Ox Bodies[®], Crysteel[®], J-Craft[®], Duraclass[®], Rugby[®] and Travis[®] brand names. Product offerings also include certain products manufactured by other companies, such as refuse and recycling collection vehicles, camera systems, ice resurfacing equipment and snow-removal equipment. Products are sold to both municipal and industrial customers either through a dealer network or direct sales to service customers generally depending on the type and geographic location of the customer. In addition to vehicle and equipment sales, the Group also engages in the sale of parts, service and repair, equipment rentals and training as part of a complete offering to its current and potential customers through its service centers located across North America.

Safety and Security Systems — Our Safety and Security Systems Group is a leading manufacturer and supplier of comprehensive systems and products that law enforcement, fire rescue, emergency medical services, campuses, military facilities and industrial sites use to protect people and property. Offerings include systems for campus and community alerting, emergency vehicles, first responder interoperable communications and industrial communications, as well as command and municipal networked security. Specific products include vehicle lightbars and sirens, public warning sirens, general alarm systems, public address systems and public safety software. Products are sold under the Federal Signal TM, Federal Signal VAMA® and Victor® brand names. The Group operates manufacturing facilities in the U.S., Europe and South Africa.

Corporate contains those items that are not included in our operating segments.

Net sales by operating segment reflect sales of products and services to external customers, as reported in the Company's Consolidated Statements of Operations. Intersegment sales are insignificant. The Company evaluates performance based on operating income of the respective segment. Operating income includes all revenues, costs and expenses directly related to the segment involved. In determining operating segment income, neither corporate nor interest expenses are included.

As described in Note 2 – Revenue Recognition, the Company's revenue recognition accounting policy has been updated to reflect the adoption of Topic 606 on January 1, 2018. The financial information in the comparative periods presented herein has not been restated and continues to be reported under the accounting standards in effect for those periods. Refer to Note 2 – Revenue Recognition for further discussion regarding the impact of the adoption of Topic 606 on Net sales reported by the Environmental Solutions Group. The accounting policies of each operating segment are otherwise the same as those described in Note 1 – Summary of Significant Accounting Policies in the Company's Annual Report on Form 10-K for the year ended December 31, 2017. The results for the interim periods are not necessarily indicative of results for a full year.

The following tables summarize the Company's continuing operations by segment, including Net sales, Operating income (loss), and Total assets:

		Three Mon Jun	nths e 30,		Six Mont Jun	hs Ei e 30,	ıded
(in millions)	2018 2017				2018		2017
Net sales:							
Environmental Solutions	\$	233.3	\$	174.3	\$ 429.9	\$	302.1
Safety and Security Systems		57.7		50.1	110.8		100.1
Total net sales	\$	291.0	\$	224.4	\$ 540.7	\$	402.2
Operating income (loss):							
Environmental Solutions	\$	37.2	\$	21.0	\$ 57.8	\$	31.3
Safety and Security Systems		8.2		5.6	14.3		12.0
Corporate and eliminations		(7.3)		(7.8)	(14.4)		(13.1)
Total operating income		38.1		18.8	57.7		30.2
Interest expense		2.5		1.3	5.0		1.9
Other expense (income), net		0.4		(0.1)	0.5		(0.3)
Income before income taxes	\$	35.2	\$	17.6	\$ 52.2	\$	28.6

(in millions)	Ju	As of ne 30, 2018	Dece	ember 31, 2017
Total assets:				
Environmental Solutions	\$	776.8	\$	746.4
Safety and Security Systems		210.4		211.8
Corporate and eliminations		28.5		33.6
Total assets of continuing operations		1,015.7		991.8
Total assets of discontinued operations		0.5		0.5
Total assets	\$	1,016.2	\$	992.3

NOTE 11 – FAIR VALUE MEASUREMENTS

The Company uses a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. This hierarchy maximizes the use of observable inputs and minimizes the use of unobservable inputs. Observable inputs are developed based on market data obtained from independent sources, while unobservable inputs reflect the Company's assumptions about valuation based on the best information available in the circumstances. The three levels of inputs are classified as follows:

- Level 1 quoted prices in active markets for identical assets or liabilities;
- Level 2 observable inputs, other than quoted prices included in Level 1, such as quoted prices for markets that are not active, or other inputs that are observable or can be corroborated by observable market data; and
- Level 3 unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities, including certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

In determining fair value, the Company uses various valuation approaches within the fair value measurement framework. The valuation methodologies used for the Company's assets and liabilities measured at fair value and their classification in the valuation hierarchy are summarized below:

Cash Equivalents

Cash equivalents primarily consist of time-based deposits and interest-bearing instruments with maturities of three months or less. The Company classified cash equivalents as Level 1 due to the short-term nature of these instruments and measured the fair value based on quoted prices in active markets for identical assets.

Interest Rate Swap

As described in Note 4 – Debt, the Company entered into an interest rate swap as a means of fixing the floating interest rate component on a portion of its floating-rate debt. The Company classified the interest rate swap as Level 2 due to the use of a discounted cash flow model based on the terms of the contract and the interest rate curve (Level 2 inputs) to calculate the fair value of the swap.

Contingent Consideration

The Company has a contingent obligation to transfer cash to the former owners of JJE if specified financial results are met over future reporting periods (i.e., an earn-out). Liabilities for contingent consideration are measured at fair value each reporting period, with the acquisition-date fair value included as part of the consideration transferred. Subsequent changes in fair value are recorded as a component of Acquisition and integration-related expenses on the Condensed Consolidated Statements of Operations.

The Company uses an income approach to value the contingent consideration obligation based on future financial performance, which is determined based on the present value of expected future cash flows. Due to the lack of relevant observable market data over fair value inputs, the Company has classified the contingent consideration liability within Level 3 of the fair value hierarchy outlined in ASC 820, *Fair Value Measurements*. Increases in the expected payout under a contingent consideration arrangement contribute to increases in the fair value of the related liability. Conversely, decreases in the expected payout under a contingent consideration arrangement contribute to decreases in the fair value of the related liability. Changes in assumptions could have an impact on the fair value of the contingent consideration, which has a maximum payout of C\$10.0 million (approximately \$7.6 million).

The following table summarizes the Company's assets and liabilities that are measured at fair value on a recurring basis as of June 30, 2018:

	Fair Value Measurement at Reporting Date Using										
(in millions)	Level 1 Level 2 Lev		Level 3	To	tal						
Assets:											
Cash equivalents	\$	4.4			\$	4.4					
Interest rate swap			2.9			2.9					
Liabilities:											
Contingent consideration				6.5		6.5					

The following table provides a roll-forward of the fair value of recurring Level 3 fair value measurements in the three months ended June 30, 2018 and 2017:

(in millions)	2	018	2	2017
Contingent consideration liability, at April 1	\$	6.4	\$	5.4
Foreign currency translation		(0.1)		_
Total losses included in earnings (a)		0.2		0.3
Contingent consideration liability, at June 30	\$	6.5	\$	5.7

⁽a) Changes in the fair value of contingent consideration liabilities are included as a component of Acquisition and integration-related expenses within the Condensed Consolidated Statements of Operations.

The following table provides a roll-forward of the fair value of recurring Level 3 fair value measurements in the six months ended June 30, 2018 and 2017:

(in millions)	2018		2	2017
Contingent consideration liability, at January 1	\$	6.3	\$	5.1
Foreign currency translation		(0.2)		0.1
Total losses included in earnings (a)		0.4		0.5
Contingent consideration liability, at June 30	\$	6.5	\$	5.7

⁽a) Changes in the fair value of contingent consideration liabilities are included as a component of Acquisition and integration-related expenses within the Condensed Consolidated Statements of Operations.

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

Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is designed to provide information that is supplemental to, and should be read together with, the condensed consolidated financial statements and the accompanying notes contained in this Form 10-Q, as well as the Company's Annual Report on Form 10-K for the year ended December 31, 2017. Information in MD&A is intended to assist the reader in obtaining an understanding of (i) the condensed consolidated financial statements, (ii) the Company's business segments and how the results of those segments impact the Company's results of operations and financial condition as a whole and (iii) how certain accounting principles affect the Company's condensed consolidated financial statements. The Company's results for interim periods are not necessarily indicative of annual operating results.

Executive Summary

The Company is a leading global manufacturer and supplier of (i) vehicles and equipment for maintenance and infrastructure end-markets, including sewer cleaners, vacuum trucks, street sweepers, dump truck bodies and trailers and (ii) safety, security and communication equipment, such as lights, sirens and warning systems. The Company also distributes and re-sells products manufactured by other companies, which include refuse and recycling collection vehicles, camera systems, ice resurfacing equipment and snow-removal equipment. In addition, we sell parts and provide service, repair, equipment rentals and training as part of a comprehensive offering to our customer base. We operate 14 manufacturing facilities in five countries around the world and provide products and integrated solutions to municipal, governmental, industrial and commercial customers in all regions of the world.

As described in Note 10 – Segment Information to the accompanying condensed consolidated financial statements, the Company's business units are organized and managed in two operating segments: the Environmental Solutions Group and the Safety and Security Systems Group.

Net sales increased by \$66.6 million, or 30%, in the three months ended June 30, 2018 as compared to the prior-year quarter. Our Environmental Solutions Group reported a net sales increase of \$59.0 million, or 34%, largely due to \$39.4 million of incremental net sales resulting from the acquisition of TBEI, which was completed in June 2017, an increase in shipments of vacuum trucks and street sweepers, higher rental income and improved parts sales, partially offset by lower refuse truck sales. Within our Safety and Security Systems Group, net sales increased by \$7.6 million, or 15%, primarily due to higher global sales of public safety products.

For the six months ended June 30, 2018, net sales increased by \$138.5 million, or 34%, as compared to the corresponding period of the prior year. Within our Environmental Solutions Group, net sales improved by \$127.8 million, or 42%, largely due to \$90.7 million of incremental net sales from TBEI, increased shipments of vacuum trucks, sewer cleaners and street sweepers, higher rental income and improved parts sales, partially offset by lower refuse truck sales. In our Safety and Security Systems Group, net sales increased by \$10.7 million, or 11%, primarily due to higher global sales of public safety products and favorable foreign currency translation effects.

Operating income increased by \$19.3 million, or 103%, to \$38.1 million in the three months ended June 30, 2018 as compared to the prior-year quarter, primarily driven by a \$16.2 million increase within our Environmental Solutions Group associated with increased sales volumes, improved operating leverage and an incremental \$4.6 million of operating income contribution from TBEI, resulting from the inclusion of three months of activity in the current-year quarter, compared to only one month in the prior-year quarter. TBEI's operating income contribution in the second quarter included the effects of amortization expense on intangible assets acquired, which contributed to an increase in depreciation and amortization expense of \$2.4 million. Operating income in the three months ended June 30, 2018 within our Safety and Security Systems Group increased by \$2.6 million, while corporate expenses decreased by \$0.5 million. Consolidated operating margin for the three months ended June 30, 2018 was 13.1%, up from 8.4% in the prior-year quarter.

For the six months ended June 30, 2018, operating income increased by \$27.5 million as compared to the corresponding period of the prior year. Within our Environmental Solutions Group, operating income for the six months ended June 30, 2018 increased by \$26.5 million, or 85%, with higher sales volumes, improved operating leverage and an incremental operating income contribution of \$9.4 million from TBEI, associated with including six months of activity in 2018, compared to only one month in the prior-year period. TBEI's operating income contribution in the first half of 2018 included the effects of amortization expense on intangible assets acquired, which contributed to an increase in depreciation and amortization expense of \$5.5 million. Within our Safety and Security Systems Group, operating income in the six months ended June 30, 2018 increased by \$2.3 million, while corporate expenses increased by \$1.3 million. Consolidated operating margin for the six months ended June 30, 2018 was 10.7%, compared to 7.5% in the prior-year period.

Income before income taxes increased by \$17.6 million, or 100%, to \$35.2 million for the three months ended June 30, 2018 as compared to the prior-year quarter. The increase resulted from the higher operating income, partially offset by a \$1.2 million increase in interest expense, associated with higher average debt levels following the acquisition of TBEI, and a \$0.5 million decrease in other income. For the six months ended June 30, 2018, income before income taxes increased by \$23.6 million, or 83%, as compared to the prior-year period, primarily due to the increase in operating income, partially offset by a \$3.1 million increase in interest expense and a \$0.8 million decrease in other income.

Net income from continuing operations for the three and six months ended June 30, 2018 was impacted by increases in income tax expense of \$2.2 million and \$2.5 million, respectively. The increases were largely due to higher pre-tax income levels, partially offset by the lower U.S. corporate tax rate following the enactment of the 2017 Tax Act and the recognition of a \$0.5 million excess tax benefit from stock compensation activity in the second quarter. The effective tax rate for the three months ended June 30, 2018 was 23.6%, compared to 34.7% in the prior-year quarter, while the effective tax rate for the six months ended June 30, 2018 was 23.8%, compared to 34.6% in the prior-year period. The lower rates in the current year reflect the impact of the reduction in the U.S. corporate tax rate, which was effective at the beginning of 2018, and the excess tax benefit.

Total orders for the three months ended June 30, 2018 were \$277.6 million, an increase of \$6.5 million, or 2%, as compared to the prior-year quarter. Of the orders reported in the fourth quarter of 2017 and the first quarter of 2018, we estimated that the receipt of up to \$45 million in orders had been accelerated from later in 2018, with customers placing orders earlier as they sought to secure availability of certain product lines with extended lead times, or to manage the procurement of their related chassis, which also have extended lead times. Despite this acceleration, our Environmental Solutions Group reported total orders of \$217.3 million in the second quarter of 2018, an increase of \$2.6 million, or 1%, compared to the prior-year quarter. Organic order growth was approximately \$2.7 million, or 2%, primarily represented by improved orders for vacuum trucks, inclusive of higher demand from customers serving utility markets, partially offset by lower orders for refuse trucks. Orders in the three months ended June 30, 2018 within our Safety and Security Systems Group were up \$3.9 million, or 7%, primarily due to improved international orders for public safety products and higher orders for warning systems.

For the six months ended June 30, 2018, total orders were \$607.3 million, an increase of \$121.6 million, or 25%, compared to the prior-year period. Our Environmental Solutions Group reported total orders of \$491.7 million in the first half of 2018, an increase of \$110.4 million, or 29%, compared to the prior-year period. The improvement was driven by the effects of the inclusion of TBEI orders for six months in 2018, and organic order growth of approximately \$46.9 million, or 15%, primarily represented by improved orders for sewer cleaners and vacuum trucks, inclusive of higher demand from customers serving utility markets, partially offset by lower orders for refuse trucks. Orders in the six months ended June 30, 2018 within our

Safety and Security Systems Group were up \$11.2 million, or 11%, primarily due to improved orders for public safety products and favorable foreign currency translation effects.

Our consolidated backlog at June 30, 2018 was \$322.3 million, up \$99.6 million, or 45%, compared to \$222.7 million at June 30, 2017, largely as a result of the increase in orders for vacuum trucks and sewer cleaners received in the six months ended June 30, 2018.

Results of Operations

The following table summarizes our Condensed Consolidated Statements of Operations and illustrates the key financial indicators used to assess our consolidated financial results:

	Three Months Ended June 30,						Six Months Ended June 30,					
(\$ in millions, except per share data)		2018		2017	(Change		2018		2017	-	Change
Net sales	\$	291.0	\$	224.4	\$	66.6	\$	540.7	\$	402.2	\$	138.5
Cost of sales		211.8		169.7		42.1		399.6		303.9		95.7
Gross profit		79.2		54.7		24.5		141.1		98.3		42.8
Selling, engineering, general and administrative expenses		40.7		34.8		5.9		82.5		66.2		16.3
Acquisition and integration-related expenses		0.4		1.0		(0.6)		0.9		1.5		(0.6)
Restructuring				0.1		(0.1)				0.4		(0.4)
Operating income		38.1		18.8		19.3		57.7		30.2		27.5
Interest expense		2.5		1.3		1.2		5.0		1.9		3.1
Other expense (income), net		0.4		(0.1)		0.5		0.5		(0.3)		0.8
Income before income taxes		35.2		17.6		17.6		52.2		28.6		23.6
Income tax expense		8.3		6.1		2.2		12.4		9.9		2.5
Income from continuing operations		26.9		11.5		15.4		39.8		18.7		21.1
Loss from discontinued operations and disposal, net of tax		_		(0.1)		0.1		_		_		_
Net income	\$	26.9	\$	11.4	\$	15.5	\$	39.8	\$	18.7	\$	21.1
Operating data:												
Operating margin		13.1%		8.4%		4.7%		10.7%		7.5%		3.2%
Diluted earnings per share – Continuing operations	\$	0.44	\$	0.19	\$	0.25	\$	0.65	\$	0.31	\$	0.34
Total orders		277.6		271.1		6.5		607.3		485.7		121.6
Backlog		322.3		222.7		99.6		322.3		222.7		99.6
Depreciation and amortization		9.0		6.6		2.4		17.6		12.3		5.3

Net sales

Net sales increased by \$66.6 million, or 30%, in the three months ended June 30, 2018 as compared to the prior-year quarter. The Environmental Solutions Group reported a net sales increase of \$59.0 million, or 34%, largely due to \$39.4 million of incremental net sales resulting from the acquisition of TBEI, which was completed in June 2017, an increase in shipments of vacuum trucks and street sweepers, higher rental income and improved parts sales, partially offset by lower refuse truck sales. Within the Safety and Security Systems Group, net sales increased by \$7.6 million, or 15%, primarily due to higher global sales of public safety products.

For the six months ended June 30, 2018, net sales increased by \$138.5 million, or 34%, as compared to the corresponding period of the prior year. Within the Environmental Solutions Group, net sales improved by \$127.8 million, or 42%, largely due to \$90.7 million of incremental net sales from TBEI, increased shipments of vacuum trucks, sewer cleaners and street sweepers, higher rental income and improved parts sales, partially offset by lower refuse truck sales. In the Safety and Security Systems Group, net sales increased by \$10.7 million, or 11%, primarily due to higher global sales of public safety products and favorable foreign currency translation effects.

Cost of sales

Cost of sales increased by \$42.1 million, or 25%, for the three months ended June 30, 2018 compared to the prior-year quarter, largely due to an increase of \$37.4 million, or 27%, within the Environmental Solutions Group, primarily driven by increased sales volumes, additional cost of sales from the TBEI acquisition and a \$1.0 million increase in depreciation expense, partially offset by a \$2.1 million reduction in purchase accounting expenses. Within the Safety and Security Systems Group, cost of sales increased by \$4.7 million, or 15%, driven by higher sales volumes, as well as unfavorable foreign currency translation and sales mix effects.

For the six months ended June 30, 2018, cost of sales increased by \$95.7 million, or 31%, largely due to an increase of \$87.7 million, or 36%, within the Environmental Solutions Group, primarily driven by increased sales volumes and the effects of six months of TBEI activity in the current-year period compared with one month in the prior year and a \$2.1 million increase in depreciation expense, partially offset by a \$2.0 million reduction in purchase accounting expenses. This increase was partially offset by an increase in cost of sales of \$8.0 million, or 13%, within the Safety and Security Systems Group, largely driven by higher sales volumes.

Gross profit

Gross profit increased by \$24.5 million, or 45%, for the three months ended June 30, 2018, compared to the prior-year quarter, primarily due to improvements of \$21.6 million and \$2.9 million within the Environmental Solutions Group and the Safety and Security Systems Group, respectively. Gross margin for the three months ended June 30, 2018 improved to 27.2%, from 24.4% in the prior-year quarter, primarily due to improved operating leverage, benefits from actions taken in response to increasing commodity costs, favorable sales mix and the aforementioned reduction in purchase accounting expenses within the Environmental Solutions Group.

For the six months ended June 30, 2018, gross profit increased by \$42.8 million, or 44%, primarily due to improvements of \$40.1 million and \$2.7 million within the Environmental Solutions Group and the Safety and Security Systems Group, respectively. Gross margin for the six months ended June 30, 2018 was 26.1%, compared to 24.4% in the prior-year period, primarily due to improved operating leverage, benefits from actions taken in response to increasing commodity costs, favorable sales mix and the aforementioned reduction in purchase accounting expenses within the Environmental Solutions Group.

Selling, engineering, general and administrative expenses

Selling, engineering, general and administrative ("SEG&A") expenses for the three months ended June 30, 2018 increased by \$5.9 million, or 17%, compared to the prior-year quarter, primarily due to a \$5.3 million increase within the Environmental Solutions Group, largely the result of the addition of expenses associated with the TBEI acquisition, including an increase in amortization expense of \$1.3 million. The prior-year quarter also included a \$1.0 million favorable adjustment of product liability and workers compensation reserves. SEG&A expenses within the Safety and Security Systems Group increased by \$0.4 million, primarily due to increased expenses associated with new product development and other growth initiatives, while Corporate SEG&A expenses increased by \$0.2 million. As a percentage of net sales, SEG&A expenses decreased from 15.5% in the prior-year quarter, to 14.0% in the current-year quarter.

For the six months ended June 30, 2018, SEG&A expenses increased by \$16.3 million, or 25%, primarily represented by a \$13.4 million increase within the Environmental Solutions Group, largely the result of the addition of expenses of associated with the TBEI acquisition, including an increase in amortization expense of \$3.2 million. SEG&A expenses within the Safety and Security Systems Group increased by \$0.8 million, primarily due to increased expenses associated with new product development and other growth initiatives, while corporate SEG&A expenses increased by \$2.1 million, primarily due to higher employee benefit-related costs, partially offset by a \$0.8 million decrease in acquisition and integration-related expenses. As a percentage of net sales, SEG&A expenses decreased from 16.5% in the prior-year period, to 15.3% in the current-year period.

Operating income

Operating income increased by \$19.3 million, or 103%, to \$38.1 million in the three months ended June 30, 2018 as compared to the prior-year quarter, primarily driven by a \$16.2 million increase within the Environmental Solutions Group associated

with increased sales volumes, improved operating leverage and an incremental \$4.6 million of operating income contribution from TBEI, resulting from the inclusion of three months of activity in the current-year quarter, compared to only one month in the prior-year quarter. TBEI's operating income contribution in the second quarter included the effects of amortization expense on intangible assets acquired, which contributed to an increase in depreciation and amortization expense of \$2.4 million. Operating income in the three months ended June 30, 2018 within the Safety and Security Systems Group increased by \$2.6 million, while corporate expenses decreased by \$0.5 million. Consolidated operating margin for the three months ended June 30, 2018 was 13.1%, up from 8.4% in the prior-year quarter.

