

Form 5500 Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Annual Return/Report of Employee Benefit Plan This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code). <p style="text-align: center;">▶ Complete all entries in accordance with the instructions to the Form 5500.</p>	OMB Nos. 1210-0110 1210-0089 <div style="text-align: center; font-size: 24pt; font-weight: bold;">2017</div> This Form is Open to Public Inspection
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Part I	Annual Report Identification Information		
For calendar plan year 2017 or fiscal plan year beginning <u>01/01/2017</u> and ending <u>12/31/2017</u>			
A	This return/report is for:	☐ a multiemployer plan ☐ a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)	
	☒ a single-employer plan ☐ a DFE (specify) ____		
B	This return/report is:	☐ the first return/report ☒ the final return/report	
	☐ an amended return/report ☐ a short plan year return/report (less than 12 months)		
C	If the plan is a collectively-bargained plan, check here. ▶ ☒		
D	Check box if filing under:	☒ Form 5558 ☐ automatic extension ☐ the DFVC program	
	☐ special extension (enter description)		

Part II	Basic Plan Information —enter all requested information		
1a	Name of plan <u>JOHNS MANVILLE HOURLY RETIREMENT PLAN</u>	1b	Three-digit plan number (PN) ▶ <u>002</u>
		1c	Effective date of plan <u>08/01/1966</u>
2a	Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) <u>JOHNS MANVILLE CORPORATION ATTN RETIREMENT 11-04</u> <u>717 17TH STREET</u> <u>DENVER, CO 80202</u>	2b	Employer Identification Number (EIN) <u>84-0856796</u>
		2c	Plan Sponsor's telephone number <u>303-978-2000</u>
		2d	Business code (see instructions) <u>327900</u>

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	10/15/2018	LAURA LANPHIER
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

3a Plan administrator's name and address ☐ Same as Plan Sponsor BENEFITS COMMITTEE OF JOHNS MANVILLE CORPORATION 717 17 TH STREET P.O. BOX 5108 DENVER, CO 80202	3b Administrator's EIN 84-0717946 3c Administrator's telephone number 303-978-2946
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report: a Sponsor's name c Plan Name	4b EIN 4d PN
5 Total number of participants at the beginning of the plan year	5 6813
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines 6a(1) , 6a(2) , 6b , 6c , and 6d). a(1) Total number of active participants at the beginning of the plan year a(2) Total number of active participants at the end of the plan year b Retired or separated participants receiving benefits c Other retired or separated participants entitled to future benefits d Subtotal. Add lines 6a(2) , 6b , and 6c e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits. f Total. Add lines 6d and 6e g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item) h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	6a(1) 1637 6a(2) 0 6b 0 6c 0 6d 0 6e 0 6f 0 6g 6h 0
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item)	7
8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions: 1B 3H b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:	

9a Plan funding arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor	9b Plan benefit arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor
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10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

a Pension Schedules

- (1) ☒ **R** (Retirement Plan Information)
- (2) ☐ **MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
- (3) ☒ **SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary

b General Schedules

- (1) ☒ **H** (Financial Information)
- (2) ☐ **I** (Financial Information – Small Plan)
- (3) ☐ 0 **A** (Insurance Information)
- (4) ☐ **C** (Service Provider Information)
- (5) ☒ **D** (DFE/Participating Plan Information)
- (6) ☐ **G** (Financial Transaction Schedules)

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2017 Form M-1 annual report. If the plan was not required to file the 2017 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code _____

<div>SCHEDULE SB (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation</div>	<div>Single-Employer Defined Benefit Plan Actuarial Information</div> <div>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).</div> <div>File as an attachment to Form 5500 or 5500-SF.</div>	<div>OMB No. 1210-0110</div> <div>2017</div> <div>This Form is Open to Public Inspection</div>
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For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017

Round off amounts to nearest dollar.
Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan JOHNS MANVILLE HOURLY RETIREMENT PLAN	B Three-digit plan number (PN) 002
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF JOHNS MANVILLE CORPORATION ATTN RETIREMENT 11-04	D Employer Identification Number (EIN) 84-0856796

E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B	F Prior year plan size: ☐ 100 or fewer ☐ 101-500 ☒ More than 500
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Part I Basic Information

1 Enter the valuation date: Month 01 Day 01 Year 2017			
2 Assets:			
a Market value	2a	491507473	
b Actuarial value	2b	494360168	
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	4248	227288500	227288500
b For terminated vested participants	987	23657067	23657067
c For active participants	1637	104044420	109416655
d Total	6872	354989987	360362222
4 If the plan is in at-risk status, check the box and complete lines (a) and (b): ☐			
a Funding target disregarding prescribed at-risk assumptions	4a		
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b		
5 Effective interest rate	5	5.85 %	
6 Target normal cost	6	4080963	

Statement by Enrolled Actuary
To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE		
MARLISE S. BRUNO	Signature of actuary	08/27/2018
MERCER	Type or print name of actuary	Date
1225 17TH STREET, SUITE 1300 DENVER, CO 80202	Firm name	17-06542
	Address of the firm	Most recent enrollment number
		303-376-0800
		Telephone number (including area code)

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

Part II Beginning of Year Carryover and Prefunding Balances

	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	9753455	9573132
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9 Amount remaining (line 7 minus line 8)	9753455	9573132
10 Interest on line 9 using prior year's actual return of <u>9.87</u> %	962666	944868
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		0
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.05</u> %		0
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c Total available at beginning of current plan year to add to prefunding balance		0
d Portion of (c) to be added to prefunding balance		0
12 Other reductions in balances due to elections or deemed elections	0	0
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	10716121	10518000

Part III Funding Percentages

14 Funding target attainment percentage	14	131.29%
15 Adjusted funding target attainment percentage	15	137.18%
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	138.76%
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls**18** Contributions made to the plan for the plan year by employer(s) and employees:

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
Totals ▶			18(b)	0	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:

a Contributions allocated toward unpaid minimum required contributions from prior years.	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	0

20 Quarterly contributions and liquidity shortfalls:

- a** Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☒ No
- b** If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☐ No
- c** If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.16 %	2nd segment: 5.72 %	3rd segment: 6.48 %	☐ N/A, full yield curve used
b Applicable month (enter code)				21b 4
22 Weighted average retirement age.....				22 62
23 Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute				

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment	☒ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.....	☐ Yes ☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.....	☒ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6)	31a	4080963	
b Excess assets, if applicable, but not greater than line 31a	31b	4080963	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment.....	0	0	
b Waiver amortization installment	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33).....	34	0	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement.....	0	0	0
36 Additional cash requirement (line 34 minus line 35)	36	0	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	0	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	0	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	0	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0	
40 Unpaid minimum required contributions for all years.....	40	0	

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:			
a Schedule elected	☐ 2 plus 7 years	☐ 15 years	
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008	☐ 2009	☐ 2010 ☐ 2011
42 Amount of acceleration adjustment	42		
43 Excess installment acceleration amount to be carried over to future plan years	43		

SCHEDULE D (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small>	DFE/Participating Plan Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ► File as an attachment to Form 5500.	OMB No. 1210-0110 2017 This Form is Open to Public Inspection.
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For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017

A Name of plan <u>JOHNS MANVILLE HOURLY RETIREMENT PLAN</u>	B Three-digit plan number (PN) ►	<u>002</u>
C Plan or DFE sponsor's name as shown on line 2a of Form 5500 <u>JOHNS MANVILLE CORPORATION ATTN RETIREMENT 11-04</u>	D Employer Identification Number (EIN) <u>84-0856796</u>	

Part I	Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs) (Complete as many entries as needed to report all interests in DFEs)
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a Name of MTIA, CCT, PSA, or 103-12 IE: JOHNS MANVILLE MASTER PENSION TRUST

b Name of sponsor of entity listed in (a): BANK OF NEW YORK MELLON TRUST COMPANY

c EIN-PN <u>84-0856796-007</u>	d Entity code <u>M</u>	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>0</u>
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

a Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
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103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)