For the six months ended June 30, 2018, operating income increased by \$27.5 million as compared to the corresponding period of the prior year. Within the Environmental Solutions Group, operating income for the six months ended June 30, 2018 increased by \$26.5 million, or 85%, with higher sales volumes, improved operating leverage and an incremental operating income contribution of \$9.4 million from TBEI, associated with including six months of activity in 2018, compared to only four months in the prior-year period. TBEI's operating income contribution in the first half of 2018 included the effects of amortization expense on intangible assets acquired, which contributed to an increase in depreciation and amortization expense of \$5.5 million. Within the Safety and Security Systems Group, operating income in the six months ended June 30, 2018 increased by \$2.3 million, while Corporate expenses increased by \$1.3 million. Consolidated operating margin for the six months ended June 30, 2018 was 10.7%, compared to 7.5% in the prior-year period.

Interest expense

Interest expense for the three and six months ended June 30, 2018 increased by \$1.2 million and \$3.1 million, respectively, compared to the corresponding period of the prior year, largely due to higher average debt levels following the acquisition of TBEI.

Other expense (income), net

For the three months ended June 30, 2018, other expense totaled \$0.4 million and was primarily related to foreign currency transaction losses and pension expense, whereas in the prior-year period, other income of \$0.1 million was realized, representing foreign currency transaction gains that were partially offset by \$0.1 million of pension expense. For the six months ended June 30, 2018, other expense totaled \$0.5 million and was primarily related to foreign currency transaction losses and pension expense, whereas in the prior-year period, other income of \$0.3 million was realized, representing foreign currency transaction gains that were partially offset by \$0.2 million of pension expense.

Income tax expense

The Company recognized income tax expense of \$8.3 million and \$6.1 million for the three months ended June 30, 2018 and 2017, respectively, and income tax expense of \$12.4 million and \$9.9 million for the six months ended June 30, 2018 and 2017, respectively. The increases were largely due to higher pre-tax income levels, partially offset by the lower U.S. corporate tax rate following the enactment of the 2017 Tax Act and the recognition of a \$0.5 million excess tax benefit from stock compensation activity in the second quarter. The effective tax rate for the three months ended June 30, 2018 was 23.6%, compared to 34.7% in the prior-year quarter, while the effective tax rate for the six months ended June 30, 2018 was 23.8%, compared to 34.6% in the prior-year period. The lower rates in the current year reflect the impact of the reduction in the U.S. corporate tax rate, which was effective at the beginning of 2018, and the excess tax benefit.

Income from continuing operations

Income from continuing operations for the three months ended June 30, 2018 increased by \$15.4 million compared to the prioryear period, largely due to the aforementioned increase in operating income, partially offset by the increase in interest expense, the decrease in other income and the \$2.2 million increase in income tax expense.

For the six months ended June 30, 2018, income from continuing operations increased by \$21.1 million compared to the corresponding period of the prior year, largely due to the aforementioned increase in operating income, partially offset by the increase in interest expense, the decrease in other income and the \$2.5 million increase in income tax expense.

Orders

On the date of acquisition, TBEI had a backlog of orders from its end customers of \$44.8 million. These acquired orders were included in total orders reported for the three and six months ended June 30, 2017.

Three Months Ended June 30, 2018 vs. three months ended June 30, 2017

Total orders for the three months ended June 30, 2018 were \$277.6 million, an increase of \$6.5 million, or 2%, compared to the prior-year quarter. The Environmental Solutions Group reported total orders of \$217.3 million in the second quarter of 2018, an increase of \$2.6 million, or 1%, compared to the prior-year quarter, driven by organic order growth of approximately \$2.7 million, or 2%, primarily represented by improved orders for vacuum trucks, partially offset by lower orders for refuse trucks. Orders in the three months ended June 30, 2018 within the Safety and Security Systems Group were up \$3.9 million, or 7%, primarily due to improved international orders for public safety products and higher orders for warning systems.

U.S. municipal and governmental orders decreased by \$2.8 million, or 3%, primarily due to a \$2.9 million decrease within the Environmental Solutions Group, associated with lower orders for street sweepers and sewer cleaners. TBEI's municipal orders also decreased by \$0.8 million. Within the Safety and Security Systems Group, municipal orders increased by \$0.1 million.

U.S. industrial orders increased by \$2.7 million, or 2%, primarily due to an \$2.4 million increase within the Environmental Solutions Group, due to an increase in orders of vacuum trucks, partially offset by decreases in orders for used trucks and sewer cleaners. The Safety and Security Systems Group reported a \$0.3 million increase in industrial orders.

Non-U.S. orders increased by \$6.6 million, or 11%. Within the Safety and Security Systems Group, non-U.S. orders increased by \$3.5 million, largely driven by increased international orders for public safety products. Within the Environmental Solutions Group, non-U.S. orders increased by \$3.1 million, due to improvements in orders for sewer cleaners, rental equipment, vacuum trucks, waterblasting equipment, parts and used equipment, partially offset by fewer orders for refuse trucks. The acquisition of TBEI also contributed \$0.5 million of incremental orders.

Six months ended June 30, 2018 vs. six months ended June 30, 2017

Total orders for the six months ended June 30, 2018 were \$607.3 million, an increase of \$121.6 million, or 25%, as compared to the prior-year period. The Environmental Solutions Group reported total orders of \$491.7 million in the first half of 2018, an increase of \$110.4 million, or 29%, compared to the prior-year period. The improvement was driven by the effects of the inclusion of TBEI orders for six months in 2018 and organic order growth of approximately \$46.9 million, or 15%, primarily represented by improved orders for sewer cleaners and vacuum trucks, partially offset by lower orders for refuse trucks. Orders in the six months ended June 30, 2018 within the Safety and Security Systems Group were up \$11.2 million, or 11%, primarily due to improved orders for public safety products and favorable foreign currency translation effects.

U.S. municipal and governmental orders increased by \$16.8 million, or 10%, primarily due to a \$14.9 million increase within the Environmental Solutions Group, associated with improved orders for sewer cleaners and street sweepers. Within the Safety and Security Systems Group, municipal orders increased by \$1.9 million, largely driven by higher orders for public safety products.

U.S. industrial orders increased by \$95.0 million, or 48%, primarily due to a \$93.5 million increase within the Environmental Solutions Group, largely driven by the acquisition of TBEI, which added \$62.7 million of incremental industrial orders, and increases in orders of vacuum trucks, parts and waterblasting equipment, partially offset by a decrease in orders for street sweepers. The Safety and Security Systems Group reported a \$1.5 million increase in industrial orders.

Non-U.S. orders increased by \$9.8 million, or 8%. Within the Safety and Security Systems Group, non-U.S. orders increased by \$7.8 million, largely driven by an increase in orders for public safety products and a favorable foreign currency translation impact. Within the Environmental Solutions Group, non-U.S. orders increased by \$2.0 million, primarily due to increased orders of waterblasting equipment, vacuum trucks, rentals, used equipment, snow removal equipment and parts. The acquisition of TBEI also contributed \$1.2 million of orders. These increases were partially offset by a decrease in orders for refuse trucks.

Backlog

Backlog was \$322.3 million at June 30, 2018 compared to \$222.7 million at June 30, 2017. The increase of \$99.6 million, or 45%, was primarily due to a \$93.5 million increase in backlog within the Environmental Solutions Group, largely due to higher backlog for sewer cleaners and vacuum trucks as a result of the strong orders received in the six months ended June 30, 2018. Backlog within the Safety and Security Systems Group was also up \$6.1 million, primarily due to an increase in orders for public safety products and warning systems.

Environmental Solutions

The following table summarizes the Environmental Solutions Group's operating results as of and for the three and six months ended June 30, 2018 and 2017:

	Three Months Ended June 30,							Six Months Ended June 30,								
(\$ in millions)		2018		2017		Change	2018		2017			Change				
Net sales	\$	233.3	\$	174.3	\$	59.0	\$	429.9	\$	302.1	\$	127.8				
Operating income		37.2		21.0		16.2		57.8		31.3		26.5				
Operating data:																
Operating margin		15.9%)	12.0%)	3.9%		13.4%		10.4%		3.0%				
Total orders	\$	217.3	\$	214.7	\$	2.6	\$	491.7	\$	381.3	\$	110.4				
Backlog		291.3		197.8		93.5		291.3		197.8		93.5				
Depreciation and amortization		8.0		5.6		2.4		15.7		10.2		5.5				

Three Months Ended June 30, 2018 vs. three months ended June 30, 2017

Total orders increased by \$2.6 million, or 1%, for the three months ended June 30, 2018. U.S. orders decreased by \$0.5 million, primarily due to reductions in orders for sewer cleaners, used equipment and street sweepers of \$2.8 million, \$2.7 million and \$2.1 million, respectively, partially offset by a \$7.4 million increase in orders for vacuum trucks. Non-U.S. orders increased by \$3.1 million, or 8%, due to improvements in orders of sewer cleaners, rental equipment, vacuum trucks, waterblasting equipment, parts and used equipment of \$2.8 million, \$1.8 million, \$1.4 million, \$1.1 million, \$1.1 million and \$1.1 million, respectively, partially offset by a \$5.7 million decrease in orders for refuse trucks.

Net sales increased by \$59.0 million, or 34%, for the three months ended June 30, 2018. U.S. sales increased by \$55.2 million, or 43%, primarily due to the acquisition of TBEI, which contributed \$39.0 million of incremental sales, as well as increases in shipments of vacuum trucks, sewer cleaners and street sweepers of \$10.8 million, \$1.5 million and \$1.5 million, respectively. In addition, rental income increased by \$1.1 million. Non-U.S. sales increased by \$3.8 million, or 9%, primarily due to improvements in sales of vacuum trucks, street sweepers and used equipment of \$4.0 million, \$1.4 million and \$0.6 million, respectively. In addition, parts and service revenues and rental income also increased by \$2.7 million and \$1.8 million, respectively. Partially offsetting these improvements was an \$8.9 million reduction in sales of refuse trucks.

Cost of sales increased by \$37.4 million, or 27%, for the three months ended June 30, 2018, primarily attributable to increased sales volumes, the effects of three months of TBEI activity in the current-year quarter compared with one month in the prior year and a \$1.0 million increase in depreciation expense, partially offset by a \$2.1 million reduction in purchase accounting expenses. Gross margin increased to 24.8% from 20.8% in the prior-year quarter, primarily due to improved operating leverage, benefits from actions taken in response to increasing commodity costs, favorable sales mix and the reduction in purchase accounting expenses.

SEG&A expenses increased by \$5.3 million for the three months ended June 30, 2018, largely due to the addition of expenses associated with the prior year TBEI acquisition, including an increase in amortization expense of \$1.3 million. The prior-year quarter also included a \$1.0 million favorable adjustment of product liability and workers compensation reserves.

Operating income for the three months ended June 30, 2018 increased by \$16.2 million, largely due to a \$21.6 million increase in gross profit, partially offset by the \$5.3 million increase in SEG&A expenses and a \$0.1 million increase in acquisition-related expenses.

Six months ended June 30, 2018 vs. six months ended June 30, 2017

Total orders increased by \$110.4 million, or 29%, for the six months ended June 30, 2018. U.S. orders increased by \$108.4 million, or 37%, largely due to the prior-year acquisition of TBEI, which contributed an increase in orders of \$62.4 million. The organic growth in the U.S. was largely due to improvements in orders for vacuum trucks and sewer cleaners of \$31.8 million and \$12.6 million, respectively. Non-U.S. orders increased by \$2.0 million, or 2%, primarily attributable to increased orders for waterblasting equipment, vacuum trucks, rental equipment, used equipment, snow removal equipment and parts of \$3.4 million, \$2.7 million, \$2.7 million, \$2.5 million, \$2.3 million and \$1.3 million, respectively. The acquisition of TBEI also contributed \$1.2 million of orders. Partially offsetting these improvements was a \$14.5 million reduction in refuse truck orders.

Net sales increased by \$127.8 million, or 42%, for the six months ended June 30, 2018. U.S. sales increased by \$122.9 million, or 55%, primarily due to the inclusion of five more months of TBEI activity in the current-year period, accounting for \$89.7 million of the sales increase, as well as increases in shipments of vacuum trucks, sewer cleaners, used equipment and street

sweepers of \$16.5 million, \$12.5 million, \$1.5 million and \$1.4 million, respectively. In addition, rental income increased by \$1.6 million. Non-U.S. sales increased by \$4.9 million, or 6%, primarily due to increases in shipments of vacuum trucks, snow-removal equipment and street sweepers of \$4.3 million, \$3.8 million and \$1.9 million, respectively. Parts and service revenues and rental income also increased by \$4.0 million and \$2.7 million, respectively. Partially offsetting these improvements was a \$12.3 million reduction in sales of refuse trucks.

Cost of sales increased by \$87.7 million, or 36%, for the six months ended June 30, 2018, primarily attributable to higher sales volumes, the effects of six months of TBEI activity in the current-year compared with one month in the prior year and a \$2.1 million increase in depreciation expense, partially offset by a \$2.0 million reduction in purchase accounting expenses. Gross margin increased to 23.4% from 20.1% in the prior-year period, primarily due to improved operating leverage, benefits from actions taken in response to increasing commodity costs, favorable sales mix and the reduction in purchase accounting expenses.

SEG&A expenses increased by \$13.4 million for the six months ended June 30, 2018, largely due to the addition of expenses associated with the TBEI acquisition, including an increase in amortization expense of \$3.2 million.

Operating income for the six months ended June 30, 2018 increased by \$26.5 million, largely due to a \$40.1 million increase in gross profit, partially offset by the \$13.4 million increase in SEG&A expenses and a \$0.2 million increase in acquisition-related expenses.

Backlog was \$291.3 million at June 30, 2018, up 47.3% compared to \$197.8 million at June 30, 2017. The increase was largely a result of the increase in orders for vacuum trucks and sewer cleaners received in the six months ended June 30, 2018.

Safety and Security Systems

The following table summarizes the Safety and Security Systems Group's operating results as of and for the three and six months ended June 30, 2018 and 2017:

	Three Months Ended June 30,							Six Months Ended June 30,							
(\$ in millions)		2018		2017		Change		2018		2017		hange			
Net sales	\$	57.7	\$	50.1	\$	7.6	\$	110.8	\$	100.1	\$	10.7			
Operating income		8.2		5.6		2.6		14.3		12.0		2.3			
Operating data:															
Operating margin		14.2%		11.2%		3.0%		12.9%		12.0%		0.9%			
Total orders	\$	60.3	\$	56.4	\$	3.9	\$	115.6	\$	104.4	\$	11.2			
Backlog		31.0		24.9		6.1		31.0		24.9		6.1			
Depreciation and amortization		1.0		1.0		—		1.9		2.0		(0.1)			

Three Months Ended June 30, 2018 vs. three months ended June 30, 2017

Total orders increased by \$3.9 million, or 7%, for the three months ended June 30, 2018. In the aggregate, U.S. orders increased by \$0.4 million compared to the prior-year quarter, primarily due to a \$0.7 million increase in orders for warning systems. Non-U.S. orders increased by \$3.5 million, largely driven by a \$3.1 million increase in orders for public safety products, a \$1.0 million favorable foreign currency translation impact, and a \$0.5 million increase in orders for warning systems, partially offset by a \$1.1 million reduction in orders for industrial signaling equipment.

Net sales increased by \$7.6 million, or 15%, for the three months ended June 30, 2018. U.S. sales increased by \$1.5 million, primarily due to a \$3.1 million increase in sales of public safety products, partially offset by a \$1.9 million decrease in sales of warning systems. Non-U.S. sales increased by \$6.1 million, primarily due to a \$3.9 million increase in sales of public safety products, a \$1.0 million favorable foreign currency translation impact, and increases in sales of warning systems and industrial signaling equipment of \$0.8 million and \$0.4 million, respectively.

Cost of sales increased by \$4.7 million, or 15%, for the three months ended June 30, 2018, largely due to higher sales volumes and an unfavorable foreign currency translation impact of \$0.7 million. Gross margin for the three months ended June 30, 2018 improved to 36.9%, compared to 36.7% in the prior-year quarter.

SEG&A expenses for the three months ended June 30, 2018 increased by \$0.4 million, or 3%. As a percentage of net sales, SEG&A expenses decreased from 25.3% in the prior-year quarter, to 22.7% in the current-year quarter.

Operating income increased by \$2.6 million for the three months ended June 30, 2018. The increase was primarily attributable to the \$2.9 million improvement in gross profit and a \$0.1 million decrease in restructuring charges, partially offset by the \$0.4 million increase in SEG&A expenses.

Six months ended June 30, 2018 vs. six months ended June 30, 2017

Total orders increased by \$11.2 million or 11%, for the six months ended June 30, 2018. In the aggregate, U.S. orders increased by \$3.4 million, primarily due to increases in orders for public safety products and warning systems of \$2.6 million and \$1.5 million, respectively, offset by a \$0.6 million reduction in orders for industrial signaling equipment. Non-U.S. orders increased by \$7.8 million, largely driven by a \$5.8 million increase in orders for public safety products and a \$2.9 million favorable foreign currency translation effect, which were partially offset by a \$0.6 million reduction in orders for industrial signaling equipment.

Net sales increased by \$10.7 million, or 11%, for the six months ended June 30, 2018. U.S. sales increased by \$3.3 million, primarily due to a \$4.6 million increase in sales of public safety products, partially offset by reductions in sales of warning systems and industrial signaling equipment of \$0.7 million and \$0.6 million, respectively. Non-U.S. sales increased by \$7.4 million, primarily due to increases in sales of public safety products, industrial signaling equipment and warning systems of \$3.4 million, \$1.0 million and \$0.6 million, respectively, as well as a \$2.4 million favorable foreign currency translation impact.

Cost of sales increased by \$8.0 million, or 13%, for the six months ended June 30, 2018, largely due to higher sales volumes, and an unfavorable foreign currency translation impact of \$1.8 million. Gross margin for the six months ended June 30, 2018 was 36.4%, compared to 37.6% in the first half of last year, driven by unfavorable mix experienced in the first quarter of 2018 in comparison to the same period of the prior-year.

SEG&A expenses for the six months ended June 30, 2018 increased by \$0.8 million, or 3%, primarily due to increased expenses associated with new product development and other growth initiatives. As a percentage of net sales, SEG&A expenses decreased from 25.2% in the prior-year period, to 23.5% in the current-year period.

Operating income increased by \$2.3 million for the six months ended June 30, 2018. The increase was primarily attributable to the \$2.7 million increase in gross profit and a \$0.4 million reduction in restructuring charges, partially offset by the \$0.8 million increase in SEG&A expenses.

Backlog was \$31.0 million at June 30, 2018, up from \$24.9 million at June 30, 2017, primarily due to increased orders for public safety products within international markets and outdoor warning systems.

Corporate Expenses

Corporate operating expenses for the three months ended June 30, 2018 were \$7.3 million, compared to \$7.8 million in the prior-year quarter. The decrease was primarily driven by a \$0.7 million reduction in acquisition and integration-related expenses and lower legal costs, partially offset by increased employee benefit-related costs.

Corporate operating expenses for the six months ended June 30, 2018 were \$14.4 million, compared to \$13.1 million in the prior-year period. The increase was primarily driven by higher employee benefit-related costs, partially offset by a \$0.8 million decrease in acquisition and integration-related expenses.

Seasonality of Company's Business

Certain of the Company's businesses are susceptible to the influences of seasonal factors, including buying patterns, delivery patterns and productivity influences from holiday periods and weather. In general, the Company tends to have lower equipment sales in the first calendar quarter of each year compared to other quarters as a result of these factors. In addition, rental income and parts sales are generally higher in the second and third quarters of the year, because many of the Company's products are used for maintenance activities in North America, where usage is typically lower during periods of harsher weather conditions.

Financial Condition, Liquidity and Capital Resources

The Company uses its cash flow from operations to fund growth, make capital investments that sustain its operations, reduce costs, or both, and make pension contributions. Beyond these uses, remaining cash may be used to fund additional strategic acquisitions of businesses, pay down debt, repurchase shares, or fund dividend payments. In the absence of significant unanticipated cash demands, we believe that the Company's existing cash balances, cash flow from operations and borrowings available under the Amended 2016 Credit Agreement, will provide funds sufficient for these purposes. The net cash flows

associated with the Company's rental equipment transactions are included in cash flow from operating activities.

The Company's cash and cash equivalents totaled \$36.0 million and \$37.5 million as of June 30, 2018 and December 31, 2017, respectively. As of June 30, 2018, \$22.4 million of cash and cash equivalents was held by foreign subsidiaries. Cash and cash equivalents held by subsidiaries outside the U.S. typically are held in the currency of the country in which it is located. This cash is used to fund the operating activities of our foreign subsidiaries and for further investment in foreign operations. Generally, we consider such cash to be permanently reinvested in our foreign operations and our current plans do not demonstrate a need to repatriate such cash to fund U.S. operations. However, in the event that these funds were needed to fund U.S. operations or to satisfy U.S. obligations, they generally could be repatriated. The repatriation of these funds may then cause us to incur additional U.S. income tax expense, which would be dependent on income tax laws and other circumstances at the time any such amounts were repatriated. The 2017 Tax Act provides a one-time "transition tax" on E&P of a company's CFC determined as of November 2, 2017 or December 31, 2017 (whichever date on which there is more deferred E&P). The Company's accumulated undistributed earnings of foreign subsidiaries aggregated to an overall E&P deficit. Therefore, the Company estimates that no transition tax will be payable under the provisions of the 2017 Tax Act. As with other tax calculations surrounding the 2017 Tax Act, the Company's estimate of its transition tax liability as of June 30, 2018 is provisional due to complexities inherent in the computations that it expects to be addressed in whole, or in part, by regulations issued during 2018. The Company will continue to evaluate its U.S. and foreign cash needs and, as circumstances change, may change its assertion related to all or a portion of its undistributed foreign earnings.

Net cash of \$37.8 million was generated by continuing operating activities in the six months ended June 30, 2018, down from \$45.8 million in the prior-year period. Higher earnings were offset by a \$9.2 million increase in income tax payments, which was largely timing-related, as well as additions to working capital and rental assets in support of increased demand, and higher incentive compensation payments in comparison to the prior year.

Net cash of \$3.9 million was used for continuing investing activities in the six months ended June 30, 2018, compared with \$271.8 million in the prior-year period. In the six months ended June 30, 2017, the Company paid an initial \$269.2 million (net of cash acquired) to acquire TBEI. During the six months ended June 30, 2018, the Company received \$3.0 million as part of the finalization of certain post-closing adjustments in connection with the acquisition of TBEI. Capital expenditures in the six months ended June 30, 2018 and 2017 were \$7.0 million and \$2.7 million, respectively.