Part II Information on Participating Plans (to be completed by DFEs)

(Complete as many entries as needed to report all participating plans)

a Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
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plan sponsor**c** EIN-PN

SCHEDULE H (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Financial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500.	OMB No. 1210-0110 2017 This Form is Open to Public Inspection
For calendar plan year 2017 or fiscal plan year beginning <u>01/01/2017</u> and ending <u>12/31/2017</u>		
A Name of plan <u>JOHNS MANVILLE HOURLY RETIREMENT PLAN</u>	B Three-digit plan number (PN) ►	<u>002</u>
C Plan sponsor's name as shown on line 2a of Form 5500 <u>JOHNS MANVILLE CORPORATION ATTN RETIREMENT 11-04</u>	D Employer Identification Number (EIN) <u>84-0856796</u>	

Part I	Asset and Liability Statement		(a) Beginning of Year	(b) End of Year
1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.				
	Assets			
a	Total noninterest-bearing cash	1a		
b	Receivables (less allowance for doubtful accounts):			
	(1) Employer contributions	1b(1)	0	0
	(2) Participant contributions	1b(2)		
	(3) Other.....	1b(3)		
c	General investments:			
	(1) Interest-bearing cash (include money market accounts & certificates of deposit)	1c(1)		
	(2) U.S. Government securities.....	1c(2)		
	(3) Corporate debt instruments (other than employer securities):			
	(A) Preferred	1c(3)(A)		
	(B) All other.....	1c(3)(B)		
	(4) Corporate stocks (other than employer securities):			
	(A) Preferred	1c(4)(A)		
	(B) Common	1c(4)(B)		
	(5) Partnership/joint venture interests	1c(5)		
	(6) Real estate (other than employer real property)	1c(6)		
	(7) Loans (other than to participants)	1c(7)		
	(8) Participant loans	1c(8)		
	(9) Value of interest in common/collective trusts.....	1c(9)		
	(10) Value of interest in pooled separate accounts.....	1c(10)		
	(11) Value of interest in master trust investment accounts	1c(11)	491507473	0
	(12) Value of interest in 103-12 investment entities	1c(12)		
	(13) Value of interest in registered investment companies (e.g., mutual funds).....	1c(13)		
	(14) Value of funds held in insurance company general account (unallocated contracts).....	1c(14)		
	(15) Other	1c(15)		

1d Employer-related investments:		(a) Beginning of Year	(b) End of Year
(1) Employer securities	1d(1)		
(2) Employer real property	1d(2)		
e Buildings and other property used in plan operation	1e		
f Total assets (add all amounts in lines 1a through 1e)	1f	491507473	0

Liabilities

g Benefit claims payable	1g		
h Operating payables	1h		
i Acquisition indebtedness	1i		
j Other liabilities	1j	90736	0
k Total liabilities (add all amounts in lines 1g through 1j)	1k	90736	0

Net Assets

l Net assets (subtract line 1k from line 1f)	1l	491416737	0
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Part II Income and Expense Statement

- 2** Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

Income

		(a) Amount	(b) Total
a Contributions:			
(1) Received or receivable in cash from: (A) Employers	2a(1)(A)	0	
(B) Participants	2a(1)(B)		
(C) Others (including rollovers)	2a(1)(C)		
(2) Noncash contributions	2a(2)		
(3) Total contributions. Add lines 2a(1)(A) , (B) , (C) , and line 2a(2)	2a(3)		0
b Earnings on investments:			
(1) Interest:			
(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)	0	
(B) U.S. Government securities	2b(1)(B)		
(C) Corporate debt instruments	2b(1)(C)		
(D) Loans (other than to participants)	2b(1)(D)		
(E) Participant loans	2b(1)(E)		
(F) Other	2b(1)(F)		
(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)		0
(2) Dividends: (A) Preferred stock	2b(2)(A)		
(B) Common stock	2b(2)(B)		
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)		
(D) Total dividends. Add lines 2b(2)(A) , (B) , and (C)	2b(2)(D)		0
(3) Rents	2b(3)		
(4) Net gain (loss) on sale of assets: (A) Aggregate proceeds	2b(4)(A)		
(B) Aggregate carrying amount (see instructions)	2b(4)(B)		
(C) Subtract line 2b(4)(B) from line 2b(4)(A) and enter result	2b(4)(C)		0
(5) Unrealized appreciation (depreciation) of assets: (A) Real estate	2b(5)(A)		
(B) Other	2b(5)(B)		
(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)		0

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		79900725
(9) Net investment gain (loss) from 103-12 investment entities	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds).....	2b(10)		
c Other income	2c		
d Total income. Add all income amounts in column (b) and enter total.....	2d		79900725

Expenses

e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers.....	2e(1)	23146143	
(2) To insurance carriers for the provision of benefits	2e(2)		
(3) Other	2e(3)		
(4) Total benefit payments. Add lines 2e(1) through (3).....	2e(4)		23146143
f Corrective distributions (see instructions)	2f		
g Certain deemed distributions of participant loans (see instructions).....	2g		
h Interest expense.....	2h		
i Administrative expenses: (1) Professional fees	2i(1)		
(2) Contract administrator fees	2i(2)		
(3) Investment advisory and management fees	2i(3)		
(4) Other	2i(4)		
(5) Total administrative expenses. Add lines 2i(1) through (4).....	2i(5)		0
j Total expenses. Add all expense amounts in column (b) and enter total.....	2j		23146143

Net Income and Reconciliation

k Net income (loss). Subtract line 2j from line 2d	2k		56754582
l Transfers of assets:			
(1) To this plan.....	2l(1)		
(2) From this plan	2l(2)		548171319

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) ☐ Unqualified (2) ☐ Qualified (3) ☒ Disclaimer (4) ☐ Adverse

b Did the accountant perform a limited scope audit pursuant to 29 CFR 2520.103-8 and/or 103-12(d)?

☒ Yes ☐ No

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: DELOITTE & TOUCHE, LLP

(2) EIN: 13-3891517

d The opinion of an independent qualified public accountant is **not attached** because:

(1) ☐ This form is filed for a CCT, PSA, or MTIA. (2) ☐ It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l.

During the plan year:

a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.).....

b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)

	Yes	No	Amount
4a		X	
4b		X	

	Yes	No	Amount
c Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)		X	
d Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.).....		X	
e Was this plan covered by a fidelity bond?	X		10000000
f Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?		X	
g Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?		X	
h Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?.....		X	
i Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.).....		X	
j Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked, and see instructions for format requirements.).....		X	
k Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	X		
l Has the plan failed to provide any benefit when due under the plan?		X	
m If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.).....			
n If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.			

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year?..... ☐ Yes ☒ No
If "Yes," enter the amount of any plan assets that reverted to the employer this year _____.

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

5b(1) Name of plan(s)	5b(2) EIN(s)	5b(3) PN(s)
BERKSHIRE HATHAWAY CONSOLIDATED PENSION PLAN	45-5344990	003

5c If the plan is a defined benefit plan, is it covered under the PBGC insurance program (See ERISA section 4021.)? ☒ Yes ☐ No ☐ Not determined
If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 4090534. (See instructions.)