Net cash of \$34.9 million was used for continuing financing activities in the six months ended June 30, 2018, whereas in the prior-year period, \$213.0 million of cash was provided by continuing financing activities. In the six months ended June 30, 2018, the Company paid down \$26.6 million of debt and funded cash dividends of \$9.0 million. In the six months ended June 30, 2017, in connection with the funding of the acquisition of TBEI, the Company borrowed \$243.0 million against its revolving credit facility. Prior to June 30, 2017, \$20.0 million of those borrowings were paid down. In addition, the Company funded cash dividends of \$8.4 million and redeemed \$2.4 million of stock in order to remit funds to tax authorities to satisfy employees' tax withholdings following the vesting of stock-based compensation.

The Company is subject to certain leverage ratio and interest coverage ratio financial covenants under the Amended 2016 Credit Agreement that are to be measured at each fiscal quarter-end. The Company was in compliance with all such covenants as of June 30, 2018.

As of June 30, 2018, there was \$247.3 million of cash drawn and \$12.4 million of undrawn letters of credit under the Amended 2016 Credit Agreement, with \$140.3 million of net availability for borrowings. As of June 30, 2018, there were no borrowings against the Company's non-U.S. lines of credit which provide for borrowings of up to \$0.1 million.

The Company anticipates that capital expenditures for 2018 will be in the range of \$15 million to \$20 million.

Contractual Obligations and Off-Balance Sheet Arrangements

During the six months ended June 30, 2018, there have been no material changes in the Company's contractual obligations and off-balance sheet arrangements as described in Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations*, of the Company's Annual Report on Form 10-K for the year ended December 31, 2017.

Item 3. Quantitative and Qualitative Disclosures about Market Risk.

See Item 7A, *Quantitative and Qualitative Disclosures about Market Risk*, of the Company's Annual Report on Form 10-K for the year ended December 31, 2017. During the six months ended June 30, 2018, there have been no significant changes in our exposure to market risk.

Item 4. Controls and Procedures.

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As required by Rule 13a-15 under the Exchange Act, the Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) or Rule 15d-15(e) under the Exchange Act) as of June 30, 2018. Based on that evaluation, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of June 30, 2018.

As a matter of practice, the Company's management continues to review and document internal control and procedures for financial reporting. From time to time, the Company may make changes aimed at enhancing the effectiveness of the controls and ensuring that the systems evolve with the business. There were no changes in the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting during the three months ended June 30, 2018.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

The information set forth under the heading "Legal Proceedings" in Note 7 – Commitments and Contingencies to the accompanying condensed consolidated financial statements as included in Part I of this Form 10-Q is incorporated herein by reference.

Item 1A. Risk Factors.

There have been no material changes in the Company's risk factors as described in Item 1A, *Risk Factors*, of the Company's Annual Report on Form 10-K for the year ended December 31, 2017.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

Restrictions upon the Payment of Dividends

Under the terms of the Company's Amended 2016 Credit Agreement, restricted payments, including dividends and stock repurchases, shall be permitted if (i) the Company's leverage ratio is less than or equal to 2.50, (ii) the Company is in compliance with all other financial covenants and (iii) there are no existing defaults under the Amended 2016 Credit Agreement. If the leverage ratio is more than 2.50, the Company is still permitted to fund (i) up to \$30.0 million of dividend payments, (ii) stock repurchases sufficient to offset dilution created by the issuance of equity as compensation to its officers, directors, employees and consultants and (iii) an incremental \$30.0 million of other cash payments.

The Company is able to declare dividends at current levels under the restricted payment guidelines set forth above.

Purchases of Equity Securities

The following table provides a summary of the Company's repurchase activity for its common stock during the three months ended June 30, 2018:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs ^(a)
April 2018 (4/1/18 – 5/5/18)	_	\$	_	\$ 31,395,802
May 2018 (5/6/18 – 6/2/18)				31,395,802
June 2018 (6/3/18 – 6/30/18)	_	_	_	31,395,802

⁽a) On November 4, 2014, the Board authorized a stock repurchase program of up to \$75.0 million of the Company's common stock.

Item 3. Defaults upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

Other Events

On August 7, 2018, the Company issued a press release announcing its financial results for the three and six months ended June 30, 2018. The presentation slides for the second quarter 2018 earnings call were also posted on the Company's website at that time. The full text of the second quarter financial results press release and earnings presentation are attached hereto as Exhibits 99.1 and 99.2, respectively, to this Form 10-Q.

Item 6. Exhibits.

3.1	Restated Certificate of Incorporation of the Company. Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed April 30, 2010.
3.2	Amended and Restated By-laws of the Company. Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed February 9, 2016.
10.1*	Form of Nonqualified Stock Option Award Agreement.
10.2*	Form of Performance Share Unit Award Agreement - Non-U.S.
10.3*	Form of Performance Share Unit Award Agreement - U.S.
10.4*	Form of Restricted Stock Award Agreement - U.S.
10.5*	Form of Restricted Stock Unit Award Agreement - Non-U.S.
10.6	First Amendment to the Federal Signal Corporation Retirement Savings Plan, as amended and restated as of January 1, 2015.
31.1	CEO Certification under Section 302 of the Sarbanes-Oxley Act.
31.2	CFO Certification under Section 302 of the Sarbanes-Oxley Act.
32.1	CEO Certification of Periodic Report under Section 906 of the Sarbanes-Oxley Act.
32.2	CFO Certification of Periodic Report under Section 906 of the Sarbanes-Oxley Act.
99.1	Second Quarter Financial Results Press Release, Dated August 7, 2018.
99.2	Second Quarter Earnings Call Presentation Slides.
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Calculation Linkbase Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Label Linkbase Document.
101.PRE	XBRL Taxonomy Presentation Linkbase Document.

^{*} Management contract or compensatory plan or arrangement required to be filed as an exhibit pursuant to Item 15(a)(3) of Form 10-K.

SIGNATURE

Pursuant to the requirements of Section 13 or 15 (d) 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.

Federal Signal Corporation

Date: August 7, 2018 /s/ Ian A. Hudson

Ian A. Hudson

Senior Vice President and Chief Financial Officer (Principal Financial Officer)



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Nonqualified Stock Option Award ("Award") pursuant to the Federal empensation Plan (the "Plan"), as specified below:
and conditions prescribed in the Plan and in the Federal Signal of Agreement No. 2018 attached hereto and incorporated herein. I agreement shall be referred to throughout each as the "Award
have caused this Award Agreement to be executed as of the Date of
FEDERAL SIGNAL CORPORATION
1

NQSO US 1/2018

corrections on this form.

This document constitutes part of the prospectus covering securities that have been registered under the Securities Act of 1933, as amended.

FEDERAL SIGNAL CORPORATION NONQUALIFIED STOCK OPTION AWARD AGREEMENT NO. 2018

This Award Agreement, which includes the attached cover page, effective as of the Date of Grant, represents the grant of nonqualified stock options (the "Options") by the Company to the Participant named in this Award Agreement, pursuant to the provisions of the Plan.

The Company established the Plan pursuant to which, among other things, options, stock appreciation rights, restricted stock and stock units, stock bonus awards, dividend equivalents and/or performance compensation awards may be granted to eligible persons.

The Plan and this Award Agreement provide a complete description of the terms and conditions governing the Options. If there is any inconsistency between the terms of this Award Agreement and the terms of the Plan, the Plan's terms shall completely supersede and replace the conflicting terms of this Award Agreement. All capitalized terms shall have the meanings ascribed to them in the Plan, unless specifically set forth otherwise herein.

The Board of Directors and the Committee have determined that the interests of the Company will be advanced by encouraging and enabling certain of its employees to own shares of the Stock and that Participant is one of those employees.

NOW, THEREFORE, in consideration of services rendered and the mutual covenants herein contained, the parties agree as follows:

Section 1. Certain Definitions

As used in this Award Agreement, the following terms shall have the following meanings:

- A. "Affiliate" means with respect to any Person, any other Person (other than an individual) that controls, is controlled by, or is under common control with such Person. The term "control," as used in this Award Agreement, means the power to direct or cause the direction of the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise. "Controlled" and "controlling" have meanings correlative to the foregoing.
 - B. "Board of Directors" means the board of directors of the Company.
 - C. "Code" means the Internal Revenue Code of 1986, as amended.
- D. "Committee" means the Compensation and Benefits Committee of the Board of Directors or a subcommittee or other committee appointed to administer the Plan in accordance with the Plan.
 - E. "Company" means Federal Signal Corporation, a Delaware corporation.
 - F. "Date of Expiration" means the date set forth on this Award Agreement.
 - G. "Date of Grant" means the date set forth on this Award Agreement.
- H. "Disability" shall have the meaning ascribed to that term in the Company's long-term disability plan applicable to Participant, or if no such plan exists, at the discretion of the Committee and as determined by the Committee.
 - I. "Exercise Price" means the exercise price set forth on this Award Agreement.
 - J. "Fair Market Value" shall have the meaning set forth in the Plan.
 - K. "Option" means the Company's nonqualified stock options.

- L. "Participant" means the individual shown as the recipient of an award of Options, as set forth on this Award Agreement.
- M. "Person" means a "person" as such term is used for purposes of 13(d) or 14(d), or any successor section thereto, of the Securities Exchange Act of 1934, as amended, and any successor thereto.
 - N. "Stock" means the common stock of the Company.

Section 2. Grant of Stock Options

The Company hereby grants to Participant Options to purchase the number of shares of Stock ("Shares") set forth in this Award Agreement, at the stated Exercise Price, which is equal to one hundred percent (100%) of the closing market value of a share of Stock on the Date of Grant, in the manner and subject to the terms and conditions of the Plan and this Award Agreement. Subject to Section 12, each Option shall be exercisable into one Share.

This grant of Options shall not confer any right to Participant (or any other participant) to be granted Options or other awards in the future under the Plan.

Section 3. Exercise of Stock Options

Except as hereinafter provided, Participant may exercise Options held by Participant at any time after the Date of Grant, provided that any such Options have vested according to the vesting schedule set forth in this Award Agreement, and provided that no exercise may occur subsequent to the close of business on the Date of Expiration.

Vested Options held by Participant may be exercised in whole or in part, but not for fewer than one hundred (100) Shares at any one time, unless fewer than one hundred (100) Shares then remain subject to the Options, and the Options are then being exercised as to all such remaining Shares.

To the extent that the Fair Market Value of a share of Stock exceeds the Exercise Price on the trading day immediately preceding the Date of Expiration (the "Automatic Exercise Date"), the Company shall have the right and authority in its sole discretion to provide that any vested but unexercised Options that have not been forfeited or otherwise cancelled in accordance with the terms of this Award Agreement will be exercised automatically on Participant's behalf on the Automatic Exercise Date using a "net exercise" method (described in Section 13 of this Award Agreement). Such automatic exercise shall only occur if, after withholding from the delivery of the Shares the number of Shares having a Fair Market Value equal to the aggregate Exercise Price and applicable taxes, Participant will net at least one Share. Participant at all times remains responsible for all taxes associated with any such automatic exercise, notwithstanding any withholding of Shares by the Company for taxes. Participant may elect not to have these Options automatically exercised as contemplated herein by giving written notice to the Company not less than 10 days prior to the Automatic Exercise Date. Notwithstanding the foregoing, there is no guarantee that such an automatic exercise will be effected on Participant's behalf and neither the Company nor any other party will bear any responsibility or liability if such an automatic exercise is not effected and instead, these Options expire unexercised. Accordingly, Participant bears sole responsibility for ensuring that he or she exercises any vested Options prior to the expiration thereof. By accepting these Options, Participant agrees to the automatic exercise of these Options on the terms hereof. In its discretion, the Company may determine to cease automatically exercising options, including these Options, at any time without notice, responsibility or liability to the Participant or otherwise.

Section 4. Option Period/Limitations on Exercise

Except as set otherwise set forth in this Award Agreement, Participant must exercise all rights under this Award Agreement prior to the tenth anniversary of the Date of Grant (i.e., the Options will expire upon the tenth anniversary if not exercised prior to that date). Participant may sell the Shares acquired via these Options at any time, subject to Company policy on insider trading and stockholding requirements.

Section 5. Termination of Employment by Death

In the event the employment of Participant is terminated by reason of death, all outstanding Options not yet vested shall become immediately fully vested and, along with all previously vested Options, shall remain exercisable at any time prior to the Date of Expiration, or for one year after the date of death, whichever period is shorter, by such person or persons as shall have been named as Participant's beneficiary(ies), or by such persons that have acquired Participant's rights under the Options by will or by the laws of descent and distribution.

Section 6. Termination of Employment by Disability

In the event the employment of Participant is terminated by reason of Disability, all outstanding Options not yet vested shall become immediately fully vested and, along with all previously vested Options, shall remain exercisable at any time prior to the Date of Expiration, or for one year after the date that the Committee determines the definition of Disability to have been satisfied, whichever period is shorter.

Section 7. Termination of Employment by Retirement

In the event the employment of Participant is terminated by reason of Participant's retirement on terms and conditions authorized in writing by the Committee, the Committee may exercise its discretion at or near Participant's retirement date to provide that some or all outstanding Options not yet vested shall become immediately fully vested and, along with all previously vested Options, shall remain exercisable at any time prior to the Date of Expiration, or for five years after the date of retirement, whichever period is shorter. In exercising its discretion under this Section 7, the Committee shall consider whether Participant: (A) remained employed in good standing with the Company through Participant's retirement date; (B) provided reasonable written notice to the Company of Participant's intention to retire of no less than 12 weeks; (C) materially breached any statutory, contractual, or common law duties owed to Company or any material Company policy, including but not limited to post-employment non-competition, non-solicitation and confidentiality obligations; and (D) failed in good faith to provide to and perform for Company all reasonably requested duties and responsibilities in connection with the transition of Participant's duties and responsibilities. In exercising its discretion, the Committee shall also consider: (1) the financial status of the Company; (2) Company performance; (3) Company stock performance; and (4) where appropriate, input from Company management. In the event the Committee does not so exercise its discretion, Participant's termination of employment by reason of retirement shall be considered a termination of employment for other reasons and Section 8 of this Award Agreement shall govern.

Section 8. Termination of Employment for Other Reasons

If the employment of Participant shall terminate for any reason other than the reasons set forth in Sections 5, 6 or 7 herein, all previously vested Options shall remain exercisable for a period of three months from the effective date of termination. For the avoidance of doubt, termination of employment on account of a Divestiture of a Business Segment shall result in any vested Options remaining exercisable for a period of three months from the Divestiture Date. Any Options not yet vested as of the date of termination (after first taking into account the accelerated vesting provisions of Sections 5, 6, 7, and 10) shall be forfeited. The transfer of employment of Participant between the Company and any Affiliate (or between Affiliates) shall not be deemed a termination of employment for purposes of this Award Agreement.

For the avoidance of doubt, in instances involving the termination of Participant's employment, the reason for the termination of Participant's employment (i.e., death, Disability, retirement, for other reasons, or Divestiture of Business Segment) shall control the vesting and exercising implications. For example, Participant's death or Disability following Participant's termination of employment by reason of retirement shall not impact the vesting or exercising of Options which shall continue to be governed by Section 7.

Section 9. Change-in-Control

In the event Participant is employed by the Company or its Affiliates on a date when a Change-in-Control occurs, Participant's right to exercise these Options shall become immediately fully vested as of the date of the Change-In-Control, and shall remain exercisable until the Date of Expiration; unless such right of exercisability is terminated early pursuant to Sections 5 through 8 of this Award Agreement.

Section 10. Acceleration of Vesting of Options in the Event of Divestiture of Business Segment

If the "Business Segment" (as that term is defined in this Section) in which Participant is primarily employed as of the "Divestiture Date" (as that term is defined in this Section) is the subject of a "Divestiture of a Business Segment" (as that term is defined in this Section), and such divestiture results in the termination of Participant's employment with the Company and its Affiliates for any reason, Participant shall immediately vest in any Options subject to this Award Agreement that have not previously vested and any such Options shall become immediately exercisable as of the Divestiture Date. In accordance with Section 8 above, any Options for which vesting is accelerated under this Section 10, and any Options that have vested prior to the Divestiture Date, shall remain exercisable for a period of three months from the Divestiture Date.

For purposes of this Award Agreement, the term "Business Segment" shall mean a business line which the Company treats as a separate operating segment under the segment reporting rules under U.S. generally accepted accounting principles, which currently includes the following: Safety and Security Systems Group and Environmental Solutions Group. Likewise, the term "Divestiture Date" shall mean the date that a transaction constituting a Divestiture of a Business Segment is finally consummated.

For purposes of this Award Agreement, the term "Divestiture of a Business Segment" means the following:

- A. When used with a reference to the sale of stock or other securities of a Business Segment that is or becomes a separate corporation, limited liability company, partnership or other separate business entity, the sale, exchange, transfer, distribution or other disposition of the ownership, either beneficially or of record or both, by the Company or one of its Affiliates to "Nonaffiliated Persons" (as that term is defined in this Section) of one hundred percent (100%) of either (i) the then-outstanding common stock (or the equivalent equity interests) of the Business Segment or (ii) the combined voting power of the then-outstanding voting securities of the Business Segment entitled to vote generally in the election of the board of directors or the equivalent governing body of the Business Segment;
- B. When used with reference to the merger or consolidation of a Business Segment that is or becomes a separate corporation, limited liability company, partnership or other separate business entity, any such transaction that results in Nonaffiliated Persons owning, either beneficially or of record or both, one hundred percent (100%) of either (i) the then-outstanding common stock (or the equivalent equity interests) of the Business Segment or (ii) the combined voting power of the then-outstanding voting securities of the Business Segment entitled to vote generally in the election of the board of directors or the equivalent governing body of the Business Segment; or
- C. When used with reference to the sale of the assets of the Business Segment, the sale, exchange, transfer, liquidation, distribution or other disposition of all or substantially all of the assets of the Business Segment necessary or required to operate the Business Segment in the manner that the Business Segment had been operated prior to the Divestiture Date.

For purposes of this Award Agreement, the term "Nonaffiliated Persons" shall mean any persons or business entities which do not control, or which are not controlled by or under common control with, the Company.

Section 11. Restrictions on Transfer

Unless determined otherwise by the Committee pursuant to the terms of the Plan, these Options may not be sold, transferred, alienated, assigned, pledged, encumbered or otherwise hypothecated, other than by will or by the laws of descent and distribution. Further, these Options shall be exercisable during Participant's lifetime only by Participant or Participant's legal representative.

Section 12. Adjustment in Certain Events

If there is any change in the Stock by reason of stock dividends or other distribution (whether in the form of securities or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, split-off, combination, repurchase or exchange of Shares or other securities of the Company, or other similar corporate transaction or event, or changes in applicable rules, rulings, regulations or other requirements of any governmental body or securities exchange, the Committee may, in its sole discretion, make such adjustments to these Options that it deems necessary or appropriate and as it may deem equitable in Participant's rights.

Section 13. Method of Exercise and Form of Payment

Options that have become exercisable may be exercised by delivery of timely written notice to the Company at its executive offices, addressed to the attention of the Company's Corporate Secretary. Such notice: (A) shall be signed by Participant or his or her legal representative; (B) shall specify the number of Options being exercised and thus the number of full Shares then elected to be purchased with respect to the Options; and (C) shall be accompanied by payment (or promise to pay, as applicable) in full of the Exercise Price of the Shares to be purchased (along with an amount equal to any federal, state, local, and non-U.S. income and employment taxes required to be withheld).

The Exercise Price shall be payable: (a) in cash, check, cash equivalent and/or shares of Stock valued at the Fair Market Value at the time the Option is exercised (including, pursuant to procedures approved by the Committee, by means of attestation of ownership of a sufficient number of shares of Stock in lieu of actual delivery of such shares to the Company); or (b) by such other method as the Committee may permit in its sole discretion, including without limitation: (i) in other property having a fair market value on the date of exercise equal to the Exercise Price, (ii) if

there is a public market for the shares of Stock at such time, by means of a broker-assisted "cashless exercise" pursuant to which the Company is delivered a copy of irrevocable instructions to a stockbroker to sell the Shares otherwise deliverable upon the exercise of the Option and to deliver promptly to the Company an amount equal to the Exercise Price, or (iii) by a "net exercise" method whereby the Company withholds from the delivery of the Shares for which the Option was exercised that number of Shares having a Fair Market Value equal to the aggregate Exercise Price for the Shares for which the Option was exercised. Any fractional Shares shall be settled in cash.

The Company shall deliver to Participant evidence of book entry Shares, or upon Participant's request, Share certificates in an appropriate amount based upon the number of Shares purchased under the Option. The Company shall maintain a record of all information pertaining to Participant's rights under this Award Agreement, including the number of Shares for which the Options are exercisable. If all of the Options granted pursuant to this Award Agreement have been exercised, this Award Agreement shall be null and void.

Section 14. Beneficiary Designation

Participant may designate a beneficiary or beneficiaries (contingently or successively) to receive any benefits that may be payable under this Award Agreement in the event of Participant's death and, from time to time, may change his or her designated beneficiary (a "Beneficiary"). A Beneficiary may be a trust. A Beneficiary designation shall be made in writing in a form prescribed by the Company and delivered to the Company while Participant is alive. Each such designation shall revoke all prior designations by Participant with respect to Participant's award under this Award Agreement. If Participant fails to so designate a beneficiary, or if no such designated beneficiary survives Participant, the beneficiary shall be deemed to be Participant's spouse or, if Participant is unmarried at the time of death, Participant's beneficiary shall be his or her estate.

Section 15. Stockholder Rights

Participant shall have no rights as a stockholder of the Company with respect to the Shares subject to this Award Agreement until such time as the Exercise Price has been paid, and the Shares have been issued and delivered to Participant.

Section 16. Tax Withholding

Participant agrees to make adequate provision for any sums required to satisfy applicable federal, state, local and foreign income or employment taxes, which are Participant's sole responsibility. The Company shall not be obligated to transfer any shares of Stock until Participant pays to the Company or any of its Affiliates in cash, or any other form of property, including Stock, acceptable to the Company, the amount required to be withheld from the wages or other amounts owing to Participant with respect to any exercise of Participant's rights under this Award Agreement. Further, the Company can withhold amounts for such taxes, in accordance with any tax withholding policy that may be adopted by the Company and is in effect from time to time with respect to equity awards under the Plan (including any method allowed under Section 16(c)(ii) of the Plan) irrespective of whether the amounts to be withheld exceed the lowest tax withholding amount that could be determined for the grantee under another tax withholding method. Participant may elect, subject to procedural rules adopted by the Committee, to satisfy the applicable withholding tax requirement, in whole or in part, by having the Company reduce the number of shares of Stock otherwise transferable under this Award Agreement having an aggregate Fair Market Value on the date the tax is to be determined, equal to such applicable withholding tax requirement. Notwithstanding any provision herein to the contrary, in no event shall the amount of such tax withholding exceed the maximum statutory tax rates (or such other rate as would not trigger a negative accounting impact), as determined by the Company in its sole discretion.

Section 17. Section 409A

This Award Agreement shall be construed consistent with the intention that it be exempt from Section 409A of the Code (together with any Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the date hereof, "Section 409A") as a stock right. However, notwithstanding any other provision of the Plan or this Award Agreement, if at any time the Committee determines that this Award (or any portion thereof) may be subject to Section 409A, the Committee shall have the right in its sole discretion (without any obligation to do so or to indemnify Participant or any other person for failure to do so) to adopt such amendments to the Plan or this Award Agreement, or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, as the Committee determines are necessary or appropriate either for this Award to be exempt from the application of Section 409A or to comply with the requirements of Section 409A.

Section 18. Continuation of Employment

This Award Agreement shall not confer upon Participant any right to continuation of employment by the Company or its Affiliates, nor shall this Award Agreement interfere in any way with the Company's or its Affiliates' right to terminate Participant's employment at any time.

Section 19. Entire Award; Amendment

This Award Agreement and the Plan constitute the entire agreement between the parties with respect to the terms and supersede all prior written or oral negotiations, commitments, representations and agreements with respect thereto. The terms and conditions set forth in this Award Agreement may only be modified or amended in writing, signed by both parties.

Section 20. Severability

In the event any one or more of the provisions of this Award Agreement shall be held invalid, illegal or unenforceable in any respect in any jurisdiction, such provision or provisions shall be automatically deemed amended, but only to the extent necessary to render such provision or provisions valid, legal and enforceable in such jurisdiction, and the validity, legality and enforceability of the remaining provisions of this Award Agreement shall not in any way be affected or impaired thereby.

Section 21. Miscellaneous

A. This Award Agreement and the rights of Participant hereunder are subject to all the terms and conditions of the Plan, as the same may be amended from time to time, as well as to such rules and regulations as the Committee may adopt for administration of the Plan. The Committee shall have the right to impose such restrictions on any Shares acquired pursuant to these Options, as it may deem advisable, including, without limitation, restrictions under applicable federal securities laws, under applicable federal and state tax law, under the requirements of any stock exchange or market upon which such Shares are then listed and/or traded, and under any blue sky or state securities laws applicable to such Shares.

It is expressly understood that the Committee is authorized to administer, construe, and make all determinations necessary or appropriate to the administration of the Plan and this Award Agreement, all of which shall be binding upon Participant.

- B. The Committee may terminate, amend, or modify the Plan; provided, however, that no such termination, amendment, or modification of the Plan may materially and adversely affect Participant's vested rights under this Award Agreement, without the written consent of Participant.
- C. Participant agrees to take all steps necessary to comply with all applicable provisions of federal and state securities and tax laws in exercising his or her rights under this Award Agreement.
- D. This Award Agreement shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.
- E. This Award (including any proceeds, gains or other economic benefit actually or constructively received by Participant upon any receipt or exercise of any Award or upon the receipt or resale of any Shares underlying the Award) shall be subject to the provisions of any clawback policy currently or subsequently implemented by the Company to the extent set forth in such policy.
- F. All obligations of the Company under the Plan and this Award Agreement, with respect to these Options, shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.
- G. To the extent not preempted by federal law, this Award Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, without giving effect to principles of conflict of law.
- H. This Award Agreement may be executed in one or more counterparts, all of which taken together shall constitute one agreement and executed copies may be exchanged by .pdf to the other party by e-mail and accepted and treated as originals for any and all purposes.



Participant: Date of Grant: Number of PSUs Subject to the	
Ç	iods: January 1, 201_ through December 31, 20 [3-year period]
	the terms and conditions prescribed in the Plan and in the Federal Signal
Corporation Performance Share U	Unit Award Agreement No. 2018 attached hereto and incorporated herein. Ched award agreement shall be referred to throughout each as the "Award
Corporation Performance Share U Together, this Award and the attack Agreement." Calculations of performance	Unit Award Agreement No. 2018 attached hereto and incorporated herein.
Corporation Performance Share U Together, this Award and the attack Agreement." Calculations of performance by the Committee in accordance with	Unit Award Agreement No. 2018 attached hereto and incorporated herein. Ched award agreement shall be referred to throughout each as the "Award eversus target, threshold and maximum values set forth in Appendix A are made
Corporation Performance Share UTogether, this Award and the attack Agreement." Calculations of performance by the Committee in accordance with IN WITNESS WHEREOF,	Unit Award Agreement No. 2018 attached hereto and incorporated herein. Ched award agreement shall be referred to throughout each as the "Award eversus target, threshold and maximum values set forth in Appendix A are made in the terms of the Plan and are final and binding.
Corporation Performance Share UTogether, this Award and the attack Agreement." Calculations of performance by the Committee in accordance with IN WITNESS WHEREOF, Grant.	Unit Award Agreement No. 2018 attached hereto and incorporated herein. Ched award agreement shall be referred to throughout each as the "Award eversus target, threshold and maximum values set forth in Appendix A are made in the terms of the Plan and are final and binding. the parties have caused this Award Agreement to be executed as of the Date of

corrections on this form.

This document constitutes part of the prospectus covering securities that have been registered under the Securities Act of 1933, as amended.

FEDERAL SIGNAL CORPORATION PERFORMANCE SHARE UNIT AWARD AGREEMENT NO. 2018

This Award Agreement, which includes the attached cover page and Appendix A, effective as of the Date of Grant, represents the grant of PSUs by the Company to Participant, pursuant to the provisions of the Plan.

The Company established the Plan pursuant to which, among other things, options, stock appreciation rights, restricted stock and stock units, stock bonus awards, dividend equivalents and/or performance compensation awards may be granted to eligible persons.

The Plan and this Award Agreement provide a complete description of the terms and conditions governing the PSUs. If there is any inconsistency between the terms of this Award Agreement and the terms of the Plan, the Plan's terms shall completely supersede and replace the conflicting terms of this Award Agreement. All capitalized terms shall have the meanings ascribed to them in the Plan, unless specifically set forth otherwise herein.

The Board of Directors and the Committee have determined that the interests of the Company will be advanced by encouraging and enabling certain of its employees to own shares of Stock, and that Participant is one of those employees.

NOW, THEREFORE, in consideration of services rendered and the mutual covenants herein contained, the parties agree as follows:

Section 1. Certain Definitions

As used in this Award Agreement, the following terms shall have the following meanings:

- A. "Affiliate" means with respect to any Person, any other Person (other than an individual) that controls, is controlled by, or is under common control with such Person. The term "control," as used in this Award Agreement, means the power to direct or cause the direction of the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise. "Controlled" and "controlling" have meanings correlative to the foregoing.
 - B. "Award" means the award provided for in Section 2.
 - C. "Board of Directors" means the board of directors of the Company.
 - D. "Code" means the Internal Revenue Code of 1986, as amended.
- E. "Committee" means the Compensation and Benefits Committee of the Board of Directors or a subcommittee or other committee appointed to administer the Plan in accordance with the Plan.
 - F. "Company" means Federal Signal Corporation, a Delaware corporation.
 - G. "Date of Grant" means the date set forth on this Award Agreement.
- H. "Disability" shall have the meaning ascribed to that term in the Company's long-term disability plan applicable to Participant, or if no such plan exists, at the discretion of the Committee and as determined by the Committee.
 - I. "Fair Market Value" shall have the meaning set forth in the Plan.
- J. "Participant" means the individual shown as the recipient of an award of PSUs, as set forth on this Award Agreement.
- K. "Performance Period" means the consecutive three-year calendar year period set forth in this Award Agreement.
- L. "Performance Share Units" or "PSUs" means the obligation of the Company to transfer the number of shares of Stock to Participant determined under Section 2, Section 4A (in the case of death or termination of employment by Disability), Section 4B (in the case of Change-in-Control), or Section 5 (in the case of Divestiture of

a Business Segment) of this Award Agreement, as applicable, at the time provided in Section 6 of this Award Agreement, to the extent that the rights to such shares are vested at such time.

- M. "Person" means a "person" as such term is used for purposes of 13(d) or 14(d), or any successor section thereto, of the Securities Exchange Act of 1934, as amended, and any successor thereto.
 - N. "Stock" means the common stock of the Company.
- O. "Vesting Period" means the consecutive three-year calendar year period set forth in this Award Agreement.

Section 2. Award

Subject to the terms of this Award Agreement, the Company awarded to Participant the number of PSUs set forth on this Award Agreement, effective as of the Date of Grant set forth on such instrument.

This Award entitles Participant to receive a whole number of shares of Stock as set forth on this Award Agreement equal to a percentage, from zero percent (0%) to two hundred percent (200%), based on the Company's performance against the performance goals set forth, and as calculated in, <u>Appendix A</u>.

The number of shares of Stock determined based on the Company's performance against the performance goals set forth in Appendix A (or, if applicable, the formula set forth in Section 4A (in the case of death or termination of employment by Disability), the formula set forth in Section 4B (in the case of a Change-in-Control), or Section 5 (in the case of Divestiture of a Business Segment)), shall be distributable as provided in Section 6 of this Award Agreement, but only to the extent the rights to such shares are vested under either Section 4 or Section 5 of this Award Agreement.

This grant of PSUs shall not confer any right to Participant (or any other participant) to be granted PSUs or other awards in the future under the Plan.

The provisions of this Section 2 and Appendix A (Adjustments of Performance Criteria) of this Award Agreement and the applicable provisions of the Plan regarding Section 162(m) of the Code (including but not limited to Sections 4, 12 and 15(a) of the Plan) concerning actions with respect to awards designed to meet the standard of "performance-based" compensation under Section 162(m) of the Code shall apply only to the extent that Section 162(m) of the Code provides a "performance-based" compensation exception to the deduction limitations applicable thereunder. Notwithstanding anything to the contrary in this Award Agreement, the number of shares of Stock that may be earned under this Award Agreement cannot exceed the maximum number of shares of Stock provided for under the Plan.

Section 3. Bookkeeping Account

The Company shall record the number of PSUs subject to this Award Agreement to a bookkeeping account for Participant (the "Performance Share Unit Account"), subject to adjustment based on performance as set forth in Section 2 above. Participant's Performance Share Unit Account shall be reduced by the number of PSUs, if any, forfeited in accordance with Section 4 and by the number of PSUs with respect to which shares of Stock were transferred to Participant in accordance with Section 6.

Section 4. Vesting

Subject to the accelerated vesting provisions provided below, the number of PSUs determined under Section 2 above shall vest on the last day of the Vesting Period, if Participant remains employed by the Company or its Affiliate through such date.

For the avoidance of doubt, if the Company fails to achieve a performance goal at the threshold level, Participant shall be entitled to receive no shares of Stock subject to such performance goal, unless the deemed performance provisions in this Section specifically modify such result.

If, during the Performance and Vesting Periods, while employed by the Company or its Affiliates:

A. Participant dies or his or her employment terminates by reason of Disability, the number of vested PSUs subject to the Award shall be equal to the product of: (1) the number of full and partial months of Participant's employment during the Performance Period divided by thirty-six (36) and (2) the greater of (a) one hundred percent (100%) of the PSUs subject to this Award Agreement, regardless of actual performance or (b) the number of PSUs that

Participant would have been payable to Participant at the end of Performance Period based on actual Company performance during the entire Performance Period.

- B. A Change-in-Control occurs, the number of vested PSUs subject to this Award shall be the greater of (1) one hundred percent (100%) of the PSUs subject to this Award Agreement, regardless of actual performance or (2) the number of PSUs that would have been payable to Participant for the Performance Period based on the Company's best estimate of projected Company performance through the end of the Performance Period, determined at the date of the Change-in-Control. In the event of a Change-in-Control following an event that would otherwise enable vesting at the end of the Performance and Vesting Periods under Section 4A, the provisions of this Section 4B shall control. For the avoidance of doubt, vesting under this Section 4B is not calculated on a pro-rata basis.
- C. Except as provided in Section 5 below, and in certain limited instances where the Committee may exercise its discretion in determining the vesting implications of PSUs, if Participant's employment with the Company and its Affiliates terminates for any other reason before the end of the Performance and Vesting Periods, all PSUs that are not vested at the time of such termination of employment (after first taking into account the accelerated vesting provisions of this Section 4) shall be forfeited. In the event of termination of employment (whether or not in breach of local labor laws), the Company shall have the exclusive discretion to determine the date of termination of employment for purposes of this Award. Such termination date shall be the date that Participant is no longer actively employed and will not be extended by any notice period mandated under local law (e.g., active employment would not include a period of "garden leave" or similar period pursuant to local law).

Section 5. Acceleration of Vesting of Shares in the Event of Divestiture of Business Segment

If the "Business Segment" (as that term is defined in this Section) in which Participant is primarily employed as of the "Divestiture Date" (as that term is defined in this Section) is the subject of a "Divestiture of a Business Segment" (as that term is defined in this Section) during the Performance and Vesting Periods, and such divestiture results in the termination of Participant's employment with the Company and its Affiliates for any reason during the Performance Period, the number of vested PSUs subject to the Award shall be equal to the product of: (1) the number of full and partial months of Participant's employment during the Performance Period before the Divestiture Date, divided by thirty-six (36) and (2) one hundred percent (100%) of the PSUs subject to this Award Agreement, regardless of actual performance.

For purposes of this Award Agreement, the term "Business Segment" shall mean a business line which the Company treats as a separate operating segment under the segment reporting rules under U.S. generally accepted accounting principles, which currently includes the following: Safety and Security Systems Group and Environmental Solutions Group. Likewise, the term "Divestiture Date" shall mean the date that a transaction constituting a Divestiture of a Business Segment is finally consummated.

For purposes of this Award Agreement, the term "Divestiture of a Business Segment" means the following:

- A. When used with a reference to the sale of stock or other securities of a Business Segment that is or becomes a separate corporation, limited liability company, partnership or other separate business entity, the sale, exchange, transfer, distribution or other disposition of the ownership, either beneficially or of record or both, by the Company or one of its Affiliates to "Nonaffiliated Persons" (as that term is defined in this Section) of one hundred percent (100%) of either (i) the then-outstanding common stock (or the equivalent equity interests) of the Business Segment or (ii) the combined voting power of the then-outstanding voting securities of the Business Segment entitled to vote generally in the election of the board of directors or the equivalent governing body of the Business Segment;
- B. When used with reference to the merger or consolidation of a Business Segment that is or becomes a separate corporation, limited liability company, partnership or other separate business entity, any such transaction that results in Nonaffiliated Persons owning, either beneficially or of record or both, one hundred percent (100%) of either (i) the then-outstanding common stock (or the equivalent equity interests) of the Business Segment or (ii) the combined voting power of the then-outstanding voting securities of the Business Segment entitled to vote generally in the election of the board of directors or the equivalent governing body of the Business Segment; or
- C. When used with reference to the sale of the assets of the Business Segment, the sale, exchange, transfer, liquidation, distribution or other disposition of all or substantially all of the assets of the Business Segment necessary or required to operate the Business Segment in the manner that the Business Segment had been operated prior to the Divestiture Date.

For purposes of this Award Agreement, the term "Nonaffiliated Persons" shall mean any persons or business entities which do not control, or which are not controlled by or under common control with, the Company.

Section 6. Distribution of Shares

- A. Except as specifically provided to the contrary in Section 6B, the number of shares of Stock payable with respect to PSUs, as determined under Section 2 above, that become vested under this Award shall become distributable as of the end of the Vesting Period and shall be paid not later than March 15, 2020; provided however, that if it is impracticable to pay such shares of Stock by such date (e.g., due to the unavailability of audited financial statements or a Form S-8 registration statement for the shares), then the Committee may delay payment until it becomes administratively practicable to do so later that same year.
- B. The number of shares of Stock payable with respect to PSUs, as determined under Section 2 above, that vest prior to the end of the Vesting Period under either Section 4B or Section 5 of this Award Agreement shall become distributable on an accelerated basis as follows:
- (1) If a Change-in-Control occurs at any time before the end of the Vesting Period, then the number of earned shares of Stock with respect to PSUs that become vested under Section 4B of this Award Agreement shall become distributable on the date of the Change-in-Control.
- (2) If a Divestiture of a Business Segment occurs at any time before the end of the Vesting Period, and such divestiture results in the termination of Participant's employment with the Company and its Affiliates for any reason, then the number of earned shares of Stock with respect to PSUs that become vested under this Award Agreement shall become distributable on the Divestiture Date, but only if that payment on that date is permissible under Section 409A of the Code.

Section 7. Stockholder Rights

Participant shall not have any of the rights of a stockholder of the Company with respect to PSUs until shares of Stock are issued to Participant. No dividend equivalent rights are provided under this Award Agreement.

Section 8. Beneficiary Designation

Participant may designate a beneficiary or beneficiaries (contingently or successively) to receive any benefits that may be payable under this Award Agreement in the event of Participant's death and, from time to time, may change his or her designated beneficiary (a "Beneficiary"). A Beneficiary may be a trust. A Beneficiary designation shall be made in writing in a form prescribed by the Company and delivered to the Company while Participant is alive. Each such designation shall revoke all prior designations by Participant with respect to Participant's award under this Award Agreement. If Participant fails to so designate a beneficiary, or if no such designated beneficiary survives Participant, the beneficiary shall be deemed to be Participant's spouse or, if Participant is unmarried at the time of death, Participant's beneficiary shall be his or her estate. In lieu of payment to Participant, a Beneficiary shall be paid shares of Stock under Section 6 at the same time and in the same form as Participant would have been paid but for Participant's death.

Section 9. Restrictions on Transfer

PSUs awarded hereunder shall not be transferable by Participant. Except as may be required by the federal income tax withholding provisions of the Code or by the tax laws of any state or foreign sovereign, the interests of Participant and his or her Beneficiary(ies) under this Award Agreement are not subject to the claims of their respective creditors and may not be voluntarily or involuntarily sold, assigned, transferred, alienated, pledged, attached, encumbered or charged. Any attempt by Participant or a Beneficiary to sell, assign, transfer, alienate, pledge, attach, encumber, charge or otherwise dispose of any right to benefits payable hereunder shall be void.

Section 10. Adjustment in Certain Events

If there is any change in the Stock by reason of stock dividends or other distribution (whether in the form of securities or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, split-off, combination, repurchase or exchange of Stock or other securities of the Company, or other similar corporate transaction or event, or changes in applicable rules, rulings, regulations or other requirements of any governmental body or securities exchange, the Committee may, in its sole discretion, make such adjustments to the number of PSUs credited to Participant's Performance Share Unit Account that it deems necessary or appropriate and as it may deem equitable in Participant's rights.

Section 11. Tax Withholding

Regardless of any action the Company, any of its Affiliates and/or Participant's employer takes with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related items related to Participant's participation in the Plan and legally applicable to Participant ("Tax-Related Items"), Participant acknowledges that the ultimate liability for all Tax-Related Items is and remains Participant's responsibility and may exceed the amount actually withheld by the Company or any of its affiliates. Participant further acknowledges that the Company and/or its Affiliates: (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Performance Share Units, including, but not limited to, the grant, vesting or exercise of the Performance Share Units, the delivery of shares of Stock, the subsequent sale of shares acquired pursuant to such delivery and the receipt of any dividends; and (ii) do not commit to and are under no obligation to structure the terms of any award to reduce or eliminate Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if Participant becomes subject to tax in more than one jurisdiction between the Date of Grant and the date of any relevant taxable event, Participant acknowledges that the Company and/or its Affiliates 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, Participant will pay or make adequate arrangements satisfactory to the Company and/or its Affiliates to satisfy all Tax-Related Items. In this regard, Participant authorizes the Company and/or its Affiliates, or their respective agents, at their discretion, to satisfy the obligations with regard to all Tax-Related Items by one or a combination of the following:

- A. withholding from Participant's wages or other cash compensation paid to Participant by the Company and/or its Affiliates; or
 - B. withholding in shares of Stock to be delivered upon distribution of the Performance Share Units.

The Company and/or its Affiliates may withhold or account for Tax-Related Items by considering applicable statutory withholding amounts or other applicable withholding rates. If the obligation for Tax-Related Items is satisfied by withholding in shares of Stock, for tax purposes, Participant is deemed to have been issued the full number of shares attributable to the Performance Share Units, notwithstanding that a number of shares of Stock are held back solely for the purpose of paying the Tax-Related Items due as a result of any aspect of Participant's participation in the Plan.

Finally, Participant shall pay to the Company and/or its Affiliates any amount of Tax-Related Items that the Company and/or its Affiliates may be required to withhold or account for as a result of Participant's participation in the Plan that are not satisfied by the means previously described. The Company may refuse to issue or deliver the Shares if Participant fails to comply with Participant's obligations in connection with the Tax-Related Items.

Section 12. Section 409A

This Award Agreement shall be construed consistent with the intention that it be exempt from Section 409A of the Code (together with any Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the date hereof, "Section 409A"). However, notwithstanding any other provision of the Plan or this Award Agreement, if at any time the Committee determines that this Award (or any portion thereof) may be subject to Section 409A, the Committee shall have the right in its sole discretion (without any obligation to do so or to indemnify Participant or any other person for failure to do so) to adopt such amendments to the Plan or this Award Agreement, or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, as the Committee determines are necessary or appropriate either for this Award to be exempt from the application of Section 409A or to comply with the requirements of Section 409A.

Section 13. Source of Payment

Shares of Stock transferable to Participant, or Participant's Beneficiary, under this Award Agreement may be either Treasury shares, authorized but unissued shares, or any combination of such stock. The Company shall have no duties to segregate or set aside any assets to secure Participant's right to receive shares of Stock under this Award Agreement. Participant shall not have any rights with respect to transfer of shares of Stock under this Award Agreement other than the unsecured right to receive shares of Stock from the Company.

Section 14. Continuation of Employment

This Award Agreement shall not confer upon Participant any right to continuation of employment by the Company or its Affiliates, nor shall this Award Agreement interfere in any way with the Company's or its Affiliates' right to terminate t Participant's employment at any time.

Section 15. English Language

Participant acknowledges and agrees that it is Participant's express intent that this Award Agreement, the Plan and all other documents, rules, procedures, forms, notices and legal proceedings entered into, given or instituted pursuant to the Award, be drawn up in English. If Participant has received this Award Agreement, the Plan or any other rules, procedures, forms or documents related to the Award 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.