<div>SCHEDULE R (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation</div>	<div>Retirement Plan Information</div> <div>This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code).</div> <div>▶ File as an attachment to Form 5500.</div>	<div>OMB No. 1210-0110</div> <div>2017</div> <div>This Form is Open to Public Inspection.</div>
For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017		
A Name of plan JOHNS MANVILLE HOURLY RETIREMENT PLAN		B Three-digit plan number (PN) ▶ 002
C Plan sponsor's name as shown on line 2a of Form 5500 JOHNS MANVILLE CORPORATION ATTN RETIREMENT 11-04		D Employer Identification Number (EIN) 84-0856796
Part I	Distributions	
All references to distributions relate only to payments of benefits during the plan year.		
1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions		1 0
2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits): EIN(s): 13-3981763		
Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.		
3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year		3 0
Part II	Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)	
4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? Yes No N/A		
If the plan is a defined benefit plan, go to line 8.		
5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. Date: Month Day Year		
If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.		
6 a Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived)		6a
b Enter the amount contributed by the employer to the plan for this plan year		6b
c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount)		6c
If you completed line 6c, skip lines 8 and 9.		
7 Will the minimum funding amount reported on line 6c be met by the funding deadline? Yes No N/A		
8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? Yes No N/A		
Part III	Amendments	
9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box. Increase Decrease Both No		
Part IV	ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.	
10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan? Yes No		
11 a Does the ESOP hold any preferred stock? Yes No		
b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.) Yes No		
12 Does the ESOP hold any stock that is not readily tradable on an established securities market? Yes No		
For Paperwork Reduction Act Notice, see the Instructions for Form 5500.		
Schedule R (Form 5500) 2017 v. 170203		

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that contributed more than 5% of total contributions to the plan during the plan year (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

- 14** Enter the number of participants on whose behalf no contributions were made by an employer as an employer of the participant for:

a The current year	14a	
b The plan year immediately preceding the current plan year	14b	
c The second preceding plan year	14c	

- 15** Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:

a The corresponding number for the plan year immediately preceding the current plan year	15a	
b The corresponding number for the second preceding plan year	15b	

- 16** Information with respect to any employers who withdrew from the plan during the preceding plan year:

a Enter the number of employers who withdrew during the preceding plan year	16a	
b If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers	16b	

- 17** If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment. ☐

Part VI Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans

- 18** If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐

- 19** If the total number of participants is 1,000 or more, complete lines (a) through (c)

- a** Enter the percentage of plan assets held as:

Stock: 92.0% Investment-Grade Debt: 1.0% High-Yield Debt: 0.0% Real Estate: 0.0% Other: 7.0%

- b** Provide the average duration of the combined investment-grade and high-yield debt:

☐ 0-3 years ☒ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more

- c** What duration measure was used to calculate line 19(b)?

☐ Effective duration ☐ Macaulay duration ☒ Modified duration ☐ Other (specify):

Johns Manville Hourly Retirement Plan

Plan Number 002

Employer Identification Number 84-0856796

Financial Statements as of and for the
Years Ended December 31, 2017 and 2016, and
Independent Auditors' Report

JOHNS MANVILLE HOURLY RETIREMENT PLAN

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NOTE: All schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.	

INDEPENDENT AUDITORS' REPORT

To the Retirement and Benefits Committee of
Johns Manville Corporation:

Report on the Financial Statements

We were engaged to audit the accompanying financial statements of the Johns Manville Hourly Retirement Plan (the "Plan"), which comprises the statements of net assets available for benefits as of December 31, 2017 and 2016, and the related statement of changes in net assets available for benefits for the year ended December 31, 2017 and 2016, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on conducting the audit in accordance with auditing standards generally accepted in the United States of America. Because of the matter described in the Basis for Disclaimer of Opinion paragraph, however, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion.

Basis for Disclaimer of Opinion

As permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, the plan administrator instructed us not to perform, and we did not perform, any auditing procedures with respect to the information summarized in Note 9, which was certified by Bank of New York Mellon Trust Company, the trustee of the Plan, except for comparing such information with the related information included in the financial statements. We have been informed by the plan administrator that the trustee holds the Plan's investment assets and executes investment transactions. The plan administrator has obtained certifications from the trustee as of December 31, 2017 and 2016, and for the year ended December 31, 2017, that the information provided to the plan administrator by the trustee is complete and accurate.

Disclaimer of Opinion

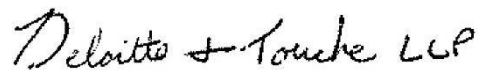
Because of the significance of the matter described in the Basis for Disclaimer of Opinion paragraph, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion. Accordingly, we do not express an opinion on these financial statements.

Emphasis of Matter

As discussed in Note 1 to the financial statements, on December 31, 2017 all assets and liabilities of the Plan were transferred to the Berkshire Hathaway Consolidated Pension Plan (BHCPP).

Report on Form and Content in Compliance with Department of Labor Rules and Regulations

The form and content of the information included in the financial statements, other than that derived from the information certified by the trustee, have been audited by us in accordance with auditing standards generally accepted in the United States of America and, in our opinion, is presented in compliance with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974.

A handwritten signature in black ink that reads "Deloitte & Touche LLP". The signature is written in a cursive, flowing style.

October 12, 2018

JOHNS MANVILLE HOURLY RETIREMENT PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS AS OF DECEMBER 31, 2017 AND 2016

	<u>2017</u>	<u>2016</u>
ASSETS:		
Investments - at fair value -		
Plan's interest in Master Trust	<u>\$ -</u>	<u>\$491,507,473</u>
Total assets	<u>-</u>	<u>491,507,473</u>
LIABILITIES:		
Accrued administrative expenses	<u>-</u>	<u>90,736</u>
Total liabilities	<u>-</u>	<u>90,736</u>
NET ASSETS AVAILABLE FOR BENEFITS	<u><u>\$ -</u></u>	<u><u>\$491,416,737</u></u>

See notes to financial statements.

JOHNS MANVILLE HOURLY RETIREMENT PLAN

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

	<u>2017</u>	<u>2016</u>
ADDITIONS:		
Investment income:		
Net appreciation in fair value of investments —		
Investment in Johns Manville Pension Master Trust	\$ 74,761,805	\$ 37,403,808
Dividends	5,409,407	7,401,912
Interest	<u>711,167</u>	<u>410,857</u>
Net investment income	<u>80,882,379</u>	<u>45,216,577</u>
DEDUCTIONS:		
Benefits paid directly to participants	(23,146,143)	(22,505,487)
Administrative expenses	(981,654)	(913,448)
Transfer to Employee Plan	-	(302,872)
Transfer to Berkshire Hathaway Consolidated Pension Plan	<u>(548,171,319)</u>	<u>-</u>
Total deductions	<u>(572,299,116)</u>	<u>(23,721,807)</u>
NET INCREASE (DECREASE)	(491,416,737)	21,494,770
NET ASSETS AVAILABLE FOR BENEFITS:		
Beginning of year	<u>491,416,737</u>	<u>469,921,967</u>
End of year	<u>\$ -</u>	<u>\$ 491,416,737</u>

See notes to financial statements.

JOHNS MANVILLE HOURLY RETIREMENT PLAN

STATEMENTS OF ACCUMULATED PLAN BENEFITS AS OF JANUARY 1, 2017 AND 2016

	<u>2017</u>	<u>2016</u>
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS:		
Vested benefits:		
Participants currently receiving payments	\$ 214,653,399	\$ 211,321,321
Other participants	<u>118,977,408</u>	<u>121,820,304</u>
Total vested benefits	333,630,807	333,141,625
 Nonvested benefits	<u>4,683,383</u>	<u>4,876,084</u>
 TOTAL ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS	<u>\$ 338,314,190</u>	<u>\$ 338,017,709</u>

See notes to financial statements.

JOHNS MANVILLE HOURLY RETIREMENT PLAN

STATEMENTS OF CHANGES IN ACCUMULATED PLAN BENEFITS FOR THE YEARS ENDED JANUARY 1, 2017 AND 2016

	<u>2017</u>	<u>2016</u>
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS - Beginning of year	<u>\$ 338,017,709</u>	<u>\$ 334,544,096</u>
INCREASE (DECREASE) DURING THE YEAR		
ATTRIBUTABLE TO:		
Benefits paid	(22,505,487)	(21,950,621)
Increase for interest due to the decrease in the discount period	21,178,770	20,972,522
Benefits accumulated and losses	2,824,104	1,666,725
Changes in actuarial assumptions	(1,200,906)	-
Change in plan provisions	<u>-</u>	<u>2,784,987</u>
NET INCREASE	<u>296,481</u>	<u>3,473,613</u>
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS - End of year	<u>\$ 338,314,190</u>	<u>\$ 338,017,709</u>

See notes to financial statements.