Section 16. Entire Award; Amendment

This Award Agreement and the Plan constitute the entire agreement between the parties with respect to the terms and supersede all prior written or oral negotiations, commitments, representations and agreements with respect thereto. The terms and conditions set forth in this Award Agreement may only be modified or amended in writing, signed by both parties.

Section 17. Severability

In the event any one or more of the provisions of this Award Agreement shall be held invalid, illegal or unenforceable in any respect in any jurisdiction, such provision or provisions shall be automatically deemed amended, but only to the extent necessary to render such provision or provisions valid, legal and enforceable in such jurisdiction, and the validity, legality and enforceability of the remaining provisions of this Award Agreement shall not in any way be affected or impaired thereby.

Section 18. Miscellaneous

A. This Award Agreement and the rights of Participant hereunder are subject to all the terms and conditions of the Plan, as the same may be amended from time to time, as well as to such rules and regulations as the Committee may adopt for administration of the Plan. The Committee shall have the right to impose such restrictions on any Stock acquired pursuant to this Award Agreement, as it may deem advisable, including, without limitation, restrictions under applicable federal securities laws, under applicable federal and state tax law, under the requirements of any stock exchange or market upon which such Stock is then listed and/or traded, and under any blue sky or state securities laws applicable to such Stock.

It is expressly understood that the Committee is authorized to administer, construe, and make all determinations necessary or appropriate to the administration of the Plan and this Award Agreement, all of which shall be binding upon Participant.

- B. The Committee may terminate, amend, or modify the Plan; provided, however, that no such termination, amendment, or modification of the Plan may materially and adversely affect Participant's rights under this Award Agreement, without the written consent of Participant.
- C. Participant agrees to take all steps necessary to comply with all applicable provisions of federal and state securities and tax laws in exercising his or her rights under this Award Agreement.
- D. This Award Agreement shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.
- E. This Award (including any proceeds, gains or other economic benefit actually or constructively received by Participant upon any receipt or exercise of any Award or upon the receipt or resale of any Stock underlying the Award) shall be subject to the provisions of any clawback policy currently or subsequently implemented by the Company to the extent set forth in such policy.
- F. All obligations of the Company under the Plan and this Award Agreement, with respect to these PSUs, shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.

- G. To the extent not preempted by federal law, this Award Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, without giving effect to principles of conflict of law
- H. This Award Agreement may be executed in one or more counterparts, all of which taken together shall constitute one agreement and executed copies may be exchanged by .pdf to the other party by e-mail and accepted and treated as originals for any and all purposes.



Protecting people and our plan	net
Federal Signal Corporation 2015 Executive Incentive Compensation Pl Performance Share Unit Award Agreement	
	his Performance Share Units ("PSUs") award ("Award") pursuant to the incentive Compensation Plan (the "Plan"), as specified below:
This Award is subject to the term Corporation Performance Share Unit Awa	rd Agreement: Innuary 1, 201_ through December 31, 20 [3-year period] Is and conditions prescribed in the Plan and in the Federal Signal and Agreement No. 2018 attached hereto and incorporated herein ard agreement shall be referred to throughout each as the "Award
	target, threshold and maximum values set forth in <u>Appendix A</u> are madens of the Plan and are final and binding.
IN WITNESS WHEREOF, the parti	es have caused this Award Agreement to be executed as of the Date of
PARTICIPANT:	FEDERAL SIGNAL CORPORATION
Print Name	By: Chief Executive Officer

Note: If there are any discrepancies in the name or address shown above, please make the appropriate corrections on this form.

This document constitutes part of the prospectus covering securities that have been registered under the Securities Act of 1933, as amended.

FEDERAL SIGNAL CORPORATION PERFORMANCE SHARE UNIT AWARD AGREEMENT NO. 2018

This Award Agreement, which includes the attached cover page and <u>Appendix A</u>, effective as of the Date of Grant, represents the grant of PSUs by the Company to Participant, pursuant to the provisions of the Plan.

The Company established the Plan pursuant to which, among other things, options, stock appreciation rights, restricted stock and stock units, stock bonus awards, dividend equivalents and/or performance compensation awards may be granted to eligible persons.

The Plan and this Award Agreement provide a complete description of the terms and conditions governing the PSUs. If there is any inconsistency between the terms of this Award Agreement and the terms of the Plan, the Plan's terms shall completely supersede and replace the conflicting terms of this Award Agreement. All capitalized terms shall have the meanings ascribed to them in the Plan, unless specifically set forth otherwise herein.

The Board of Directors and the Committee have determined that the interests of the Company will be advanced by encouraging and enabling certain of its employees to own shares of Stock, and that Participant is one of those employees.

NOW, THEREFORE, in consideration of services rendered and the mutual covenants herein contained, the parties agree as follows:

Section 1. Certain Definitions

As used in this Award Agreement, the following terms shall have the following meanings:

- A. "Affiliate" means with respect to any Person, any other Person (other than an individual) that controls, is controlled by, or is under common control with such Person. The term "control," as used in this Award Agreement, means the power to direct or cause the direction of the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise. "Controlled" and "controlling" have meanings correlative to the foregoing.
 - B. "Award" means the award provided for in Section 2.
 - C. "Board of Directors" means the board of directors of the Company.
 - D. "Code" means the Internal Revenue Code of 1986, as amended.
- E. "Committee" means the Compensation and Benefits Committee of the Board of Directors or a subcommittee or other committee appointed to administer the Plan in accordance with the Plan.
 - F. "Company" means Federal Signal Corporation, a Delaware corporation.
 - G. "Date of Grant" means the date set forth on this Award Agreement.
- H. "Disability" shall have the meaning ascribed to that term in the Company's long-term disability plan applicable to Participant, or if no such plan exists, at the discretion of the Committee and as determined by the Committee.
 - I. "Fair Market Value" shall have the meaning set forth in the Plan.
- J. "Participant" means the individual shown as the recipient of an award of PSUs, as set forth on this Award Agreement.
- K. "Performance Period" means the consecutive three-year calendar year period set forth in this Award Agreement.

- L. "Performance Share Units" or "PSUs" means the obligation of the Company to transfer the number of shares of Stock to Participant determined under Section 2, Section 4A (in the case of death or termination of employment by Disability), Section 4B (in the case of Change-in-Control), or Section 5 (in the case of Divestiture of a Business Segment) of this Award Agreement, as applicable, at the time provided in Section 6 of this Award Agreement, to the extent that the rights to such shares are vested at such time.
- M. "Person" means a "person" as such term is used for purposes of 13(d) or 14(d), or any successor section thereto, of the Securities Exchange Act of 1934, as amended, and any successor thereto.
 - N. "Stock" means the common stock of the Company.
- O. "Vesting Period" means the consecutive three-year calendar year period set forth in this Award Agreement.

Section 2. Award

Subject to the terms of this Award Agreement, the Company awarded to Participant the number of PSUs set forth on this Award Agreement, effective as of the Date of Grant set forth on such instrument.

This Award entitles Participant to receive a whole number of shares of Stock as set forth on this Award Agreement equal to a percentage, from zero percent (0%) to two hundred percent (200%), based on the Company's performance against the performance goals set forth, and as calculated in, <u>Appendix A</u>.

The number of shares of Stock determined based on the Company's performance against the performance goals set forth in Appendix A (or, if applicable, the formula set forth in Section 4A (in the case of death or termination of employment by Disability), the formula set forth in Section 4B (in the case of a Change-in-Control), or Section 5 (in the case of Divestiture of a Business Segment)), shall be distributable as provided in Section 6 of this Award Agreement, but only to the extent the rights to such shares are vested under either Section 4 or Section 5 of this Award Agreement.

This grant of PSUs shall not confer any right to Participant (or any other participant) to be granted PSUs or other awards in the future under the Plan.

The provisions of this Section 2 and Appendix A (Adjustments of Performance Criteria) of this Award Agreement and the applicable provisions of the Plan regarding Section 162(m) of the Code (including but not limited to Sections 4, 12 and 15(a) of the Plan) concerning actions with respect to awards designed to meet the standard of "performance-based" compensation under Section 162(m) of the Code shall apply only to the extent that Section 162(m) of the Code provides a "performance-based" compensation exception to the deduction limitations applicable thereunder. Notwithstanding anything to the contrary in this Award Agreement, the number of shares of Stock that may be earned under this Award Agreement cannot exceed the maximum number of shares of Stock provided for under the Plan.

Section 3. Bookkeeping Account

The Company shall record the number of PSUs subject to this Award Agreement to a bookkeeping account for Participant (the "Performance Share Unit Account"), subject to adjustment based on performance as set forth in Section 2 above. Participant's Performance Share Unit Account shall be reduced by the number of PSUs, if any, forfeited in accordance with Section 4 and by the number of PSUs with respect to which shares of Stock were transferred to Participant in accordance with Section 6.

Section 4. Vesting

Subject to the accelerated vesting provisions provided below, the number of PSUs determined under Section 2 above shall vest on the last day of the Vesting Period, if Participant remains employed by the Company or its Affiliate through such date.

For the avoidance of doubt, if the Company fails to achieve a performance goal at the threshold level, Participant shall be entitled to receive no shares of Stock subject to such performance goal, unless the deemed performance provisions in this Section specifically modify such result.

If, during the Performance and Vesting Periods, while employed by the Company or its Affiliates:

- A. Participant dies or his or her employment terminates by reason of Disability, the number of vested PSUs subject to the Award shall be equal to the product of: (1) the number of full and partial months of Participant's employment during the Performance Period divided by thirty-six (36) and (2) the greater of (a) one hundred percent (100%) of the PSUs subject to this Award Agreement, regardless of actual performance or (b) the number of PSUs that Participant would have been payable to Participant at the end of Performance Period based on actual Company performance during the entire Performance Period.
- B. A Change-in-Control occurs, the number of vested PSUs subject to this Award shall be the greater of (1) one hundred percent (100%) of the PSUs subject to this Award Agreement, regardless of actual performance or (2) the number of PSUs that would have been payable to Participant for the Performance Period based on the Company's best estimate of projected Company performance through the end of the Performance Period, determined at the date of the Change-in-Control. In the event of a Change-in-Control following an event that would otherwise enable vesting at the end of the Performance and Vesting Periods under Section 4A, the provisions of this Section 4B shall control. For the avoidance of doubt, vesting under this Section 4B is not calculated on a pro-rata basis.
- C. Except as provided in Section 5 below, and in certain limited instances where the Committee may exercise its discretion in determining the vesting implications of PSUs, if Participant's employment with the Company and its Affiliates terminates for any other reason before the end of the Performance and Vesting Periods, all PSUs that are not vested at the time of such termination of employment (after first taking into account the accelerated vesting provisions of this Section 4) shall be forfeited.

Section 5. Acceleration of Vesting of Shares in the Event of Divestiture of Business Segment

If the "Business Segment" (as that term is defined in this Section) in which Participant is primarily employed as of the "Divestiture Date" (as that term is defined in this Section) is the subject of a "Divestiture of a Business Segment" (as that term is defined in this Section) during the Performance and Vesting Periods, and such divestiture results in the termination of Participant's employment with the Company and its Affiliates for any reason during the Performance Period, the number of vested PSUs subject to the Award shall be equal to the product of: (1) the number of full and partial months of Participant's employment during the Performance Period before the Divestiture Date, divided by thirty-six (36) and (2) one hundred percent (100%) of the PSUs subject to this Award Agreement, regardless of actual performance.

For purposes of this Award Agreement, the term "Business Segment" shall mean a business line which the Company treats as a separate operating segment under the segment reporting rules under U.S. generally accepted accounting principles, which currently includes the following: Safety and Security Systems Group and Environmental Solutions Group. Likewise, the term "Divestiture Date" shall mean the date that a transaction constituting a Divestiture of a Business Segment is finally consummated.

For purposes of this Award Agreement, the term "Divestiture of a Business Segment" means the following:

- A. When used with a reference to the sale of stock or other securities of a Business Segment that is or becomes a separate corporation, limited liability company, partnership or other separate business entity, the sale, exchange, transfer, distribution or other disposition of the ownership, either beneficially or of record or both, by the Company or one of its Affiliates to "Nonaffiliated Persons" (as that term is defined in this Section) of one hundred percent (100%) of either (i) the then-outstanding common stock (or the equivalent equity interests) of the Business Segment or (ii) the combined voting power of the then-outstanding voting securities of the Business Segment entitled to vote generally in the election of the board of directors or the equivalent governing body of the Business Segment;
- B. When used with reference to the merger or consolidation of a Business Segment that is or becomes a separate corporation, limited liability company, partnership or other separate business entity, any such transaction that results in Nonaffiliated Persons owning, either beneficially or of record or both, one hundred percent (100%) of either (i) the then-outstanding common stock (or the equivalent equity interests) of the Business Segment or (ii) the combined voting power of the then-outstanding voting securities of the Business Segment entitled to vote generally in the election of the board of directors or the equivalent governing body of the Business Segment; or
- C. When used with reference to the sale of the assets of the Business Segment, the sale, exchange, transfer, liquidation, distribution or other disposition of all or substantially all of the assets of the Business Segment

necessary or required to operate the Business Segment in the manner that the Business Segment had been operated prior to the Divestiture Date.

For purposes of this Award Agreement, the term "Nonaffiliated Persons" shall mean any persons or business entities which do not control, or which are not controlled by or under common control with, the Company.

Section 6. Distribution of Shares

- A. Except as specifically provided to the contrary in Section 6B, the number of shares of Stock payable with respect to PSUs, as determined under Section 2 above, that become vested under this Award shall become distributable as of the end of the Vesting Period and shall be paid not later than March 15, 2020 provided however, that if it is impracticable to pay such shares of Stock by such date (e.g., due to the unavailability of audited financial statements or a Form S-8 registration statement for the shares), then the Committee may delay payment until it becomes administratively practicable to do so later that same year.
- B. The number of shares of Stock payable with respect to PSUs, as determined under Section 2 above, that vest prior to the end of the Vesting Period under either Section 4B or Section 5 of this Award Agreement shall become distributable on an accelerated basis as follows:
- (1) If a Change-in-Control occurs at any time before the end of the Vesting Period, then the number of earned shares of Stock with respect to PSUs that become vested under Section 4B of this Award Agreement shall become distributable on the date of the Change-in-Control.
- (2) If a Divestiture of a Business Segment occurs at any time before the end of the Vesting Period, and such divestiture results in the termination of Participant's employment with the Company and its Affiliates for any reason, then the number of earned shares of Stock with respect to PSUs that become vested under this Award Agreement shall become distributable on the Divestiture Date, but only if that payment on that date is permissible under Section 409A of the Code.

Section 7. Stockholder Rights

Participant shall not have any of the rights of a stockholder of the Company with respect to PSUs until shares of Stock are issued to Participant. No dividend equivalent rights are provided under this Award Agreement.

Section 8. Beneficiary Designation

Participant may designate a beneficiary or beneficiaries (contingently or successively) to receive any benefits that may be payable under this Award Agreement in the event of Participant's death and, from time to time, may change his or her designated beneficiary (a "Beneficiary"). A Beneficiary may be a trust. A Beneficiary designation shall be made in writing in a form prescribed by the Company and delivered to the Company while Participant is alive. Each such designation shall revoke all prior designations by Participant with respect to Participant's award under this Award Agreement. If Participant fails to so designate a beneficiary, or if no such designated beneficiary survives Participant, the beneficiary shall be deemed to be Participant's spouse or, if Participant is unmarried at the time of death, Participant's beneficiary shall be his or her estate. In lieu of payment to Participant, a Beneficiary shall be paid shares of Stock under Section 6 at the same time and in the same form as Participant would have been paid but for Participant's death.

Section 9. Restrictions on Transfer

PSUs awarded hereunder shall not be transferable by Participant. Except as may be required by the federal income tax withholding provisions of the Code or by the tax laws of any State, the interests of Participant and his or her Beneficiary(ies) under this Award Agreement are not subject to the claims of their respective creditors and may not be voluntarily or involuntarily sold, assigned, transferred, alienated, pledged, attached, encumbered or charged. Any attempt by Participant or a Beneficiary to sell, assign, transfer, alienate, pledge, attach, encumber, charge or otherwise dispose of any right to benefits payable hereunder shall be void.

Section 10. Adjustment in Certain Events

If there is any change in the Stock by reason of stock dividends or other distribution (whether in the form of securities or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, split-off, combination, repurchase or exchange of Stock or other securities of the Company, or other similar corporate transaction or event, or changes in applicable rules, rulings, regulations or other requirements of any

governmental body or securities exchange, the Committee may, in its sole discretion, make such adjustments to the number of PSUs credited to Participant's Performance Share Unit Account that it deems necessary or appropriate and as it may deem equitable in Participant's rights.

Section 11. Tax Withholding

Participant agrees to make adequate provision for any sums required to satisfy applicable federal, state, local and foreign income or employment taxes, which are Participant's sole responsibility. The Company shall not be obligated to transfer any shares of Stock until Participant pays to the Company or any of its Affiliates in cash, or any other form of property, including Stock, acceptable to the Company, the amount required to be withheld from the wages or other amounts owing to Participant with respect to such shares. Further, the Company can withhold amounts for such taxes, in accordance with any tax withholding policy that may be adopted by the Company and is in effect from time to time with respect to equity awards under the Plan (including any method allowed under Section 16(c)(ii) of the Plan) irrespective of whether the amounts to be withheld exceed the lowest tax withholding amount that could be determined for the grantee under another tax withholding method. Participant may elect, subject to procedural rules adopted by the Committee, to satisfy the applicable withholding tax requirement, in whole or in part, by having the Company reduce the number of shares of Stock otherwise transferable under this Award Agreement having an aggregate Fair Market Value on the date the tax is to be determined, equal to such applicable withholding tax requirement. Notwithstanding any provision herein to the contrary, in no event shall the amount of such tax withholding exceed the maximum statutory tax rates (or such other rate as would not trigger a negative accounting impact), as determined by the Company in its sole discretion.

Section 12. Section 409A

This Award Agreement shall be construed consistent with the intention that it be exempt from Section 409A of the Code (together with any Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the date hereof, "Section 409A"). However, notwithstanding any other provision of the Plan or this Award Agreement, if at any time the Committee determines that this Award (or any portion thereof) may be subject to Section 409A, the Committee shall have the right in its sole discretion (without any obligation to do so or to indemnify Participant or any other person for failure to do so) to adopt such amendments to the Plan or this Award Agreement, or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, as the Committee determines are necessary or appropriate either for this Award to be exempt from the application of Section 409A or to comply with the requirements of Section 409A.

Section 13. Source of Payment

Shares of Stock transferable to Participant, or Participant's Beneficiary, under this Award Agreement may be either Treasury shares, authorized but unissued shares, or any combination of such stock. The Company shall have no duties to segregate or set aside any assets to secure Participant's right to receive shares of Stock under this Award Agreement. Participant shall not have any rights with respect to transfer of shares of Stock under this Award Agreement other than the unsecured right to receive shares of Stock from the Company.

Section 14. Continuation of Employment

This Award Agreement shall not confer upon Participant any right to continuation of employment by the Company or its Affiliates, nor shall this Award Agreement interfere in any way with the Company's or its Affiliates' right to terminate Participant's employment at any time.

Section 16. Entire Award; Amendment

This Award Agreement and the Plan constitute the entire agreement between the parties with respect to the terms and supersede all prior written or oral negotiations, commitments, representations and agreements with respect thereto. The terms and conditions set forth in this Award Agreement may only be modified or amended in writing, signed by both parties.

Section 17. Severability

In the event any one or more of the provisions of this Award Agreement shall be held invalid, illegal or unenforceable in any respect in any jurisdiction, such provision or provisions shall be automatically deemed amended,

but only to the extent necessary to render such provision or provisions valid, legal and enforceable in such jurisdiction, and the validity, legality and enforceability of the remaining provisions of this Award Agreement shall not in any way be affected or impaired thereby.

Section 18. Miscellaneous

A. This Award Agreement and the rights of Participant hereunder are subject to all the terms and conditions of the Plan, as the same may be amended from time to time, as well as to such rules and regulations as the Committee may adopt for administration of the Plan. The Committee shall have the right to impose such restrictions on any Stock acquired pursuant to this Award Agreement, as it may deem advisable, including, without limitation, restrictions under applicable federal securities laws, under applicable federal and state tax law, under the requirements of any stock exchange or market upon which such Stock is then listed and/or traded, and under any blue sky or state securities laws applicable to such Stock.

It is expressly understood that the Committee is authorized to administer, construe, and make all determinations necessary or appropriate to the administration of the Plan and this Award Agreement, all of which shall be binding upon Participant.

- B. The Committee may terminate, amend, or modify the Plan; provided, however, that no such termination, amendment, or modification of the Plan may materially and adversely affect Participant's rights under this Award Agreement, without the written consent of Participant.
- C. Participant agrees to take all steps necessary to comply with all applicable provisions of federal and state securities and tax laws in exercising his or her rights under this Award Agreement.
- D. This Award Agreement shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.
- E. This Award (including any proceeds, gains or other economic benefit actually or constructively received by Participant upon any receipt or exercise of any Award or upon the receipt or resale of any Stock underlying the Award) shall be subject to the provisions of any clawback policy currently or subsequently implemented by the Company to the extent set forth in such policy.
- F. All obligations of the Company under the Plan and this Award Agreement, with respect to these PSUs, shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.
- G. To the extent not preempted by federal law, this Award Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, without giving effect to principles of conflict of law.
- H. This Award Agreement may be executed in one or more counterparts, all of which taken together shall constitute one agreement and executed copies may be exchanged by .pdf to the other party by e-mail and accepted and treated as originals for any and all purposes.



Protecting people and our p	planet
Federal Signal Corporation 2015 Executive Incentive Compensation Restricted Stock Award Agreement	
	we this grant of Restricted Stock ("Award") pursuant to the Federal Signal mpensation Plan (the "Plan"), as specified below:
Participant: Date of Grant: Number of Shares of Restricted Stock Lapse of Restriction Date: Restrictions amount listed below:	Granted: placed on the shares of Restricted Stock shall lapse on the date and in the
	cliff vesting] conditions prescribed in the Plan and in the Federal Signal Corporation No. 2018 attached hereto and incorporated herein. Together, this Award
<u> </u>	I be referred to throughout each as the "Award Agreement." Parties have caused this Award Agreement to be executed as of the Date of
PARTICIPANT:	FEDERAL SIGNAL CORPORATION
	By:
Print Name	Chief Executive Officer

Note: If there are any discrepancies in the name or address shown above, please make the appropriate corrections on this form.

This document constitutes part of the prospectus covering securities that have been registered under the Securities Act of 1933, as amended.

FEDERAL SIGNAL CORPORATION RESTRICTED STOCK AWARD AGREEMENT NO. 2018

This Award Agreement, which includes the attached cover page, effective as of the Date of Grant, represents the grant of shares of restricted stock (the "Restricted Stock") by the Company to the Participant named in this Award Agreement, pursuant to the provisions of the Plan.

The Company established the Plan pursuant to which, among other things, options, stock appreciation rights, restricted stock and stock units, stock bonus awards, dividend equivalents and/or performance compensation awards may be granted to eligible persons.

The Plan and this Award Agreement provide a complete description of the terms and conditions governing the Restricted Stock. If there is any inconsistency between the terms of this Award Agreement and the terms of the Plan, the Plan's terms shall completely supersede and replace the conflicting terms of this Award Agreement. All capitalized terms shall have the meanings ascribed to them in the Plan, unless specifically set forth otherwise herein.

The Board of Directors and the Committee have determined that the interests of the Company will be advanced by encouraging and enabling certain of its employees to own shares of the Stock, and that Participant is one of those employees.

NOW, THEREFORE, in consideration of services rendered and the mutual covenants herein contained, the parties agree as follows:

Section 1. Certain Definitions

As used in this Award Agreement, the following terms shall have the following meanings:

- A. "Affiliate" means with respect to any Person, any other Person (other than an individual) that controls, is controlled by, or is under common control with such Person. The term "control," as used in this Award Agreement, means the power to direct or cause the direction of the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise. "Controlled" and "controlling" have meanings correlative to the foregoing.
 - B. "Board of Directors" means the board of directors of the Company.
 - C. "Code" means the Internal Revenue Code of 1986, as amended.
- D. "Committee" means the Compensation and Benefits Committee of the Board of Directors or a subcommittee or other committee appointed to administer the Plan in accordance with the Plan.
 - E. "Company" means Federal Signal Corporation, a Delaware corporation.
 - F. "Date of Grant" means the date set forth on this Award Agreement.
- G. "Disability" shall have the meaning ascribed to that term in the Company's long-term disability plan applicable to Participant, or if no such plan exists, at the discretion of the Committee and as determined by the Committee.
 - H. "Fair Market Value" shall have the meaning set forth in the Plan.
 - I. "Lapse of Restriction Date" means the date set forth on this Award Agreement.
- J. "Participant" means the individual shown as the recipient of an award of Restricted Stock, as set forth on this Award Agreement.
- K. "Person" means a "person" as such term is used for purposes of 13(d) or 14(d), or any successor section thereto, of the Securities Exchange Act of 1934, as amended, and any successor thereto.

L. "Stock" means the common stock of the Company.

Section 2. Employment with the Company

Except as may otherwise be provided in Sections 6A, 6B, 7 or 8, the Restricted Stock granted hereunder is granted on the condition that Participant remains an Employee of the Company from the Date of Grant through (and including) the Lapse of Restriction Date set forth in this Award Agreement (the "Period of Restriction").

This grant of Restricted Stock shall not confer any right to Participant (or any other participant) to be granted Restricted Stock or other awards in the future under the Plan.

Section 3. Issuance of Restricted Stock; Certificate Legend

Evidence of the issuance of the Restricted Stock pursuant to this Award Agreement may be accomplished in such manner as the Company or its authorized representatives shall deem appropriate, including, without limitation, electronic registration, book entry registration or issuance of a stock certificate or stock certificates in the name of Participant. In the event the Restricted Stock is issued in book-entry form, the depository and the Company's transfer agent shall be provided with appropriate notice referring to the terms, conditions and restrictions applicable to the Restricted Stock, together with such stop-transfer instructions as the Company deems appropriate. The Company may retain, at its option, the physical custody of any stock certificate representing any Restricted Stock, or require that such certificates be placed in escrow or trust, until all restrictions applicable thereto are removed or lapse. Participant shall promptly surrender to the Company for cancellation any stock certificate representing Restricted Stock that has been forfeited.

Any stock certificates representing the Restricted Stock, when issued, shall bear appropriate legends with respect to the restrictions on transferability contained in the Plan and this Award Agreement and shall also bear appropriate legends required under the Securities Act of 1933, as amended.

Section 4. Removal of Restrictions

Except as may otherwise be provided herein and in the Plan, the shares of Restricted Stock granted pursuant to this Award Agreement shall become freely transferable by Participant on the date and in the amount set forth under the Lapse of Restriction Date set forth in this Award Agreement, subject to applicable federal and state securities laws. Once shares of Restricted Stock are no longer subject to any restrictions, Participant shall be entitled to have the legend or book entry registration required by Section 3 of this Award Agreement removed from the applicable stock certificates.

Section 5. Voting Rights and Dividends

During the Period of Restriction, Participant may exercise full voting rights and shall accrue all dividends and other distributions paid with respect to the shares of Restricted Stock while they are held. If any such dividends or distributions are paid in shares, such shares shall be subject to the same restrictions on transferability as are the shares of Restricted Stock with respect to which they were paid.

Section 6. Termination of Employment

- A. If Participant dies or his or her employment is terminated by reason of Disability during the Period of Restriction, the Period of Restriction and the restrictions imposed on the shares of Restricted Stock held by Participant at the time of Participant's death or Disability shall immediately lapse with all such Restricted Stock vesting and becoming freely transferable by Participant or his or her estate, subject to applicable federal and state securities laws.
- B. If Participant's employment is terminated by reason of Participant's retirement during the Period of Restriction on terms and conditions authorized in writing by the Committee, the Committee may exercise its discretion at or near Participant's retirement date to provide that the Period of Restriction and restrictions imposed on some or all of the shares of Restricted Stock shall lapse on a dated determined by Committee, with such shares of Restricted Stock vesting and becoming freely transferable by Participant, subject to applicable federal and state securities laws. In exercising its discretion under this Section 6B, the Committee shall consider whether Participant: (1) remained employed in good standing with the Company through Participant's retirement date; (2) provided reasonable written notice to the Company of Participant's intention to retire of no less than 12 weeks; (3) materially breached any statutory, contractual, or common law duties owed to Company or any material Company policy, including but not limited to post-employment non-competition, non-solicitation and confidentiality obligations; and (4) failed in good faith to provide to and perform

for Company all reasonably requested duties and responsibilities in connection with the transition of Participant's duties and responsibilities. In exercising its discretion, the Committee shall also consider: (a) the financial status of the Company; (b) Company performance: (c) Company stock performance; and (d) where appropriate, input from Company management. In the event the Committee does not so exercise its discretion, Participant's termination of employment by reason of retirement shall be considered a termination of employment for other reasons and Section 6C shall govern.

C. If Participant's employment terminates for any reason other than the reasons set forth in Sections 6A, 6B, 7 or 8, during the Period of Restriction, all shares of Restricted Stock held by Participant at the time of employment termination and still subject to a Period of Restriction or other restrictions shall be forfeited by Participant to the Company. The transfer of employment of Participant between the Company and any Affiliate (or between Affiliates) shall not be deemed a termination of employment for the purposes of this Award Agreement.

Section 7. Change-in-Control

In the event of a Change-in-Control of the Company during the Period of Restriction and prior to the Participant's termination of employment with the Company and its Affiliates, the Period of Restriction and restrictions imposed on the shares of Restricted Stock shall immediately lapse, with all such shares of Restricted Stock vesting and becoming freely transferable by Participant, subject to applicable federal and state securities laws.

Section 8. Acceleration of Vesting of Shares in the Event of Divestiture of Business Segment

If the "Business Segment" (as that term is defined in this Section) in which Participant is primarily employed as of the "Divestiture Date" (as that term is defined in this Section) is the subject of a "Divestiture of a Business Segment" (as that term is defined in this Section), and such divestiture results in the termination of Participant's employment with the Company and its Affiliates for any reason, the Period of Restriction and restrictions imposed on the shares of Restricted Stock subject to this Award Agreement shall immediately lapse, with all such shares of Restricted Stock vesting and becoming freely transferable by Participant, subject to applicable federal and state securities laws.

For purposes of this Award Agreement, the term "Business Segment" shall mean a business line which the Company treats as a separate operating segment under the segment reporting rules under U.S. generally accepted accounting principles, which currently includes the following: Safety and Security Systems Group and Environmental Solutions Group. Likewise, the term "Divestiture Date" shall mean the date that a transaction constituting a Divestiture of a Business Segment is finally consummated.

For purposes of this Award Agreement, the term "Divestiture of a Business Segment" means the following:

- A. When used with reference to the sale of stock or other securities of a Business Segment that is or becomes a separate corporation, limited liability company, partnership or other separate business entity, the sale, exchange, transfer, distribution or other disposition of the ownership, either beneficially or of record or both, by the Company or one of its Affiliates to "Nonaffiliated Persons" (as that term is defined in this Section) of 100% of either (a) the then-outstanding common stock (or the equivalent equity interests) of the Business Segment or (b) the combined voting power of the then-outstanding voting securities of the Business Segment entitled to vote generally in the election of the board of directors or the equivalent governing body of the Business Segment;
- B. When used with reference to the merger or consolidation of a Business Segment that is or becomes a separate corporation, limited liability company, partnership or other separate business entity, any such transaction that results in Nonaffiliated Persons owning, either beneficially or of record or both, one hundred percent (100%) of either (a) the then-outstanding common stock (or the equivalent equity interests) of the Business Segment or (b) the combined voting power of the then-outstanding voting securities of the Business Segment entitled to vote generally in the election of the board of directors or the equivalent governing body of the Business Segment; or
- C. When used with reference to the sale of the assets of the Business Segment, the sale, exchange, transfer, liquidation, distribution or other disposition of all or substantially all of the assets of the Business Segment necessary or required to operate the Business Segment in the manner that the Business Segment had been operated prior to the Divestiture Date.

For purposes of this Award Agreement, the term "Nonaffiliated Persons" shall mean any persons or business entities which do not control, or which are not controlled by or under common control with, the Company.

Section 9. Restrictions on Transfer

Unless determined otherwise by the Committee pursuant to the terms of the Plan, during the Period of Restriction, shares of Restricted Stock granted pursuant to this Award Agreement may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated (a "Transfer"), other than by will or by the laws of descent and distribution, except as provided in the Plan. If any Transfer, whether voluntary or involuntary, of shares of Restricted Stock is made, or if any attachment, execution, garnishment, or lien shall be issued against or placed upon the shares of Restricted Stock, Participant's right to such shares of Restricted Stock shall be immediately forfeited by Participant to the Company, and this Award Agreement shall terminate.

Section 10. Adjustment in Certain Events

If there is any change in the Stock by reason of stock dividends or other distribution (whether in the form of securities or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, split-off, combination, repurchase or exchange of Stock or other securities of the Company, or other similar corporate transaction or event, or changes in applicable rules, rulings, regulations or other requirements of any governmental body or securities exchange, the Committee may, in its sole discretion, make such adjustments to the Restricted Stock that it deems necessary or appropriate and as it may deem equitable in Participant's rights.

Section 11. Tax Withholding

Participant agrees to make adequate provision for any sums required to satisfy applicable federal, state, local and foreign income or employment taxes, which are Participant's sole responsibility. The Company shall not be obligated to transfer any shares of Stock until Participant pays to the Company or any of its Affiliates in cash, or any other form of property, including Stock, acceptable to the Company, the amount required to be withheld from the wages or other amounts owing to Participant with respect to such shares. Further, the Company can withhold amounts for such taxes, in accordance with any tax withholding policy that may be adopted by the Company and is in effect from time to time with respect to equity awards under the Plan (including any method allowed under Section 16(c)(ii) of the Plan) irrespective of whether the amounts to be withheld exceed the lowest tax withholding amount that could be determined for the grantee under another tax withholding method. Participant may elect, subject to procedural rules adopted by the Committee, to satisfy the applicable withholding tax requirement, in whole or in part, by having the Company reduce the number of shares of Stock otherwise transferable under this Award Agreement having an aggregate Fair Market Value on the date the tax is to be determined, equal to such applicable withholding tax requirement. Notwithstanding any provision herein to the contrary, in no event shall the amount of such tax withholding exceed the maximum statutory tax rates (or such other rate as would not trigger a negative accounting impact), as determined by the Company in its sole discretion.

Section 12. Other Tax Matters

Participant shall review with his or her own tax advisors the federal, state, local and other tax consequences, including those in addition to any tax withholding obligations, of the investment in the Restricted Shares and the transactions contemplated by this Award Agreement. Participant has the right to file an election under Section 83 of the Code. The filing of the 83(b) election is the responsibility of Participant. Participant must notify the Company of the filing on or prior to the day of making the filing.

Section 13. Section 409A

This Award Agreement shall be construed consistent with the intention that it be exempt from Section 409A of the Code (together with any Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the date hereof, "Section 409A"). However, notwithstanding any other provision of the Plan or this Award Agreement, if at any time the Committee determines that this Award (or any portion thereof) may be subject to Section 409A, the Committee shall have the right in its sole discretion (without any obligation to do so or to indemnify Participant or any other person for failure to do so) to adopt such amendments to the Plan or this Award Agreement, or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, as the Committee determines are necessary or appropriate either for this Award to be exempt from the application of Section 409A or to comply with the requirements of Section 409A.

Section 14. Source of Payment

Shares of Stock transferable to Participant, or Participant's Beneficiary, under this Award Agreement may be either Treasury shares, authorized but unissued shares, or any combination of such stock. The Company shall have no duties to segregate or set aside any assets to secure Participant's right to receive shares of Stock under this Award Agreement. Participant shall not have any rights with respect to transfer of shares of Stock under this Award Agreement other than the unsecured right to receive shares of Stock from the Company.

Section 15. Continuation of Employment

This Award Agreement shall not confer upon Participant any right to continuation of employment by the Company or its Affiliates, nor shall this Award Agreement interfere in any way with the Company's or its Affiliates' right to terminate Participant's employment at any time.

Section 16. Beneficiary Designation

Participant may designate a beneficiary or beneficiaries (contingently or successively) to receive any benefits that may be payable under this Award Agreement in the event of Participant's death and, from time to time, may change his or her designated beneficiary (a "Beneficiary"). A Beneficiary may be a trust. A Beneficiary designation shall be made in writing in a form prescribed by the Company and delivered to the Company while Participant is alive. Each such designation shall revoke all prior designations by Participant with respect to Participant's award under this Award Agreement. If Participant fails to so designate a beneficiary, or if no such designated beneficiary survives Participant, the beneficiary shall be deemed to be Participant's spouse or, if Participant is unmarried at the time of death, Participant's beneficiary shall be his or her estate.

Section 17. Entire Award; Amendment

This Award Agreement and the Plan constitute the entire agreement between the parties with respect to the terms and supersede all prior written or oral negotiations, commitments, representations and agreements with respect thereto. The terms and conditions set forth in this Award Agreement may only be modified or amended in writing, signed by both parties.

Section 18. Severability

In the event any one or more of the provisions of this Award Agreement shall be held invalid, illegal or unenforceable in any respect in any jurisdiction, such provision or provisions shall be automatically deemed amended, but only to the extent necessary to render such provision or provisions valid, legal and enforceable in such jurisdiction, and the validity, legality and enforceability of the remaining provisions of this Award Agreement shall not in any way be affected or impaired thereby.

Section 19. Miscellaneous

A. This Award Agreement and the rights of Participant hereunder are subject to all the terms and conditions of the Plan, as the same may be amended from time to time, as well as to such rules and regulations as the Committee may adopt for administration of the Plan. The Committee shall have the right to impose such restrictions on any Stock acquired pursuant to this Award Agreement, as it may deem advisable, including, without limitation, restrictions under applicable federal securities laws, under applicable federal and state tax law, under the requirements

of any stock exchange or market upon which such Stock is then listed and/or traded, and under any blue sky or state securities laws applicable to such Stock.

It is expressly understood that the Committee is authorized to administer, construe, and make all determinations necessary or appropriate to the administration of the Plan and this Award Agreement, all of which shall be binding upon Participant.

- B. The Committee may terminate, amend, or modify the Plan; provided, however, that no such termination, amendment, or modification of the Plan may materially and adversely affect Participant's rights under this Award Agreement, without the written consent of Participant.
- C. Participant agrees to take all steps necessary to comply with all applicable provisions of federal and state securities and tax laws in exercising his or her rights under this Award Agreement.
- D. This Award Agreement shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.
- E. This Award (including any proceeds, gains or other economic benefit actually or constructively received by Participant upon any receipt or exercise of any award or upon the receipt or resale of any Stock underlying the Award) shall be subject to the provisions of any clawback policy currently or subsequently implemented by the Company to the extent set forth in such policy.
- F. All obligations of the Company under the Plan and this Award Agreement, with respect to the Restricted Stock, shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/ or assets of the Company.
- G. To the extent not preempted by federal law, this Award Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, without giving effect to principles of conflict of law.
- H. This Award Agreement may be executed in one or more counterparts, all of which taken together shall constitute one agreement and executed copies may be exchanged by .pdf to the other party by e-mail and accepted and treated as originals for any and all purposes.



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Protecting people and our p	ianet
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Federal Signal Corporation	
2015 Executive Incentive Compensation	
Restricted Stock Unit Award Agreement	
	his grant of Restricted Stock Units ("Award") pursuant to the Federal Signal npensation Plan (the "Plan"), as specified below:
Participant:	
Date of Grant:	
Number of Shares of Restricted Stoo	ck Units Granted:
Vesting Date: Restricted stock units	shall vest at the time and in the amount set forth below:
on, 20_	[3-year cliff vesting]
Corporation Restricted Stock Unit Aw	rms and conditions prescribed in the Plan and in the Federal Signal ard Agreement No. 2018 attached hereto and incorporated herein. I ward agreement shall be referred to throughout each as the "Award
IN WITNESS WHEREOF, the pa	arties have caused this Award Agreement to be executed as of the Date of
PARTICIPANT:	FEDERAL SIGNAL CORPORATION
	Ву:
Print Name	Chief Executive Officer

Note: If there are any discrepancies in the name or address shown above, please make the appropriate corrections on this form.

This document constitutes part of the prospectus covering securities that have been registered under the Securities Act of 1933, as amended.

FEDERAL SIGNAL CORPORATION RESTRICTED STOCK UNIT AWARD AGREEMENT NO. 2018

This Award Agreement, which includes the attached cover page, effective as of the Date of Grant, represents the grant of Restricted Stock Units by the Company, to the Participant named in this Award Agreement, pursuant to the provisions of the Plan.

The Company established the Plan pursuant to which, among other things, options, stock appreciation rights, restricted stock and stock units, stock bonus awards, dividend equivalents and/or performance compensation awards may be granted to eligible persons.

The Plan and this Award Agreement provide a complete description of the terms and conditions governing the Restricted Stock Units. If there is any inconsistency between the terms of this Award Agreement and the terms of the Plan, the Plan's terms shall completely supersede and replace the conflicting terms of this Award Agreement. All capitalized terms shall have the meanings ascribed to them in the Plan, unless specifically set forth otherwise herein.

The Board of Directors and the Committee have determined that the interests of the Company will be advanced by encouraging and enabling certain of its employees to own shares of the Stock, and that Participant is one of those employees.

NOW, THEREFORE, in consideration of services rendered and the mutual covenants herein contained, the parties agree as follows:

Section 1. Certain Definitions

As used in this Award Agreement, the following terms shall have the following meanings:

- A. "Affiliate" means with respect to any Person, any other Person (other than an individual) that controls, is controlled by, or is under common control with such Person. The term "control," as used in this Award Agreement, means the power to direct or cause the direction of the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise. "Controlled" and "controlling" have meanings correlative to the foregoing.
 - B. "Award" means the award provided for in Section 2.
 - C. "Board of Directors" means the board of directors of the Company.
 - D. "Code" means the Internal Revenue Code of 1986, as amended.
- E. "Committee" means the Compensation and Benefits Committee of the Board of Directors or a subcommittee or other committee appointed to administer the Plan in accordance with the Plan.
 - F. "Company" means Federal Signal Corporation, a Delaware corporation.
 - G. "Date of Grant" means the date set forth on this Award Agreement.
- H. "Disability" shall have the meaning ascribed to that term in the Company's long-term disability plan applicable to Participant, or if no such plan exists, at the discretion of the Committee and as determined by the Committee.
 - I. "Fair Market Value" shall have the meaning set forth in the Plan.
- J. "Participant" means the individual shown as the recipient of the Restricted Stock Units, as set forth on this Award Agreement.
- K. "Person" means a "person" as such term is used for purposes of 13(d) or 14(d), or any successor section thereto, of the Securities Exchange Act of 1934, as amended, and any successor thereto.

- L. "Restricted Stock Unit" means the obligation of the Company to transfer one share of Stock to Participant at the time provided in Section 6 of this Award Agreement, provided such Restricted Stock Unit is vested at such time.
 - M. "Stock" means the common stock of the Company.
- N. "Vesting Date" means the date upon which the Restricted Stock Unit becomes vested as set forth in either Section 4 or 5 of this Award Agreement.

Section 2. Award

Subject to the terms of this Award Agreement, the Company hereby grants to Participant the number of Restricted Stock Units set forth on this Award Agreement, effective as of the Date of Grant set forth on such instrument.

This grant of Restricted Stock Units shall not confer any right to Participant (or any other participant) to be granted Restricted Stock Units or other awards in the future under the Plan.

Section 3. Bookkeeping Account

The Company shall record the number of Restricted Stock Units granted hereunder to a bookkeeping account for Participant (the "Restricted Stock Unit Account"). Participant's Restricted Stock Unit Account shall be reduced by the number of Restricted Stock Units, if any, forfeited in accordance with Section 4 and by the number of shares of Stock transferred to Participant in accordance with Section 6 with respect to such Restricted Stock Units.

Section 4. Vesting

Subject to the accelerated vesting provisions provided below, the Restricted Stock Units shall vest on the third anniversary of the Date of Grant, if Participant remains employed by the Company or its Affiliates through such date.

If, while employed by the Company or its Affiliates, Participant dies or his or her employment terminates by reason of Disability before the third anniversary of the Date of Grant, all of the Restricted Stock Units granted pursuant to Section 2 shall become fully vested on the date of such death or Disability, as applicable.

If, while Participant is employed by the Company or its Affiliate, a Change-in-Control occurs, all of the Restricted Stock Units granted pursuant to Section 2 shall become fully vested on the date of such Change-in-Control.