JOHNS MANVILLE HOURLY RETIREMENT PLAN

NOTES TO FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

1. DESCRIPTION OF THE PLAN

The following description of the Johns Manville Hourly Retirement Plan (the “Plan”) is provided for general information purposes only. Participants should refer to the Plan documents for more complete information.

General — The Plan is a noncontributory defined benefit pension plan sponsored by Johns Manville Corporation and offered through its wholly owned subsidiary Johns Manville (the “Company”). The Plan is a defined benefit pension plan covering certain union and non-union hourly employees of the company who were employed as of December 31, 2006. All non-union employees hired on or after January 1, 2007, and all union employees hired on or after varying negotiated dates are not eligible to participate in the Plan. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA). The Company maintains the Johns Manville Master Pension Trust (the “Master Trust”) fund to provide pension, disability, and pre-retirement death benefits to eligible employees in accordance with the provisions of the Plan.

Pension Benefits — Participants who meet the hiring requirements described above were eligible to participate in the Plan after one year of service. If employees terminate before rendering five years of accumulated service or are age 60 with less than one year of service, they forfeit the right to receive pension benefits upon retirement. Employees with five years of accumulated service or who are age 60 with one year of service, as defined by the Plan, are entitled to pension benefits upon retirement based upon the employees’ years of service and the benefit rate in place at the time of the hourly employees’ termination or retirement from their work location.

Transfer of the Plan — On December 31, 2017 all assets and liabilities of the Plan were transferred to the Berkshire Hathaway Consolidated Pension Plan (BHCPP). Employees who were participants in the Johns Manville Hourly Retirement Plan on December 31, 2017 maintain the same benefits under the BHCPP.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting — The accompanying financial statements have been prepared in accordance with the accounting principles, generally accepted in the United States of America (GAAP).

Use of Estimates — The preparation of the Plan’s financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and changes therein, disclosure of contingent assets and liabilities, and the actuarial present value of accumulated Plan benefits and changes therein at the date of the financial statements. Actual results could differ from those estimates.

Risks and Uncertainties — Plan contributions and the actuarial present value of accumulated Plan benefits are determined based on certain assumptions pertaining to interest rates, inflation rates, and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

The Plan and Master Trust utilize various investment securities including U.S. government securities, corporate fixed income, other fixed income, short-term investments and common stocks. Investment securities in general are exposed to various risks, such as interest rate risk, credit risk and overall market volatility. Due to the level of risk associated with investment securities and the level of uncertainty related to changes in the value of investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and could materially affect balances in the Master Trust and the amounts reported in the financial statements.

Investment Valuation of Master Trust Fund and Income Recognition — Investments are stated at fair value. Fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. If available, quoted market prices are used to value investments. The Master Trust is included in a bank-administered Master Trust fund. The Bank of New York Mellon Trust Company, N.A. (the “Trustee”) reports the total net asset value of the Master Trust and the net asset value of each Plan’s related share. The Plan’s investment in the Master Trust is presented at fair value, which has been determined based on the fair value of the underlying investments of the Master Trust. As of December 31, 2016, the Plan had a 43% interest in the Master Trust. Purchases and sales of securities are reflected as of the trade date. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Any gain or loss on the sale of securities is based on average cost. Net depreciation includes the Plan’s gain and losses on investments bought and sold as well as held during the year.

Administrative Expenses — All administrative expenses are paid by the Plan, except for certain administrative expenses that are required to be paid by the Company under ERISA. Plan administrative expenses, paid directly by the Company to the Plan’s Trustee and outside consultants, are not included in the Plan’s financial statements.

Payment of Benefits — Benefit payments to participants are recorded upon distribution.

Transfers — Along with the Plan, the Company sponsors a Johns Manville Employee Retirement Plan for salaried and certain nonunion hourly employees. If employees change their union status during the year, they may elect to transfer their account balance into the corresponding plan. For the year ended December 31, 2017, plan transfers reported in the statement of changes in net assets available for benefit to the Employee Plan were \$0

Subsequent Events — Subsequent events were evaluated through October 12, 2018, the date the financial statements were available to be issued.

Accumulated Plan Benefit — As permitted by the Financial Accounting Standards Board (FASB) Accounting Standards Codification 960-205, *Plan Accounting — Defined Benefit Pension Plans*, all accumulated plan benefit information is presented as of the beginning of the Plan year.

3. FUNDING POLICY

The Company’s funding policy is to make cash contributions to the Plan in the amounts estimated by the Plan’s actuary such that, when combined with the net return on investments, all participants’ benefits will be fully provided for by the time they are eligible to receive such benefits. There were no required contributions and no contributions were made during 2017 and 2016, therefore the Company’s contributions for the years ended December 31, 2017 and 2016, met or exceeded the minimum funding requirements of ERISA.

4. ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS

Accumulated plan benefits are those future periodic payments payable under the Plan's provisions that are attributable to the participants based upon service that has been rendered. Accumulated plan benefits include benefits expected to be paid to retired or terminated employees or their beneficiaries, beneficiaries of employees who have died, and present employees or their beneficiaries. Benefits payable under all circumstances (retirement, death, disability, and termination of employment) are included to the extent they are deemed attributable to employee service rendered to the valuation date.

The effect of Plan amendments on accumulated plan benefits is recognized during the year in which such amendments are adopted. There was a Third and Fourth Amendment added to the Plan, which were signed on May 26, 2015. The Third Amendment is regarding section 3.09 Maximum Benefit Limitations and the Fourth is regarding section 4.02 Optional Forms of Payment of Allowance. These amendments resulted in a loss of \$2,784,987 for the January 1, 2016 actuarial present value of accumulated plan benefits.

The actuarial present value of accumulated plan benefits is determined by an independent actuary and is that amount that results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements, such as death, disability, separation, or retirement) between the valuation date and the expected date of payment.

The significant actuarial assumptions used in the valuations were as follows:

- The interest rate was 6.5% for January 1, 2017 and 2016, which reflects the expected rate of return on Plan assets as of each valuation date.
- The life expectancy of healthy participants as of January 1, 2017 and 2016 for Pre-Commencement Mortality was calculated using the RP-2014 employee blue collar table back projected to 2007 using Scale MP-2014, projected generational based on Mercer's modified MP-2016 projection scale (MMP-2016).

The life expectancy of healthy participants as of January 1, 2017 and 2016 for Post-Commencement Mortality was calculated using the Mercer Industry Longevity Experience Study (MILES) 2010 *Basic Materials and Paper & Packaging* (BMPP) blue collar employee table projected generational based on Mercer's modified MMP-2016. For spouses and beneficiaries, the table is Mercer's MILES All Industry table projected with MMP-2016.

The life expectancy of disabled participants as of January 1, 2017 and 2016 for Post-Disability Mortality was calculated using the RP-2014 disabled generational mortality table using Mercer's MMP-2016 scale. For spouses and beneficiaries of disabled participants, the table is Mercer's MILES All Industry table projected with MMP-2016.

- The form of payment assumption for active retirements, future vested deferred, future disabilities, and current deferred participants is 70% electing life annuity and 30% electing a 100% joint and survivor for January 1, 2017 and 2016.
- It is assumed that employees will retire between the ages of 45 and 70. The assumed rate of retirement varies depending on the participant's age, with an assumed rate of 5% at age 45 up to 100% at age 70.

The actuary determined the Company's contributions for the Plan using the traditional unit credit method based upon the same assumptions except using mandated interest and mortality based on the plan sponsor's elections under the Pension Protection Act as modified by MAP-21.

The foregoing actuarial assumptions are based on the presumption that the Plan will continue indefinitely. If the plan were to be terminated, different actuarial assumptions and other factors would be applicable in determining the actuarial present value of accumulated plan benefits. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonable possible that certain changes in these estimates and assumptions could be material to the financial statements.

5. FAIR VALUE MEASUREMENTS

ASC 820, *Fair Value Measurements and Disclosures*, provides a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value, as follows: Level 1, which refers to securities valued using unadjusted quoted prices from active markets for identical assets; Level 2, which refers to securities not traded on an active market but for which observable market inputs are readily available; and Level 3, which refers to securities valued based on significant unobservable inputs. Investments are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Master Trust's policy is to recognize significant transfers between levels at the end of the reporting period. For the years ended December 31, 2017 and 2016, there were no significant transfers in or out of Levels 1, 2, or 3.

Asset Valuation Techniques — Valuation techniques maximize the use of relevant observable inputs and minimize the use of unobservable inputs. The following is a description of the valuation methodologies used for assets measured at fair value. There were no changes in the methodologies used during the year ended December 31, 2017 and 2016.

Investments in Collective U.S. Government Short Term Investment Funds (Collective Funds) — Valued based upon the redemption price of units held by the Plan, which is based on the current fair value of the collective funds underlying assets. Unit values are determined by the financial institution sponsoring such funds by dividing the fund's net assets at fair value by its units outstanding at the valuation dates. Investments in collective funds are categorized as Level 2.

Common Stocks — Valued at the closing price reported on the active market on which the individual securities are traded. Investments in common stocks are categorized as Level 1.

U.S. Treasury Bill — Valued at the closing price reported on the active market on which the individual investment is traded. Investments in U.S. Treasury Bills are categorized as Level 1.

U.S. Government Securities — Valued using pricing models maximizing the use of observable inputs for similar securities. Investments in U.S. government securities are categorized as Level 2.

Corporate Fixed Income — Valued at estimated fair value. Many factors are considered in arriving at estimated value. In general, however, corporate bonds are valued based on yields currently available on comparable securities of issuers with similar credit ratings. Investments in corporate fixed income are categorized as Level 2.

The following table set forth by level within the fair value hierarchy and the major categorization for debt and equity securities on the basis of the nature and risk of the investments a summary of the Master Trust's investments measured at fair value on a recurring basis as of December 31, 2016.

Master Trust Assets				
Fair Value Measurements as of December 31, 2016				
	Active Markets for Identical Assets (Level 1)	Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
U.S. Treasury Bill	\$ 49,681,500	\$ -	\$ -	\$ 49,681,500
Collective U.S. government short-term investment funds	-	21,389,384	-	21,389,384
Common stocks	1,054,207,486	-	-	1,054,207,486
U.S. government securities	-	4,873,836	-	4,873,836
Corporate fixed income: BBB credit rating	-	5,791,650	-	5,791,650
Total Master Trust	<u>\$1,103,888,986</u>	<u>\$32,054,870</u>	<u>\$ -</u>	<u>\$1,135,943,856</u>

The valuation methods as described herein and in Note 2 may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

6. PLAN'S INTEREST IN MASTER TRUST

The Plan's investments are held in a trust account at the Trustee and consist of an interest in an investment account of the Master Trust, established by the Company and administered by the Trustee. Use of the Master Trust permits the commingling of trust assets of the Plan and the Johns Manville Employees Retirement Plan for investment and administrative purposes. Although assets of both plans are commingled in the Master Trust, the Trustee maintains supporting records for the purpose of allocating the net gain or loss of the investment account to the participating plans. The net investment income of the investments is allocated by the Trustee to each participating plan based on the relationship of the interest of each plan to the total of the interests of the participating plans.

The net assets and investments of the Master Trust as of December 31, 2016, are summarized as follows:

	<u>2016</u>
Investments — whose fair value is determined based on quoted market prices —	
Common stocks:	
Davita Inc.	\$ 222,624,414
Phillips 66	188,978,670
Charter Communications Inc.	136,677,064
Bank of New York Mellon Corp	132,441,314
American Airlines Group Inc.	123,728,500
Others (individually less than 10% of assets)	<u>249,757,524</u>
 Total common stocks	 <u>1,054,207,486</u>
 U.S. Treasury Bill	 <u>49,681,500</u>
Investments — at estimated fair value —	
Short-term investments — Collective U.S. government short-term investment funds	 <u>21,389,384</u>
 Corporate fixed income	 <u>5,791,650</u>
 U.S. government securities	 <u>4,873,836</u>
 Total investments	 <u>1,135,943,856</u>
 Accrued income receivable	 <u>201,699</u>
 Net assets of the Master Trust	 <u><u>\$1,136,145,555</u></u>
 Plan's interest in net assets of the Master Trust	 <u><u>\$ 491,507,473</u></u>
 Plan's interest in the Master Trust as a percentage of the total	 <u>43%</u>

The net investment income of the Master Trust for the years ended December 31, 2017 and 2016, are summarized below:

	<u>2017</u>	<u>2016</u>
Net appreciation in the fair value of investments	\$171,955,046	\$ 86,667,429
Dividends	12,456,969	17,195,472
Interest	<u>1,636,655</u>	<u>982,321</u>
Investment income of the Master Trust	<u>\$186,048,670</u>	<u>\$104,845,222</u>

7. FEDERAL INCOME TAX STATUS

The Internal Revenue Service (IRS) has determined and informed the Company by a letter dated January 31, 2013, that the Plan and related trust were designed in accordance with the applicable regulations of the Internal Revenue Code. During the 2017 and 2016 Plan years, the Plan had certain operational and administrative issues occur. In order to prevent the Plan from incurring a qualification defect, the Plan's sponsor has taken the necessary corrective action in accordance with the acceptable correction methods of the Employee Plans Compliance Resolution System (EPCRS). The Plan Sponsor believes the Plan has maintained its tax-exempt status. Therefore, no provision for income taxes has been included in the Plan's financial statements. The Company and the Plan Administrator believe the Plan is currently designed and operated in compliance with the applicable requirements of the code and the Plan and related trust continue to be tax exempt. Therefore, no provision for income taxes has been included in the Plan's financial statements.

GAAP requires Plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan administrator believes it is no longer subject to income tax examinations for years prior to 2013.

8. PLAN TERMINATION

Although it has not expressed any intention to do so, the Company has the right under the Plan, in certain circumstances, to discontinue its contributions at any time and to terminate the Plan, subject to the provisions set forth in ERISA. In the event that the Plan is terminated, the net assets of the Plan will be allocated for payment of Plan benefits to the participants in an order of priority determined in accordance with ERISA, applicable regulations thereunder, and the Plan documents.

Certain benefits under the Plan are insured by the Pension Benefit Guaranty Corporation (PBGC) if the Plan terminates. Generally, the PBGC guarantees most vested normal-age retirement benefits, early retirement benefits, and certain disability and survivor's pensions. However, the PBGC does not guarantee all types of benefits under the Plan, and the amount of benefit protection is subject to certain limitations. Vested benefits under the Plan are guaranteed at the level in effect on the date of the Plan termination, subject to a statutory ceiling on the amount of an individual's monthly benefit.

Whether all participants receive their benefits should the Plan be terminated at some future time will depend on the sufficiency, at that time, of the Plan's net assets to provide those benefits, the priority of those benefits to be paid, and the level and type of benefits guaranteed by the PBGC at that time. Some

benefits may be fully or partially provided for by the then-existing assets and the PBGC guaranty, while other benefits may not be provided for at all.

9. INFORMATION CERTIFIED BY THE TRUSTEE

The following is a summary of the unaudited information regarding the Plan as of December 31, 2017 and 2016, and for the years then ended, included in the Plan's financial statements, which were prepared by or derived from information prepared by the Trustee of the Plan and furnished to the Plan administrator. The Plan administrator has obtained certifications from the Trustee that the following information is complete and accurate:

	<u>2017</u>	<u>2016</u>
Statements of net assets available for benefits —		
Investments at fair value — Plan's interest in Master Trust	\$ -	\$ 491,507,473
Statements of changes in net assets available for benefits —		
Plan's interest in Master Trust investment income:		
Net appreciation in fair value of investments	74,761,805	37,403,808
Dividends	5,409,407	7,401,912
Interest	711,167	410,857

Notes 5 and 6 — All investment balances and investment information in the notes was certified by the Trustee of the Plan, excluding the classification and level of investments in Note 5.