Except as provided in Section 5 below, if Participant's employment with the Company and its Affiliates is terminated for any other reason before the third anniversary of the Date of Grant, all Restricted Stock Units that are not vested at the time of such termination of employment (after first taking into account the accelerated vesting provisions of this Section 4 and Section 5 below) shall be forfeited.

Section 5. Acceleration of Vesting of Shares in the Event of Divestiture of Business Segment

If the "Business Segment" (as that term is defined in this Section) in which Participant is primarily employed as of the "Divestiture Date" (as that term is defined in this Section) is the subject of a "Divestiture of a Business Segment" (as that term is defined in this Section), and such divestiture results in the termination of Participant's employment with the Company and its Affiliates for any reason, the Restricted Stock Units shall become fully vested on the Divestiture Date.

For purposes of this Award Agreement, the term "Business Segment" shall mean a business line which the Company treats as a separate operating segment under the segment reporting rules under U.S. generally accepted accounting principles, which currently includes the following: Safety and Security Systems Group and Environmental Solutions Group. Likewise, the term "Divestiture Date" shall mean the date that a transaction constituting a Divestiture of a Business Segment is finally consummated.

For purposes of this Award Agreement, the term "Divestiture of a Business Segment" means the following:

A. When used with a reference to the sale of stock or other securities of a Business Segment that is or becomes a separate corporation, limited liability company, partnership or other separate business entity, the sale, exchange, transfer, distribution or other disposition of the ownership, either beneficially or of record or both, by the Company or one of its Affiliates to "Nonaffiliated Persons" (as that term is defined in this Section) of 100% of either (i) the then-outstanding common stock (or the equivalent equity interests) of the Business Segment or (ii) the combined

voting power of the then-outstanding voting securities of the Business Segment entitled to vote generally in the election of the board of directors or the equivalent governing body of the Business Segment;

- B. When used with reference to the merger or consolidation of a Business Segment that is or becomes a separate corporation, limited liability company, partnership or other separate business entity, any such transaction that results in Nonaffiliated Persons owning, either beneficially or of record or both, 100% of either (i) the thenoutstanding common stock (or the equivalent equity interests) of the Business Segment or (ii) the combined voting power of the then-outstanding voting securities of the Business Segment entitled to vote generally in the election of the board of directors or the equivalent governing body of the Business Segment; or
- C. When used with reference to the sale of the assets of the Business Segment, the sale, exchange, transfer, liquidation, distribution or other disposition of all or substantially all of the assets of the Business Segment necessary or required to operate the Business Segment in the manner that the Business Segment had been operated prior to the Divestiture Date.

For purposes of this Award Agreement, the term "Nonaffiliated Persons" shall mean any persons or business entities which do not control, or which are not controlled by or under common control with, the Company.

Section 6. Distribution of Shares

Subject to the provisions below, shares of Stock equal to the number of Restricted Stock Units credited to the Restricted Stock Unit Account of Participant shall become distributable on the Vesting Date.

Actual distribution of shares of Stock with respect to vested Restricted Stock Units will occur as soon as administratively feasible, but in no event more than 60 days after such shares become distributable as described in this Section 6.

Section 7. Stockholder Rights

Participant shall not have any of the rights of a stockholder of the Company with respect to Restricted Stock Units. No dividend equivalent rights are provided under this Award Agreement.

Section 8. Beneficiary Designation

Participant may designate a beneficiary or beneficiaries (contingently or successively) to receive any benefits that may be payable under this Award Agreement in the event of Participant's death and, from time to time, may change his or her designated beneficiary (a "Beneficiary"). A Beneficiary may be a trust. A Beneficiary designation shall be made in writing in a form prescribed by the Company and delivered to the Company while Participant is alive. Each such designation shall revoke all prior designations by Participant with respect to Participant's award under this Award Agreement. If Participant fails to so designate a beneficiary, or if no such designated beneficiary survives Participant, the beneficiary shall be deemed to be Participant's spouse or, if Participant is unmarried at the time of death, Participant's beneficiary shall be his or her estate. In lieu of payment to Participant, a Beneficiary shall be paid shares of Stock under Section 6.

Section 9. Restrictions on Transfer

Restricted Stock Units awarded hereunder shall not be transferable by Participant. Except as may be required by the federal income tax withholding provisions of the Code or by the tax laws of any state or foreign sovereign, the interests of Participant and his or her Beneficiary(ies) under this Award Agreement are not subject to the claims of their respective creditors and may not be voluntarily or involuntarily sold, assigned, transferred, alienated, pledged, attached, encumbered or charged. Any attempt by Participant or a Beneficiary to sell, assign, transfer, alienate, pledge, attach, encumber, charge or otherwise dispose of any right to benefits payable hereunder shall be void.

Section 10. Adjustment in Certain Events

If there is any change in the Stock by reason of stock dividends or other distribution (whether in the form of securities or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, split-off, combination, repurchase or exchange of Stock or other securities of the Company, or other similar corporate transaction or event, or changes in applicable rules, rulings, regulations or other requirements of any governmental body or securities exchange, the Committee may, in its sole discretion, make such adjustments to the

number of Restricted Stock Units credited to Participant's Restricted Stock Unit Account that it deems necessary or appropriate and as it may deem equitable in Participant's rights.

Section 11. Tax Withholding

The Company shall not be obligated to transfer any shares of Stock until Participant pays to the Company or any of its Affiliates in cash, or any other form of property, including Stock, acceptable to the Company, the amount required to be withheld from the wages or other amounts owing to Participant with respect to such shares. Participant may elect, subject to procedural rules adopted by the Committee, to satisfy the applicable withholding requirement, in whole or in part, by having the Company reduce the number of shares of Stock otherwise transferable under this Award Agreement having an aggregate Fair Market Value on the date the tax is to be determined, equal to such applicable withholding requirement.

Section 12. Section 409A

This Award Agreement shall be construed consistent with the intention that it be exempt from Section 409A of the Code (together with any Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the date hereof, "Section 409A"). However, notwithstanding any other provision of the Plan or this Award Agreement, if at any time the Committee determines that this Award (or any portion thereof) may be subject to Section 409A, the Committee shall have the right in its sole discretion (without any obligation to do so or to indemnify Participant or any other person for failure to do so) to adopt such amendments to the Plan or this Award Agreement, or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, as the Committee determines are necessary or appropriate either for this Award to be exempt from the application of Section 409A or to comply with the requirements of Section 409A.

Section 13. Source of Payment

Shares of Stock transferable to Participant, or Participant's Beneficiary, under this Award Agreement may be either Treasury shares, authorized but unissued shares, or any combination of such stock. The Company shall have no duties to segregate or set aside any assets to secure Participant's right to receive shares of Stock under this Award Agreement. Participant shall not have any rights with respect to transfer of shares of Stock under this Award Agreement other than the unsecured right to receive shares of Stock from the Company.

Section 14. Continuation of Employment

This Award Agreement shall not confer upon Participant any right to continuation of employment by the Company or its Affiliates, nor shall this Award Agreement interfere in any way with the Company's or its Affiliates' right to terminate Participant's employment at any time.

Section 15. English Language

Participant acknowledges and agrees that it is Participant's express intent that this Award Agreement, the Plan and all other documents, rules, procedures, forms, notices and legal proceedings entered into, given or instituted pursuant to the Award, be drawn up in English. If Participant has received this Award Agreement, the Plan or any other rules, procedures, forms or documents related to the Award 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.

Section 15. Entire Award; Amendment

This Award Agreement and the Plan constitute the entire agreement between the parties with respect to the terms and supersede all prior written or oral negotiations, commitments, representations and agreements with respect thereto. The terms and conditions set forth in this Award Agreement may only be modified or amended in writing, signed by both parties.

Section 16. Severability

In the event any one or more of the provisions of this Award Agreement shall be held invalid, illegal or unenforceable in any respect in any jurisdiction, such provision or provisions shall be automatically deemed amended, but only to the extent necessary to render such provision or provisions valid, legal and enforceable in such jurisdiction,

and the validity, legality and enforceability of the remaining provisions of this Award Agreement shall not in any way be affected or impaired thereby.

Section 17. Miscellaneous

A. This Award Agreement and the rights of Participant hereunder are subject to all the terms and conditions of the Plan, as the same may be amended from time to time, as well as to such rules and regulations as the Committee may adopt for administration of the Plan. The Committee shall have the right to impose such restrictions on any Stock acquired pursuant to this Award Agreement, as it may deem advisable, including, without limitation, restrictions under applicable federal securities laws, under applicable federal and state tax law, under the requirements of any stock exchange or market upon which such Stock is then listed and/or traded, and under any blue sky or state securities laws applicable to such Stock.

It is expressly understood that the Committee is authorized to administer, construe, and make all determinations necessary or appropriate to the administration of the Plan and this Award Agreement, all of which shall be binding upon Participant.

- B. The Committee may terminate, amend, or modify the Plan; provided, however, that no such termination, amendment, or modification of the Plan may materially and adversely affect Participant's rights under this Award Agreement, without the written consent of Participant.
- C. Participant agrees to take all steps necessary to comply with all applicable provisions of federal and state securities and tax laws in exercising his or her rights under this Award Agreement.
- D. This Award Agreement shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.
- E. This Award (including any proceeds, gains or other economic benefit actually or constructively received by Participant upon any receipt or exercise of any Award or upon the receipt or resale of any Stock underlying the Award) shall be subject to the provisions of any clawback policy currently or subsequently implemented by the Company to the extent set forth in such policy.
- F. All obligations of the Company under the Plan and this Award Agreement, with respect to these Restricted Stock Units, shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.
- G. To the extent not preempted by federal law, this Award Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, without giving effect to principles of conflict of laws.
- H. This Award Agreement may be executed in one or more counterparts, all of which taken together shall constitute one agreement and executed copies may be exchanged by .pdf to the other party by e-mail and accepted and treated as originals for any and all purposes.

FIRST AMENDMENT TO THE FEDERAL SIGNAL CORPORATION RETIREMENT SAVINGS PLAN

(As Amended and Restated Effective as of January 1, 2015)

WHEREAS, Federal Signal Corporation (the "Company") maintains the Federal Signal Corporation Retirement Savings Plan (As Amended and Restated Effective as of January 1, 2015) (the "Plan") for the benefit of its eligible employees; and

WHEREAS, amendment of the Plan now is considered desirable;

NOW, THEREFORE, by virtue of the power granted to the Benefits Planning Committee by Subsection 16.1 of the Plan, the Plan be and is hereby amended in the following particulars, effective January 1, 2018, unless otherwise specified:

- 1. By replacing the first sentence of Subsection 2.21 of the Plan with the following:
- "Compensation' means compensation as defined in Treasury Regulation Section 1.414(s)-1(c)(4)."
- 2. By replacing Subsection 2.24 of the Plan with the following:
- "Employer' means the Company, which, for the purposes of extending the Plan to employees of Related Employers, shall include Federal Signal Corporation; Elgin Sweeper Company; Guzzler Manufacturing, Inc.; Jetstream of Houston, Inc.; Vactor Manufacturing, Inc.; Victor Products USA, Inc.; effective January 1, 2018, Joe Johnson Equipment LLC; and each other Related Employer who extends the Plan to its Employees with the consent of the Benefits Planning Committee."
- 3. By adding the following sentence to the end of Subsection 2.56 of the Plan:
- "Effective January 1, 2018, Retirement Account as defined in this Subsection will be referred to elsewhere in the Plan as 'Service Based Contribution Account'."

- 4. By substituting the reference to "Service Based Contribution Account" for the reference to "Retirement Account" where the latter reference appears in the Plan.
 - 5. By adding the following sentence to the end of Subsection 2.57 of the Plan:

"Effective January 1, 2018, Retirement Contributions as defined in this Subsection will be referred to elsewhere in the Plan as 'Service Based Contributions'."

- 6. By substituting the reference to "Service Based Contributions" for the reference to "Retirement Contributions" where the latter reference appears in the Plan.
- 7. Effective as of July 1, 2017, by adding the following sentences to the end of Subsection 3.2(b) of the Plan:

"Effective as of July 1, 2017, no Sheet Metal Workers Local 265
Employee, as described in Subsection 2.62 of the Plan, shall become eligible to become a Participant in the Plan. Sheet Metal Workers Local 265 Employees who are Participants in the Plan as of July 1, 2017 shall continue to be eligible Participants, until they no longer satisfy the requirements of Subsection 2.62 of the Plan. Sheet Metal Workers Local 265 Employees who previously were Participants in the Plan, who no longer satisfy the definition of 2.62, and who again satisfy the definition of 2.62 on or after July 1, 2017, shall not become eligible to become a Participant in the Plan on or after that date."

8. By substituting the following for the first sentence of Subsection 3.2 of the Plan:

"If otherwise permitted by the Plan or the applicable Employer, each Employee who is not described in Subsection 3.1 shall become a Participant with respect to Pre-Tax, After-Tax, Catch-Up and Matching Contributions (if applicable) effective on the first payroll period beginning as soon as administratively feasible on or after his or her Employment or Reemployment Date, subject to Paragraphs (a), (b), (c) and (d) below:"

- 9. By replacing Subsection 3.3(c) of the Plan with the following:
- "(c) Notwithstanding any provision of the Plan to the contrary, the following Employees are not eligible to become Participants with respect to Service Based Contributions: IAM Local 701 Employees, Sheet Metal Workers Local 265 Employees, Guzzler Union Employees and Joe Johnson Equipment LLC Employees.
- 10. By replacing the first sentence of Subsection 4.1(a) of the Plan with the following:
 - "Subject to the conditions and limitations of the Plan, (i) each Participant whose participation in the Plan is not subject to a collective bargaining agreement; and (ii) effective January 1, 2018, each eligible Participant who (A) is an IBEW Local 134 Employee and (B) is employed at the Company's Signal Division; who does not make an affirmative Pre-Tax Contribution election (including an election to not make Pre-Tax Contributions) within 30 days of first becoming eligible shall be deemed to have elected a Pre-Tax Contribution rate of 2% of Compensation for the Plan Year."
- 11. By replacing the first sentence of Subsection 4.1(c) of the Plan with the following:
 - "Subject to the conditions and limitations of the Plan, (i) each Participant whose participation in the Plan is not subject to a collective bargaining agreement; and (ii) effective January 1, 2018, each eligible Participant who (A) is an IBEW Local 134 Employee and (B) is employed at the Company's Signal Division; shall be deemed to have elected to increase his or her Pre-Tax Contribution rate by one percentage point effective each January 1; provided, that such automatic annual increase shall not apply to the extent such increase would cause the Participant's Pre-Tax Contribution rate to exceed 10%."
- 12. By replacing Subsection 5.1(a) of the Plan with the following:
- "(a) General Rule. Subject to the conditions and limitations of the Plan, effective for contributions made with respect to pay periods on or after January 1, 2018, the Employer of each eligible Participant who is not subject to a collective bargaining agreement (unless explicitly described below) shall make Matching Contributions each payroll period in an amount equal to 100% of the first 3%, and 50% of the next 2%, of Compensation that the Participant contributes as Pre-Tax Contributions during the applicable pay period."

- 13. By replacing Subsection 5.2(a) of the Plan with the following:
- "(a) General Rule. Subject to the conditions and limitations of the Plan, effective for contributions made with respect to pay periods on or after January 1, 2018, the Employer of each eligible Participant who is not subject to a collective bargaining agreement or a non-union Employee of Joe Johnson Equipment LLC (unless explicitly described below), shall make Service Based Contributions at the end of the applicable Plan Year in an amount calculated as a percentage of the Participant's Compensation, using a formula based on the Participant's full years of Vesting Service determined each January 1, in accordance with the following table:

Years of Vesting Service as of January 1	Service Based Contribution <u>Percentage</u>
Less than 5	$^{1}\!/_{2}^{0}\!/_{0}$
5 to 15	1½%
15 or more	3%

In order to be eligible for such Service Based Contribution, a Participant must be employed by the Employer on the last day of the Plan Year. Notwithstanding any provision of the Plan to the contrary, no Participant who is eligible for and elects to participate in, and thereby receives a Service Based Contribution under the Federal Signal Corporation Savings Restoration Plan is eligible to receive Service Based Contributions under this Plan."

- 14. By replacing Subsection 9.2(a) of the Plan with the following:
- "(a) Matching Contributions made with respect to Compensation deferred for payroll periods commencing on or after January 1, 2018 on behalf of each Participant not subject to a collective bargaining agreement shall be immediately 100% vested. Except as provided in Paragraph (b), (c), (d), (e) or (f) below, Matching Contributions made with respect to Compensation deferred for payroll periods commencing prior to January 1, 2018 on behalf of each Participant not subject to a collective bargaining agreement shall vest in accordance with the following table:

Number of Years of Vesting Service	Vesting <u>Percentage</u>
Less than 3	0%
3 or more	100%"

15. By adding the following parenthetical phrase to the end of Subsection 9.2(b)(iii) of the Plan, immediately preceding the semicolon and the word "and" at the end thereof:

"(with respect to Matching Contributions made for Compensation deferred for payroll periods commencing prior to January 1, 2007)"

- 16. By replacing Subsection 9.3(a) of the Plan with the following:
- "(a) Service Based Contributions made with respect to Compensation attributable to payroll periods commencing on or after January 1, 2018 on behalf of each Participant not subject to a collective bargaining agreement shall be immediately 100% vested. Except as provided in Paragraph (b), (c), (d) or (e) below, Service Based Contributions made with respect to Compensation attributable to payroll periods commencing prior to January 1, 2018 on behalf of each Participant not subject to a collective bargaining agreement shall vest in accordance with the following table:

Number of Years of Vesting Service	of			Vesting Percentage
Less than 3				0%
3 or more				100%"
*		*	*	

IN WITNESS WHEREOF, this Amendment has been executed by the Benefits Planning Committee on behalf of the Company, this <u>28</u> day of <u>December</u>, 2017.

FEDERAL SIGNAL CORPORATION BENEFITS PLANNING COMMITTEE

/s/ Julie A. Cook

Vice President, Human Resources, Julie A. Cook

CEO Certification under Section 302 of the Sarbanes-Oxley Act

I, Jennifer L. Sherman, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Federal Signal 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.

Date: August 7, 2018

/s/ Jennifer L. Sherman

Jennifer L. Sherman

President and Chief Executive Officer
(Principal Executive Officer)

CFO Certification under Section 302 of the Sarbanes-Oxley Act

I, Ian A. Hudson, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Federal Signal 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.

Date: August 7, 2018

/s/ Ian A. Hudson

Ian A. Hudson

Senior Vice President and Chief Financial Officer (Principal Financial Officer)

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 (18 U.S.C. SECTION 1350)

In connection with the Quarterly Report of Federal Signal Corporation (the "Company") on Form 10-Q for the period ended June 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jennifer L. Sherman, President and Chief Executive Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (15 U.S.C. 78m or 780 (d)); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 7, 2018

/s/ Jennifer L. Sherman

Jennifer L. Sherman

President and Chief Executive Officer
(Principal Executive Officer)

This certification accompanies the Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section. This certification shall also not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange act of 1934, as amended, except to the extent that the Company specifically incorporates it by reference.

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 (18 U.S.C. SECTION 1350)

In connection with the Quarterly Report of Federal Signal Corporation (the "Company") on Form 10-Q for the period ended June 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Ian A. Hudson, Senior Vice President and Chief Financial Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (15 U.S.C. 78m or 780 (d)); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 7, 2018

/s/ Ian A. Hudson

Ian A. Hudson
Senior Vice President and Chief Financial Officer
(Principal Financial Officer)

This certification accompanies the Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section. This certification shall also not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange act of 1934, as amended, except to the extent that the Company specifically incorporates it by reference.

News From



REGENCY TOWERS, 1415 W. 22ND ST., OAK BROOK, ILLINOIS 60523

FOR IMMEDIATE RELEASE

Federal Signal Raises Full-Year Outlook after Outstanding Second Quarter

Oak Brook, Illinois, August 7, 2018 — Federal Signal Corporation (NYSE:FSS), a leader in environmental and safety solutions, today reported results for the second quarter ended June 30, 2018.

- Net sales of \$291 million, up \$67 million, or 30%, from last year, including organic growth of \$27 million, or 13%
- Orders of \$278 million, up \$7 million from last year, including organic growth of 3%
- GAAP EPS of \$0.44, up from \$0.19 last year
- Adjusted EPS of \$0.45, up from \$0.23 last year
- Raising full-year adjusted EPS* outlook to a range of \$1.26 to \$1.32, which would equate to year-over-year improvement of between 48% and 55%

Consolidated net sales for the second quarter were \$291.0 million, up \$66.6 million, or 30% versus the same quarter a year ago. Second quarter income from continuing operations was \$26.9 million, equal to \$0.44 per diluted share, compared to \$11.5 million, equal to \$0.19 per share, in the prior-year quarter.

The Company also reported adjusted net income from continuing operations for the second quarter of \$27.5 million, equal to \$0.45 per diluted share, compared to \$13.8 million, or \$0.23 per diluted share, in the same quarter a year ago. The Company is reporting adjusted results to facilitate comparisons of underlying performance on a year-over-year basis. A reconciliation of these and other non-GAAP measures is provided at the conclusion of this news release.

Outstanding Q2 Results Exceed Expectations; Reflect Significant Increases in Sales and Income

"With the schedule for deliveries within our backlog entering the quarter, and the effects of the extended winter season which lingered in much of North America into late March, we were anticipating a strong second quarter," commented Jennifer L. Sherman, President and Chief Executive Officer. "Our results exceeded those expectations, reflecting significant year-over-year growth in both the top and bottom line. Our 30% sales growth included the effects of continued momentum on our organic growth initiatives, like our expansion into the utility market, higher rental and aftermarket demand, and a full quarter of activity in what is typically a seasonally-strong quarter for TBEI. Our adjusted EBITDA margin of 16.4% exceeded our target range, benefiting from actions taken in response to increasing commodity costs, favorable sales mix and operational efficiencies associated with increased production levels. I was also pleased with our strong order intake, including 3% organic growth, despite the pull forward of orders noted in the previous two quarters."

In the Environmental Solutions Group, net sales were up \$59.0 million, or 34%, primarily due to organic sales improvement of \$19.6 million, or 13%, driven by increased shipments of vacuum trucks and street sweepers, higher rental income, improved parts sales, and \$39.4 million of incremental net sales resulting from the TBEI acquisition, which was completed in June 2017. Sales in the Safety and Security Systems Group increased by \$7.6 million, or 15%, primarily due to higher global sales of public safety products.

Consolidated second quarter operating income was \$38.1 million, up \$19.3 million, or 103%, compared to the prior-year quarter, primarily driven by a \$16.2 million increase within the Environmental Solutions Group. Consolidated operating margin was 13.1%, up from 8.4% in the prior-year quarter.