10. EXEMPT PARTY-IN-INTEREST TRANSACTIONS

Certain Plan investments are shares of collective trust funds managed by The Bank of New York Mellon Trust Company, N.A. The Bank of New York Mellon Trust Company, N.A., is the trustee as defined by the Plan and, therefore, these transactions qualify as party-in-interest transactions. Fees paid by the Plan for the investment management services are included as a reduction of the return on each fund.

* * * * *

Schedule SB, line 26 — Schedule of Active Participant Data

ATTAINED AGE	YEARS OF CREDITED SERVICE										
	UNDER 1	1–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40 & UP	TOTAL
Under 25			1								1
25–29			9	2							11
30–34	1	1	26	19	3						50
35–39	1	4	24	41	40	8					118
40–44	1		15	53	71	33					173
45–49	1	3	19	48	86	52	16	1			226
50–54		4	7	42	83	50	41	48	4		279
55–59		2	7	39	74	47	33	83	118	17	420
60–64		1	6	19	44	34	16	40	57	76	293
65–69			1	5	6	7	5	5	10	22	61
70 & up					2			1	1	1	5
Total	4	15	115	268	409	231	111	178	190	116	1,637

In each cell, the number is the count of active participants for each age/service combination.

Schedule SB, Part V — Statement of Actuarial Assumptions/Methods

ACTUARIAL ASSUMPTIONS FOR JANUARY 1, 2017 FUNDING VALUATION

DISCOUNT RATE SPONSOR ELECTIONS			
• Segment rates or full yield curve	Segment		
• Look-back months	4		
	Stabilized	Nonstabilized	
• First 5 years	4.16%	1.52%	
• Next 15 years	5.72%	3.80%	
• Over 20 years	6.48%	4.79%	
Mortality sponsor elections			
• Healthy and disabled participants	Section 430(h)(3) prescribed separate static annuitant and nonannuitant mortality tables. These tables are based on the RP-2000 mortality tables projected with mortality improvement to the valuation year plus 7 and 15 years based on Scale AA.		
Other economic assumptions			
• Salary increases	Not applicable		
• Flat-dollar benefit increases	None assumed		
• Social Security wage base	Not applicable		
• Inflation	Not applicable		
• Expected investment return	6.5% per year for 2015 through 2017		
• Expenses	\$890,000 added to current year normal cost		

RATIONALE FOR ECONOMIC ASSUMPTIONS

- Discount rate – Assumption is prescribed by the IRS.
- Expected investment return - The expected rate of return on plan assets is based on the median simulated investment return using capital market assumptions published in Mercer Investment Consulting's Capital Markets Outlook for the plan's actual asset mix, net of an adjustment of 20 bps for expenses assumed to be paid from plan assets.
- Expenses – Expenses for the current year are assumed to be the average of actual expenses excluding PBGC premium for the prior two years plus expected current year PBGC premium, rounded to nearest \$10,000.

Schedule SB, Part V — Statement of Actuarial Assumptions/Methods

Demographic assumptions			
• Withdrawal	See table of sample rates.		
• Disability incidence	1985 Pension Disability Table, Class 3 with 82% weighting. See table of sample rates.		
• Retirement age	Attained age	Percentage Retiring	
	45-59	5.0%	
	60	6.0%	
	61	17.0%	
	62	32.0%	
	63	23.0%	
	64	27.0%	
	65	49.0%	
	66	28.0%	
	67	37.0%	
	68	28.0%	
	69	35.0%	
	70	100.0%	
• Benefit commencement age for			
— Future vested deferred	65		
— Current vested deferred	65		
• Spouse assumptions	Male participants	Female participants	
— Percentage married	75%	50%	
— Spouse age difference	2 years younger	2 years older	
Form of payment	Single Life	50% J&S	100% J&S
• Active retirements	70%	0%	30%
• Future vested deferred	70%	0%	30%
• Future disabilities	70%	0%	30%
• Future deaths	0%	100%	0%
• Current vested deferred	70%	0%	30%
Unpredictable contingent event assumptions	Not applicable		

Schedule SB, Part V — Statement of Actuarial Assumptions/Methods

Table of Sample Rates

ATTAINED AGE	PERCENTAGE		
	DISABILITY INCIDENCE		WITHDRAWAL
	MALE	FEMALE	
20	0.12%	0.07%	23.58%
25	0.18%	0.12%	18.37%
30	0.25%	0.21%	14.65%
35	0.35%	0.32%	11.96%
40	0.49%	0.45%	9.99%
45	0.68%	0.64%	8.93%
50	1.00%	0.98%	8.52%
55	1.74%	1.61%	8.44%
60	2.66%	1.91%	8.44%

RATIONALE FOR DEMOGRAPHIC ASSUMPTIONS

- Mortality – This assumption is prescribed by the IRS.
- Withdrawal – This assumption is based on an experience study covering the period from January 1, 2006 to December 31, 2010 and the expectation that future withdrawal patterns and circumstances of the employer will not differ significantly from the period studied.
- Retirement age – This assumption is based on an experience study covering the period from January 1, 2006 to December 31, 2010 and the expectation that future retirement patterns and circumstances of the employer will not differ significantly from the period studied.
- Benefit commencement age – This assumption is based on an experience study covering the period from January 1, 2006 to December 31, 2010 and the expectation that future retirement patterns and circumstances of the employer will not differ significantly from the period studied.

ACTUARIAL METHODS FOR FUNDING**Asset Methods**

The asset valuation method is an average of the adjusted market value for each year during the last two years preceding the valuation date. The adjusted market value is the market value at each determination date adjusted to the valuation date based on actual cash flows and expected interest at the lesser of the expected rate of return and the third segment rate. This amount is adjusted to be no greater than 110% and no less than 90% of the fair market value, as defined in IRC Section 430.

Schedule SB, Part V — Statement of Actuarial Assumptions/Methods

A characteristic of this asset method is that, over time, it is slightly more likely to produce an actuarial value of assets that is less than the market value of assets than an actuarial value that is greater than the market value.

Participant Methods

Participants or former participants are included or excluded from the valuation as described below:

- **Participants included:** Aon Hewitt provides us with data on all plan participants as of the valuation date.
- **Participants excluded:** No actuarial liability is included for nonvested participants who terminated prior to the valuation date. For this purpose, participants with a break in service on the valuation date are treated as terminated participants.
- **Insurance contracts:** The plan does not have any insurance contracts.
- **Transferred participants:** The liabilities for employees who have transferred into the Employees Retirement Plan have been included with the liabilities for active participants.

Minimum Funding Methods

The funding target for minimum funding calculations is computed using the traditional unit credit method of funding. The objective under this method is to fund each participant's benefits under the plan as they accrue. Thus, the total pension to which each participant is expected to become entitled at retirement is broken down into units, each associated with a year of past or future credited service.

A detailed description of the calculation follows:

- The plan's valuation date is the beginning of the plan year.
- An individual's **funding target** is the present value of future benefits based on credited service and average pay as of the beginning of the plan year, and an individual's **target normal cost** is the present value of the benefit expected to accrue in the plan year. If multiple decrements are used, the funding target and the target normal cost for an individual is the sum of the component funding targets and target normal costs associated with the various anticipated separation dates.
- This plan provides disability benefits that are not a function of participant's accrued benefit or years of service. This benefit is allocated to funding target based on the ratio of the participant's service at the beginning of the plan year to their service at each decrement age and is allocated to target normal cost based on the proportionate benefit attributable to the increase in the participant's service and compensation during the plan year.
- The plan's **target normal cost** is the sum of the individual target normal costs, and the plan's **funding target** is the sum of the individual funding targets for all participants under the plan.

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2017 This Form is Open to Public Inspection
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For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017

▶ **Round off amounts to nearest dollar.**
 ▶ **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan JOHNS MANVILLE HOURLY RETIREMENT PLAN	B Three-digit plan number (PN) ▶	002
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF JOHNS MANVILLE CORPORATION ATTN RETIREMENT 11-04	D Employer Identification Number (EIN) 84-0856796	
E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B	F Prior year plan size: ☐ 100 or fewer ☐ 101-500 ☒ More than 500	

Part I Basic Information				
1 Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2017</u>				
2 Assets:				
a Market value.....	2a	491,507,473		
b Actuarial value.....	2b	494,360,168		
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target	
a For retired participants and beneficiaries receiving payment	4,248	227,288,500	227,288,500	
b For terminated vested participants	987	23,657,067	23,657,067	
c For active participants	1,637	104,044,420	109,416,655	
d Total	6,872	354,989,987	360,362,222	
4 If the plan is in at-risk status, check the box and complete lines (a) and (b) ☐				
a Funding target disregarding prescribed at-risk assumptions	4a			
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b			
5 Effective interest rate	5	5.85%		
6 Target normal cost	6	4,080,963		

Statement by Enrolled Actuary
 To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE	 Signature of actuary	<u>8/27/2018</u> Date
MARLISE S. BRUNO Type or print name of actuary		1706542 Most recent enrollment number
MERCER Firm name		303-376-0800 Telephone number (including area code)
1225 17TH STREET, SUITE 1300 DENVER CO 80202 Address of the firm		

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

Part II	Beginning of Year Carryover and Prefunding Balances	(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year).....	9,753,455	9,573,132
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8).....	9,753,455	9,573,132
10	Interest on line 9 using prior year's actual return of <u>9.87%</u>	962,666	944,868
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year).....		0
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.05%</u>		0
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
	c Total available at beginning of current plan year to add to prefunding balance.....		0
	d Portion of (c) to be added to prefunding balance.....		0
2	Other reductions in balances due to elections or deemed elections	0	0
3	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12).....	10,716,121	10,518,000

Part III	Funding Percentages		
4	Funding target attainment percentage	14	131.29%
5	Adjusted funding target attainment percentage	15	137.18%
6	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	138.76%
7	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV		Contributions and Liquidity Shortfalls				
8 Contributions made to the plan for the plan year by employer(s) and employees:						
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	
			Totals ►	18(b)	0 18(c)	0

a Contributions allocated toward unpaid minimum required contributions from prior years.....	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date.....	19c	0

C If line 20a is "Yes," see instructions and complete the following table as applicable:

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th
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[illegible]

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.16 %	2nd segment: 5.72 %	3rd segment: 6.48 %	☐ N/A, full yield curve used
b Applicable month (enter code).....				21b 4
22 Weighted average retirement age				22 62
23 Mortality table(s) (see instructions)	☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute			

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	☐ Yes ☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):												
a Target normal cost (line 6)	31a	4,080,963										
b Excess assets, if applicable, but not greater than line 31a	31b	4,080,963										
32 Amortization installments:	<table border="1"> <thead> <tr> <th></th> <th>Outstanding Balance</th> <th>Installment</th> </tr> </thead> <tbody> <tr> <td>a Net shortfall amortization installment.....</td> <td>0</td> <td>0</td> </tr> <tr> <td>b Waiver amortization installment</td> <td>0</td> <td>0</td> </tr> </tbody> </table>				Outstanding Balance	Installment	a Net shortfall amortization installment.....	0	0	b Waiver amortization installment	0	0
	Outstanding Balance	Installment										
a Net shortfall amortization installment.....	0	0										
b Waiver amortization installment	0	0										
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33											
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....	34	0										
		Carryover balance	Prefunding balance									
35 Balances elected for use to offset funding requirement		0	0									
36 Additional cash requirement (line 34 minus line 35).....	36	0										
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....	37	0										
38 Present value of excess contributions for current year (see instructions)												
a Total (excess, if any, of line 37 over line 36)	38a	0										
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	0										
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37).....	39	0										
40 Unpaid minimum required contributions for all years	40	0										

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:	
a Schedule elected	☐ 2 plus 7 years ☐ 15 years
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011
42 Amount of acceleration adjustment	42
43 Excess installment acceleration amount to be carried over to future plan years	43

Schedule SB, line 22 — Description of Weighted Average Retirement Age

Each employee is assumed to retire in accordance with the table of retirement rates. The proportion of employees expected to retire at each potential retirement age is shown below. The average retirement age is 62.

(A)	(B)	(C)	(D)	(E)
Retirement age	Retirement Percent	Lx	Number of employees expected to retire (B) x (C)	(A) x (D)
55	5.0%	10,000	500.00	27,500
56	5.0%	9,500	475.00	26,600
57	5.0%	9,025	451.00	25,707
58	5.0%	8,574	429.00	24,882
59	5.0%	8,145	407.00	24,013
60	6.0%	7,738	464.00	27,840
61	17.0%	7,274	1,236.00	75,396
62	32.0%	6,038	1,932.00	119,784
63	23.0%	4,106	944.00	59,472
64	27.0%	3,162	854.00	54,656
65	49.0%	2,308	1,131.00	73,515
66	28.0%	1,177	329.00	21,714
67	37.0%	848	314.00	21,038
68	28.0%	534	149.00	10,132
69	35.0%	385	135.00	9,315
70	100.0%	250	250.00	17,500
Total			10,000.00	619,064
Average				61.9

Schedule SB, Part V — Summary of Plan Provisions

SUMMARY OF MAJOR PLAN PROVISIONS

Effective date and plan year	Original plan: August 1, 1966. Restated plan: January 1, 2017. Plan year: Calendar Year.
Status of the plan	All locations are closed to new entrants. Locations were closed to new entrants at various dates from 2006 through 2010.
Significant events that occurred during the year	None.
Definitions	
• Participation	One year of service. All locations are closed to new entrants. Locations were closed to new entrants at various dates from 2006 through 2010.
• Employee contributions	Discontinued August 1, 1966; if not distributed in a lump sum, provide supplemental benefit and minimum cash refund from plan.
• Accumulated service	Elapsed time beginning on the date the employee first completes an hour of service and ending on the employee's severance date.
• Benefit service	Calendar years after Participation Date in which participant completes 1,800 hours; partial years credited for less than 1,800 hours.
• Transfers between plans	Earns Benefit Service as an Employee under this Plan; earns Accumulated Service while covered under the Employees Retirement Plan. After 5 years of Benefit Service under the Employees Retirement Plan, all Service (or Accumulated Service after December 31, 2007) is accounted for under the Employees Retirement Plan but is offset by the benefit accrued under the Hourly Plan.
• Accrued benefit	Calculated same as normal retirement, but based on Benefit Service at date of calculation.
Normal retirement	
• Eligibility	Age 65.
• Benefit	Benefit rates are based on periods of Benefit Service and location. A summary of the rates used for the current valuation is included at the end of this section.
Early retirement	
• Eligibility	Age 60, age 55 and 15 years of Accumulated Service or 30 years of Accumulated Service.
• Benefit	Accrued benefit reduced 4% per year prior to age 65 (reduced from age 62 if 25 years of Accumulated Service and retire at certain locations).