Consolidated adjusted earnings before interest, tax, depreciation and amortization ("adjusted EBITDA") for the second quarter of 2018 was \$47.8 million, up \$18.8 million, or 65%, compared to the prior-year quarter, and consolidated adjusted EBITDA margin was 16.4%, compared to 12.9% last year.

Adjusted EBITDA in the Environmental Solutions Group was up \$16.5 million, or 56%, to \$45.8 million, and its adjusted EBITDA margin was 19.6%, up from 16.8% last year. Within the Safety and Security Systems Group, adjusted EBITDA was \$9.2 million, compared to \$6.7 million last year, and its adjusted EBITDA margin was 15.9%, compared to 13.4% last year.

Consolidated orders were \$277.6 million for the second quarter of 2018, up \$6.5 million, or 2%, compared to the prior-year quarter. The Environmental Solutions Group reported orders of \$217.3 million, an increase of \$2.6 million, or 1%, compared to the prior-year quarter, and orders within the Safety and Security Systems Group improved by \$3.9 million, or 7%. Consolidated backlog at June 30, 2018 was \$322 million, up \$100 million, or 45%, compared to last year.

Strong Financial Position and Healthy Cash Flow Support Additional Debt Reduction and Cash Returns to Shareholders

Net cash of \$27.5 million was provided by continuing operating activities in the second quarter of 2018, which facilitated additional debt repayments of \$18.0 million. At June 30, 2018, consolidated debt was \$248 million, total cash and cash equivalents were \$36 million and the Company had \$140 million of availability for borrowings under its credit facility.

"Since we completed the TBEI acquisition a little over a year ago, we have paid down approximately \$61 million of borrowings, lowering our debt leverage ratio at the end of the quarter to 1.8 times adjusted EBITDA," said Sherman. "Our strong financial position allows us to continue to pursue strategic acquisitions, invest in new product development initiatives, and fund cash returns to shareholders."

The Company also funded dividends of \$4.8 million during the second quarter, reflecting an increased dividend of \$0.08 per share, and the Board of Directors recently declared a similar dividend that will be payable in the third quarter.

Outlook

"With our current backlog, favorable conditions in our end markets and continued traction on our organic growth initiatives, we are expecting our adjusted EPS* in the second half of 2018 to improve by 21% to 33% in comparison to the same period of last year, despite headwinds associated with increased commodity costs," Sherman noted. "With that, and the outstanding performance in the second quarter, we are raising our full-year 2018 adjusted EPS* outlook to a new range of \$1.26 to \$1.32, from a range of \$1.15 to \$1.22. That would equate to an improvement of between 48% and 55% over last year."

CONFERENCE CALL

Federal Signal will host its second quarter conference call on Tuesday, August 7, 2018 at 10:00 a.m. Eastern Time. The call will last approximately one hour. The call may be accessed over the internet through Federal Signal's website at http://www.federalsignal.com or by dialing phone number 1-800-263-0877 and entering the pin number 7938186. A replay will be available on Federal Signal's website shortly after the call.

About Federal Signal

Federal Signal Corporation (NYSE: FSS) provides products and services to protect people and our planet. Founded in 1901, Federal Signal is a leading global designer, manufacturer and supplier of products and total solutions that serve municipal, governmental, industrial and commercial customers. Headquartered in Oak Brook, Ill., with manufacturing facilities worldwide, the Company operates two groups: Environmental Solutions and Safety and Security Systems. For more information on Federal Signal, visit: http://www.federalsignal.com.

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995

This release contains unaudited financial information and various forward-looking statements as of the date hereof and we undertake no obligation to update these forward-looking statements regardless of new developments or otherwise. Statements in this release that are not historical are forward-looking statements. Such statements are subject to various risks and uncertainties that could cause actual results to vary materially from those stated. Such risks and uncertainties include but are not limited to: economic conditions in various regions; product and price competition; supplier and raw material prices; risks associated with acquisitions such as integration of operations and achieving anticipated revenue and cost benefits; foreign currency exchange rate changes; interest rate changes; increased legal expenses and litigation results; legal and regulatory developments and other risks and uncertainties described in filings with the Securities and Exchange Commission.

Contact: Ian Hudson, Chief Financial Officer, +1-630-954-2000, ihudson@federalsignal.com

^{*} Adjusted EPS is a non-GAAP measure, which includes certain adjustments to reported GAAP net income and diluted EPS. Our outlook assumes certain adjustments to exclude the impact of acquisition and integration-related expenses, purchase accounting effects and hearing loss settlement charges, where applicable. In 2017, we also made adjustments to exclude the impact of restructuring activity, executive severance costs, pension settlement charges, and special tax items, where applicable. Should any similar items occur during 2018, we would expect to exclude them from the determination of adjusted EPS. However, because of the underlying uncertainty in quantifying amounts which may not yet be known, a reconciliation of our Adjusted EPS outlook to the most applicable GAAP measure is excluded based on the unreasonable efforts exception in Item 10(e)(1)(i)(ii).

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

	Three Mo	nths ne 30,			nded		
(in millions, except per share data)	2018		2017		2018		2017
Net sales	\$ 291.0	\$	224.4	\$	540.7	\$	402.2
Cost of sales	 211.8		169.7		399.6		303.9
Gross profit	79.2		54.7		141.1		98.3
Selling, engineering, general and administrative expenses	40.7		34.8		82.5		66.2
Acquisition and integration-related expenses	0.4		1.0		0.9		1.5
Restructuring			0.1		_		0.4
Operating income	38.1		18.8		57.7		30.2
Interest expense	2.5		1.3		5.0		1.9
Other expense (income), net	0.4		(0.1)		0.5		(0.3)
Income before income taxes	35.2		17.6		52.2		28.6
Income tax expense	8.3		6.1		12.4		9.9
Income from continuing operations	26.9		11.5		39.8		18.7
Loss from discontinued operations and disposal, net of income tax			(0.1)		_		
Net income	\$ 26.9	\$	11.4	\$	39.8	\$	18.7
Basic earnings per share:							
Earnings from continuing operations	\$ 0.45	\$	0.19	\$	0.67	\$	0.31
Loss from discontinued operations and disposal, net of tax	_		_		_		_
Net earnings per share	\$ 0.45	\$	0.19	\$	0.67	\$	0.31
Diluted earnings per share:							
Earnings from continuing operations	\$ 0.44	\$	0.19	\$	0.65	\$	0.31
Loss from discontinued operations and disposal, net of tax			_		_		
Net earnings per share	\$ 0.44	\$	0.19	\$	0.65	\$	0.31
Weighted average common shares outstanding:							
Basic	59.9		59.7		59.9		59.7
Diluted	61.0		60.3		60.9		60.3
Cash dividends declared per common share	\$ 0.08	\$	0.07	\$	0.15	\$	0.14
Operating data:							
Operating margin	13.1%)	8.4%		10.7%		7.5%
Adjusted EBITDA	\$ 47.8	\$	29.0	\$	77.3	\$	48.0
Adjusted EBITDA margin	16.4%)	12.9%		14.3%		11.9%
Total orders	\$ 277.6	\$	271.1	\$	607.3	\$	485.7
Backlog	322.3		222.7		322.3		222.7
Depreciation and amortization	9.0		6.6		17.6		12.3

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES

CONDENSED CONSOLIDATED BALANCE SHEETS

	J	June 30, 1 2018		ember 31, 2017
(in millions, except per share data)	(U	naudited)		
ASSETS				
Current assets:				
Cash and cash equivalents	\$	36.0	\$	37.5
Accounts receivable, net of allowances for doubtful accounts of \$1.3 and \$1.1, respectively		131.2		118.2
Inventories		147.7		137.2
Prepaid expenses and other current assets		10.1		10.9
Total current assets		325.0		303.8
Properties and equipment, net of accumulated depreciation of \$113.9 and \$108.9, respectively		61.0		60.1
Rental equipment, net of accumulated depreciation of \$22.3 and \$20.0, respectively		94.2		87.2
Goodwill		376.0		377.3
Intangible assets, net of accumulated amortization of \$9.5 and \$5.5, respectively		147.4		151.8
Deferred tax assets		4.6		6.2
Deferred charges and other assets		7.5		5.4
Long-term assets of discontinued operations		0.5		0.5
Total assets	\$	1,016.2	\$	992.3
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Current portion of long-term borrowings and capital lease obligations	\$	0.3	\$	0.3
Accounts payable		66.3		51.5
Customer deposits		8.6		6.5
Accrued liabilities:				
Compensation and withholding taxes		22.1		22.2
Other current liabilities		53.4		36.1
Current liabilities of discontinued operations		0.5		0.5
Total current liabilities		151.2		117.1
Long-term borrowings and capital lease obligations		247.8		277.4
Long-term pension and other postretirement benefit liabilities		53.3		56.6
Deferred gain		7.8		8.7
Deferred tax liabilities		46.8		45.4
Other long-term liabilities		15.4		28.2
Long-term liabilities of discontinued operations		1.5		1.5
Total liabilities		523.8		534.9
Stockholders' equity:				
Common stock, \$1 par value per share, 90.0 shares authorized, 66.3 and 66.1 shares issued, respectively		66.3		66.1
Capital in excess of par value		212.7		207.7
Retained earnings		377.4		346.6
Treasury stock, at cost, 6.1 and 6.1 shares, respectively		(86.7)		(86.1)
Accumulated other comprehensive loss		(77.3)		(76.9)
Total stockholders' equity		492.4		457.4
Total liabilities and stockholders' equity	\$	1,016.2	\$	992.3

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

		Six Mont Jun	hs Ende e 30,		
(in millions)		2018	2	2017	
Operating activities:					
Net income	\$	39.8	\$	18.7	
Adjustments to reconcile net income to net cash provided by operating activities:					
Depreciation and amortization		17.6		12.3	
Deferred financing costs		0.2		0.2	
Deferred gain		(0.9)		(1.0)	
Stock-based compensation expense		4.0		2.7	
Pension expense, net of funding		(3.2)		(2.8)	
Changes in fair value of contingent consideration and deferred payment		0.6		0.5	
Deferred income taxes		2.0		2.8	
Changes in operating assets and liabilities		(22.3)		12.4	
Net cash provided by continuing operating activities		37.8		45.8	
Net cash used for discontinued operating activities				(0.3)	
Net cash provided by operating activities		37.8		45.5	
Investing activities:					
Purchases of properties and equipment		(7.0)		(2.7)	
Proceeds from (payments for) acquisition-related activity		3.0		(269.2)	
Other, net		0.1		0.1	
Net cash used for continuing investing activities		(3.9)		(271.8)	
Net cash used for discontinued investing activities		_		(1.1)	
Net cash used for investing activities		(3.9)		(272.9)	
Financing activities:					
(Decrease) increase in revolving lines of credit, net		(26.6)		223.0	
Payments of debt financing fees				(0.2)	
Redemptions of common stock to satisfy withholding taxes related to stock-based compensation		(0.3)		(2.4)	
Cash dividends paid to stockholders		(9.0)		(8.4)	
Proceeds from stock-based compensation activity		0.9		1.2	
Other, net		0.1		(0.2)	
Net cash (used for) provided by continuing financing activities		(34.9)		213.0	
Net cash used for discontinued financing activities		(2 <i>)</i>			
Net cash (used for) provided by financing activities		(34.9)		213.0	
Effects of foreign exchange rate changes on cash and cash equivalents		(0.5)		0.7	
Decrease in cash and cash equivalents		(1.5)		(13.7)	
Cash and cash equivalents at beginning of year		37.5		50.7	
Cash and cash equivalents at end of period	\$	36.0	\$	37.0	
	_				

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES

GROUP RESULTS (Unaudited)

The following tables summarize group operating results as of and for the three and six months ended June 30, 2018 and 2017:

Environmental Solutions Group

	Three Months Ended June 30,				Six Months Ended June 30,							
(\$ in millions)		2018		2017	(Change		2018		2017	(Change
Net sales	\$	233.3	\$	174.3	\$	59.0	\$	429.9	\$	302.1	\$	127.8
Operating income		37.2		21.0		16.2		57.8		31.3		26.5
Adjusted EBITDA		45.8		29.3		16.5		74.8		44.8		30.0
Operating data:												
Operating margin		15.9%		12.0%		3.9%		13.4%		10.4%		3.0%
Adjusted EBITDA margin		19.6%		16.8%		2.8%		17.4%		14.8%		2.6%
Total orders	\$	217.3	\$	214.7	\$	2.6	\$	491.7	\$	381.3	\$	110.4
Backlog		291.3		197.8		93.5		291.3		197.8		93.5
Depreciation and amortization		8.0		5.6		2.4		15.7		10.2		5.5

Safety and Security Systems Group

	Three Months Ended June 30,				Six Months Ended June 30,							
(\$ in millions)		2018		2017	Cl	hange		2018		2017	C	Change
Net sales	\$	57.7	\$	50.1	\$	7.6	\$	110.8	\$	100.1	\$	10.7
Operating income		8.2		5.6		2.6		14.3		12.0		2.3
Adjusted EBITDA		9.2		6.7		2.5		16.2		14.4		1.8
Operating data:												
Operating margin		14.2%		11.2%		3.0%		12.9%		12.0%		0.9%
Adjusted EBITDA margin		15.9%		13.4%		2.5%		14.6%		14.4%		0.2%
Total orders	\$	60.3	\$	56.4	\$	3.9	\$	115.6	\$	104.4	\$	11.2
Backlog		31.0		24.9		6.1		31.0		24.9		6.1
Depreciation and amortization		1.0		1.0		_		1.9		2.0		(0.1)

Corporate Expenses

Corporate operating expenses were \$7.3 million and \$7.8 million for the three months ended June 30, 2018 and 2017, respectively. For the six months ended June 30, 2018 and 2017, corporate operating expenses were \$14.4 million and \$13.1 million, respectively.

SEC REGULATION G NON-GAAP RECONCILIATION

The financial measures presented below are unaudited and are not in accordance with U.S. generally accepted accounting principles ("GAAP"). The non-GAAP financial information presented herein should be considered supplemental to, and not a substitute for, or superior to, financial measures calculated in accordance with GAAP. The Company has provided this supplemental information to investors, analysts, and other interested parties to enable them to perform additional analyses of operating results, to illustrate the results of operations giving effect to the non-GAAP adjustments shown in the reconciliations below, and to provide an additional measure of performance which management considers in operating the business.

Adjusted net income and earnings per share from continuing operations ("EPS"):

The Company believes that modifying its 2018 and 2017 net income and diluted EPS provides additional measures which are representative of the Company's underlying performance and improves the comparability of results across reporting periods. During the three and six months ended June 30, 2018 and 2017 adjustments were made to reported GAAP net income and diluted EPS to exclude the impact of restructuring activity, executive severance costs, acquisition and integration-related expenses, purchase accounting effects and hearing loss settlement charges, where applicable.

	Three Mont	hs End	led June 30,	Six Months E	nded June 30,		
(in millions)	2018		2017	2018	2017		
Income from continuing operations	\$ 26.	.9 \$	11.5	\$ 39.8	\$ 18.7		
Add:							
Income tax expense	8.	.3	6.1	12.4	9.9		
Income before income taxes	35.	2	17.6	52.2	28.6		
Add:							
Restructuring	_	_	0.1		0.4		
Executive severance costs	-	_	_	_	0.7		
Acquisition and integration-related expenses	0.	4	1.0	0.9	1.5		
Purchase accounting effects (a)	0.	4	2.5	1.0	3.0		
Hearing loss settlement charges	_	_	_	0.4	_		
Adjusted income before income taxes	36.	.0	21.2	54.5	34.2		
Adjusted income tax expense (b)	(8.	.5)	(7.4)	(12.9)	(11.9)		
Adjusted net income from continuing operations	\$ 27.	5 \$	13.8	\$ 41.6	\$ 22.3		

	Thre	ee Months	Ende	ed June 30,	Six Months Ended June 30,				
(dollars per diluted share)		2018		2017		2018	2017		
EPS, as reported	\$	0.44	\$	0.19	\$	0.65	\$	0.31	
Add:									
Income tax expense		0.14		0.10		0.20		0.16	
Income before income taxes		0.58		0.29		0.85		0.47	
Add:									
Restructuring		_		_		_		0.01	
Executive severance costs		_		_		_		0.01	
Acquisition and integration-related expenses		0.01		0.02		0.01		0.03	
Purchase accounting effects (a)		0.00		0.04		0.02		0.05	
Hearing loss settlement charges		_		_		0.01		_	
Adjusted income before income taxes		0.59		0.35		0.89		0.57	
Adjusted income tax expense (b)		(0.14)		(0.12)		(0.21)		(0.20)	
Adjusted EPS	\$	0.45	\$	0.23	\$	0.68	\$	0.37	

⁽a) Purchase accounting effects relate to adjustments to exclude the step-up in the valuation of equipment acquired in connection with the TBEI and JJE acquisitions that was sold subsequent to the acquisition dates in the three and six months ended June 30, 2018 and 2017, as well as to exclude the depreciation of the step-up in the valuation of the rental fleet acquired in the JJE transaction.

⁽b) Adjusted income tax expense for the three and six months ended June 30, 2018 and 2017 was recomputed after excluding the impact of restructuring activity, executive severance costs, acquisition and integration-related expenses, purchase accounting effects and hearing loss settlement charges, where applicable.

Adjusted EBITDA:

The Company uses adjusted EBITDA and the ratio of adjusted EBITDA to net sales ("adjusted EBITDA margin"), at both the consolidated and segment level, as additional measures which are representative of its underlying performance and to improve the comparability of results across reporting periods. We believe that investors use versions of these metrics in a similar manner. For these reasons, the Company believes that adjusted EBITDA and adjusted EBITDA margin, at both the consolidated and segment level, are meaningful metrics to investors in evaluating the Company's underlying financial performance.

Consolidated adjusted EBITDA is a non-GAAP measure that represents the total of income from continuing operations, interest expense, hearing loss settlement charges, acquisition and integration-related expenses, restructuring activity, executive severance costs, purchase accounting effects, other income/expense, income tax expense, and depreciation and amortization expense. Consolidated adjusted EBITDA margin is a non-GAAP measure that represents the total of income from continuing operations, interest expense, hearing loss settlement charges, acquisition and integration-related expenses, restructuring activity, executive severance costs, purchase accounting effects, other income/expense, income tax expense, and depreciation and amortization expense divided by net sales for the applicable period(s).

Segment adjusted EBITDA is a non-GAAP measure that represents the total of segment operating income, acquisition and integration-related expenses, restructuring activity, purchase accounting effects and depreciation and amortization expense, as applicable. Segment adjusted EBITDA margin is a non-GAAP measure that represents the total of segment operating income, acquisition and integration-related expenses, restructuring activity, purchase accounting effects and depreciation and amortization expense, as applicable, divided by net sales for the applicable period(s). Segment operating income includes all revenues, costs and expenses directly related to the segment involved. In determining segment income, neither corporate nor interest expenses are included. Segment depreciation and amortization expense relates to those assets, both tangible and intangible, that are utilized by the respective segment.

Other companies may use different methods to calculate adjusted EBITDA and adjusted EBITDA margin.

Consolidated

The following table summarizes the Company's consolidated adjusted EBITDA and adjusted EBITDA margin and reconciles income from continuing operations to consolidated adjusted EBITDA for the three and six months ended June 30, 2018 and 2017:

	Th	ree Months	Ende	d June 30,	Si	ix Months F	nded June 30,		
(\$ in millions)		2018		2017	2018			2017	
Income from continuing operations	\$	26.9	\$	11.5	\$	39.8	\$	18.7	
Add:									
Interest expense		2.5		1.3		5.0		1.9	
Hearing loss settlement charges		_		_		0.4		_	
Acquisition and integration-related expenses		0.4		1.0		0.9		1.5	
Restructuring		_		0.1		_		0.4	
Executive severance costs		_		_		_		0.7	
Purchase accounting effects*		0.3		2.5		0.7		2.9	
Other expense (income), net		0.4		(0.1)		0.5		(0.3)	
Income tax expense		8.3		6.1		12.4		9.9	
Depreciation and amortization		9.0		6.6		17.6		12.3	
Consolidated adjusted EBITDA	\$	47.8	\$	29.0	\$	77.3	\$	48.0	
Net sales	\$	291.0	\$	224.4	\$	540.7	\$	402.2	
Consolidated adjusted EBITDA margin		16.4%		12.9%		14.3%		11.9%	

^{*} Excludes purchase accounting expenses reflected in depreciation and amortization of \$0.1 million and \$0.0 million for the three months ended June 30, 2018 and 2017, and \$0.3 million and \$0.1 million for the six months ended June 30, 2018 and 2017, respectively.

Environmental Solutions Group

The following table summarizes the Environmental Solutions Group's adjusted EBITDA and adjusted EBITDA margin and reconciles operating income to adjusted EBITDA for the three and six months ended June 30, 2018 and 2017:

	Thi	ree Months	Ende	d June 30,	Si	June 30,		
(\$ in millions)		2018	2017		2018			2017
Operating income	\$	37.2	\$	21.0	\$	57.8	\$	31.3
Add:								
Acquisition and integration-related expenses		0.3		0.2		0.6		0.4
Purchase accounting effects*		0.3		2.5		0.7		2.9
Depreciation and amortization		8.0		5.6		15.7		10.2
Adjusted EBITDA	\$	45.8	\$	29.3	\$	74.8	\$	44.8
Net sales	\$	233.3	\$	174.3	\$	429.9	\$	302.1
Adjusted EBITDA margin		19.6%		16.8%		17.4%		14.8%

^{*} Excludes purchase accounting expenses reflected in depreciation and amortization of \$0.1 million and \$0.0 million for the three months ended June 30, 2018 and 2017, and \$0.3 million and \$0.1 million for the six months ended June 30, 2018 and 2017, respectively.

Safety and Security Systems Group

The following table summarizes the Safety and Security Systems Group's adjusted EBITDA and adjusted EBITDA margin and reconciles operating income to adjusted EBITDA for the three and six months ended June 30, 2018 and 2017:

	Three Months Ended June 30,				Six Months Ended June 30,				
(\$ in millions)		2018		2017		2018		2017	
Operating income	\$	8.2	\$	5.6	\$	14.3	\$	12.0	
Add:									
Restructuring		_		0.1		_		0.4	
Depreciation and amortization		1.0		1.0		1.9		2.0	
Adjusted EBITDA	\$	9.2	\$	6.7	\$	16.2	\$	14.4	
Net sales	\$	57.7	\$	50.1	\$	110.8	\$	100.1	
Adjusted EBITDA margin		15.9%)	13.4%		14.6%		14.4%	