Schedule SB, Part V — Summary of Plan Provisions

Deferred vested																											
• Eligibility	Five years of Accumulated Service.																										
• Benefit	Accrued benefit payable at age 65 or reduced benefit payable after age 55; reduction factors per the following table:																										
	<table> <tr> <th>Age</th><th>Reduction</th></tr> <tr> <th>Benefit</th><th>Factor</th></tr> <tr> <th>Commences</th><th></th></tr> <tr> <td>55</td><td>0.40</td></tr> <tr> <td>56</td><td>0.44</td></tr> <tr> <td>57</td><td>0.48</td></tr> <tr> <td>58</td><td>0.52</td></tr> <tr> <td>59</td><td>0.56</td></tr> <tr> <td>60</td><td>0.61</td></tr> <tr> <td>61</td><td>0.67</td></tr> <tr> <td>62</td><td>0.74</td></tr> <tr> <td>63</td><td>0.82</td></tr> <tr> <td>64</td><td>0.90</td></tr> </table>	Age	Reduction	Benefit	Factor	Commences		55	0.40	56	0.44	57	0.48	58	0.52	59	0.56	60	0.61	61	0.67	62	0.74	63	0.82	64	0.90
Age	Reduction																										
Benefit	Factor																										
Commences																											
55	0.40																										
56	0.44																										
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59	0.56																										
60	0.61																										
61	0.67																										
62	0.74																										
63	0.82																										
64	0.90																										
Disability																											
• Eligibility	10 years of Accumulated Service, mentally or physically incapable of employment.																										
• Benefit	Accrued benefit payable immediately plus a supplemental benefit of \$100 per month payable to earlier of age 65 or eligibility for an unreduced Social Security benefit.																										
Pre-retirement death																											
• Eligibility	Death of a vested participant with a surviving spouse prior to his or her annuity starting date.																										
• Benefit	Death benefit to spouse is benefit payable had the participant terminated on his date of death, elected benefit commencement with a 50% contingent annuitant option at age 55, or date of death if later, and died on the following day.																										
Unpredictable contingent event benefits	N/A																										
Form of benefits																											
• Automatic form for unmarried participants	Life annuity																										
• Automatic form for married participants	Reduced 50% contingent annuitant annuity																										

Schedule SB, Part V — Summary of Plan Provisions

• Optional forms	100%, 75% or 50% contingent annuitant annuity or life annuity. If the present value of the member's accrued benefit is less than \$5,000, the member can elect a single lump sum payment. During 2012, vested terminated participants were able to elect to receive their benefits under the plan payable as a lump sum.
• Optional form Conversion factors	<p><u>Deferred Disability and Non-Disability Benefits:</u> Principal annuitant determination shall use the Society of Actuaries' RP-2014 Blue Collar Mortality Table rates (employee rates for ages below 50 and healthy annuitant rates for ages 50 and above) projected to 2038 using the Society of Actuaries' MP-2014 projection scale, blended 85% male and 15% female. The contingent annuitant determination shall use the Society of Actuaries' RP-2014 Aggregate Mortality Table (employee rates for ages below 50 and healthy annuitant rates for ages 50 and above) projected to 2038 using the Society of Actuaries' MP-2014 projection scale, blended 15% male and 85% female.</p> <p><u>Immediate disability benefits:</u> Principal annuitant determination shall use the Society of Actuaries' RP-2014 Disabled Retiree Table rates projected to 2038 using the Society of Actuaries' MP-2014 projection scale, and then blended at a ratio of 70% male and 30% female. The contingent annuitant determination shall use the Society of Actuaries' RP-2014 Aggregate Mortality Table (employee rates for ages below 50 and healthy annuitant rates for ages 50 and above) projected to 2038 using the Society of Actuaries' MP-2014 projection scale, and then blended at a ratio of 30% male and 70% female. The factors are determined with a 6% interest rate.</p>
• Retroactive annuity starting dates	The plan includes a retroactive annuity starting date provision.
Miscellaneous	
• Maximum benefits	Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually. For 2017, the limit is \$215,000.

Schedule SB, Part V — Summary of Plan Provisions

Location Name	Number of Actives	Special Early	Collectively Bargained	Annual Accrual Rate for 2017
Bremen, Indiana	15			\$ 204
CEELCO	2			132
Cleburne ¹	198	198	198	360
Defiance (GMP) ¹	335	335	335	468
Defiance UAW ¹	46	46	46	468
Edison (Zeston) ¹	29	29	29	252
Etowah	123	123		384
Fernley	9			216
Hazleton	23			204
Jacksonville	15			204
Lewiston	7			252
Macon	31			216
McPherson	115	115		342
Oklahoma City	7			240
Penbryn ¹	6	6	6	312
Phenix City, AL	1			204
Plattsburgh	11			216
Richland	29			180
Richmond, Indiana ¹	38	38	38	324
Richmond, Virginia ¹	16	16	16	276
Rockdale ¹	24	24	24	312
Southgate	14			216
Waterville (plant 1, IBT 20) ¹	171	171	171	396
Waterville (plant 1, UAW) ¹	8	8	8	384
Waterville (plant 7, IBT 20) ¹	44	44	44	396
Waterville (plant 7, UAW) ¹	2	2	2	384
Willows	126	126		330
Winder ¹	<u>140</u>	<u>140</u>	<u>140</u>	324
Total participants	1,585	1,421	1,057	
Average accrual rate				\$ 366

¹ These locations are offering additional accruals for employees who meet special age and service requirements as detailed on the next page.

Schedule SB, Part V — Summary of Plan Provisions

Location Name	Ultimate Supplement Rate	Eligibility End Date
Cleburne	\$9	2/18/2007
Defiance (GMP)	\$7	8/16/2010
Defiance UAW	\$7	9/30/2010
Edison (Zeston)	\$3	10/15/2011
Penbryn	\$11	1/1/2012
Richmond, Indiana	\$7	11/1/2013
Richmond, Virginia	\$5	Ongoing
Rockdale	\$2	10/9/2009
Waterville (plant 1, IBT 20)	\$7	4/18/2006
Waterville (plant 1, UAW) ²	\$5	7/16/2009
Waterville (plant 7, IBT 20)	\$7	4/18/2006
Waterville (plant 7, UAW) ²	\$5	7/16/2009
Winder	\$2	10/15/2011

Accrual supplements are available to employees who meet the 55/25 age and service criteria prior to termination and prior to the Eligibility End Date.

Benefits Included or Excluded

Unless noted below, all benefits provided by the plan, as amended and restated effective January 1, 2017, are included in this valuation.

- **Most recent plan amendments included:** None.
- **Plan amendments excluded:** None
- **Late retirement increases:**
 - *Active participants:* The plan provides benefit suspension notices to participants who work beyond normal retirement; therefore, late retirement actuarial increases only apply to participants who defer retirement beyond age 70½. This valuation includes increases for current participants over age 70.
 - *Deferred vested participants:* Current deferred vested participants over normal retirement age are valued including the late retirement actuarial increase.
- **Internal Revenue Code limitations:** The limitations of Internal Revenue Code Section 415(b) and 401(a)(17) have been incorporated into our calculations.

² Eligible Waterville UAW participants who met the 55/25 criteria prior to 7/15/2006 receive a \$7 multiplier supplement. Eligible Waterville UAW participants who met the 55/25 criteria after 7/14/2006 and before 7/16/2009 receive a \$5 multiplier supplement.

Schedule SB, Part V — Summary of Plan Provisions

- **IRC Section 416 rules for top-heavy plans:** We did not test whether this plan is top-heavy (when the present value of benefits for key employees equals or exceeds 60% of the present value for all participants). However, we expect that the plan is not top-heavy due to the large number of rank-and-file participants; therefore, the funding target and target normal cost do not reflect any liability for top-heavy benefit accruals.

PLAN PROVISIONS SPECIFIC TO FUNDING

Additional Benefits Included or Excluded

- **IRC Section 436 benefit restrictions:**
 - *Unpredictable contingent event benefits:* The plan does not have any unpredictable contingent event benefits.
 - *Plan amendments:* See above.
 - *Prohibited payments:* Limitations on prohibited benefits (if any) are reflected for annuity starting dates before the valuation date but are ignored for annuity starting dates on or after the valuation date.
 - *Benefit accruals:* The plan's funding target does not reflect any limitation on benefit accruals. The target normal cost does not reflect any limitation on benefit accruals.
- **Scheduled benefit increases:** Scheduled benefit increases effective after the end of the current plan year are excluded from minimum funding requirements.

PLAN PROVISION CHANGES SINCE PRIOR VALUATION

None

Schedule SB, line 24 — Change in Actuarial Assumptions

- The expense component of normal cost changed from \$910,000 to \$890,000 to reflect our expectations for the current plan year.