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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Form 5500</b><br><br>Department of the Treasury<br>Internal Revenue Service<br><br>Department of Labor<br>Employee Benefits Security<br>Administration<br><br>Pension Benefit Guaranty Corporation | <b>Annual Return/Report of Employee Benefit Plan</b><br>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).<br><br><p style="text-align: center;">▶ <b>Complete all entries in accordance with the instructions to the Form 5500.</b></p> | OMB Nos. 1210-0110<br>1210-0089<br><br><b>2017</b><br><br><b>This Form is Open to Public Inspection</b> |
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|                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Part I</b>                                                                                            | <b>Annual Report Identification Information</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| For calendar plan year 2017 or fiscal plan year beginning <u>01/01/2017</u> and ending <u>12/31/2017</u> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>A</b>                                                                                                 | This return/report is for: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> <input type="checkbox"/> a multiemployer plan         </div> <div> <input type="checkbox"/> a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)         </div> </div> <div style="margin-top: 5px;"> <input checked="" type="checkbox"/> a single-employer plan         <div style="margin-left: 100px;"><input type="checkbox"/> a DFE (specify) _____</div> </div> |
| <b>B</b>                                                                                                 | This return/report is: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> <input type="checkbox"/> the first return/report<br/> <input type="checkbox"/> an amended return/report         </div> <div> <input type="checkbox"/> the final return/report<br/> <input type="checkbox"/> a short plan year return/report (less than 12 months)         </div> </div>                                                                                                                                                                                     |
| <b>C</b>                                                                                                 | If the plan is a collectively-bargained plan, check here. . . . . <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>D</b>                                                                                                 | Check box if filing under: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> <input checked="" type="checkbox"/> Form 5558<br/> <input type="checkbox"/> special extension (enter description)         </div> <div> <input type="checkbox"/> automatic extension         </div> <div> <input type="checkbox"/> the DFVC program         </div> </div>                                                                                                                                                                                                |

|                |                                                                                                                                                                                                                                                                                                                                                                                            |           |                                                           |           |                                                        |           |                                                   |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------|-----------|--------------------------------------------------------|-----------|---------------------------------------------------|
| <b>Part II</b> | <b>Basic Plan Information—enter all requested information</b>                                                                                                                                                                                                                                                                                                                              |           |                                                           |           |                                                        |           |                                                   |
| <b>1a</b>      | Name of plan<br><u>PPG INDUSTRIES, INC. RETIREMENT PLAN F</u>                                                                                                                                                                                                                                                                                                                              |           |                                                           |           |                                                        |           |                                                   |
|                | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"><b>1b</b></td> <td>Three-digit plan number (PN) ▶ <u>097</u></td> </tr> <tr> <td><b>1c</b></td> <td>Effective date of plan<br/><u>01/28/2013</u></td> </tr> </table>                                                                                                                       | <b>1b</b> | Three-digit plan number (PN) ▶ <u>097</u>                 | <b>1c</b> | Effective date of plan<br><u>01/28/2013</u>            |           |                                                   |
| <b>1b</b>      | Three-digit plan number (PN) ▶ <u>097</u>                                                                                                                                                                                                                                                                                                                                                  |           |                                                           |           |                                                        |           |                                                   |
| <b>1c</b>      | Effective date of plan<br><u>01/28/2013</u>                                                                                                                                                                                                                                                                                                                                                |           |                                                           |           |                                                        |           |                                                   |
| <b>2a</b>      | Plan sponsor's name (employer, if for a single-employer plan)<br>Mailing address (include room, apt., suite no. and street, or P.O. Box)<br>City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions)<br><u>PPG INDUSTRIES, INC.</u><br><br><u>ONE PPG PLACE</u><br><u>PITTSBURGH, PA 15272</u>                                              |           |                                                           |           |                                                        |           |                                                   |
|                | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"><b>2b</b></td> <td>Employer Identification Number (EIN)<br/><u>25-0730780</u></td> </tr> <tr> <td><b>2c</b></td> <td>Plan Sponsor's telephone number<br/><u>412-434-3916</u></td> </tr> <tr> <td><b>2d</b></td> <td>Business code (see instructions)<br/><u>325100</u></td> </tr> </table> | <b>2b</b> | Employer Identification Number (EIN)<br><u>25-0730780</u> | <b>2c</b> | Plan Sponsor's telephone number<br><u>412-434-3916</u> | <b>2d</b> | Business code (see instructions)<br><u>325100</u> |
| <b>2b</b>      | Employer Identification Number (EIN)<br><u>25-0730780</u>                                                                                                                                                                                                                                                                                                                                  |           |                                                           |           |                                                        |           |                                                   |
| <b>2c</b>      | Plan Sponsor's telephone number<br><u>412-434-3916</u>                                                                                                                                                                                                                                                                                                                                     |           |                                                           |           |                                                        |           |                                                   |
| <b>2d</b>      | Business code (see instructions)<br><u>325100</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.

|                  |                                                   |            |                                                              |
|------------------|---------------------------------------------------|------------|--------------------------------------------------------------|
| <b>SIGN HERE</b> | Filed with authorized/valid electronic signature. | 10/12/2018 | KAREN P. RATHBURN                                            |
|                  | Signature of plan administrator                   | Date       | Enter name of individual signing as plan administrator       |
| <b>SIGN HERE</b> |                                                   |            |                                                              |
|                  | Signature of employer/plan sponsor                | Date       | Enter name of individual signing as employer or plan sponsor |
| <b>SIGN HERE</b> |                                                   |            |                                                              |
|                  | Signature of DFE                                  | Date       | Enter name of individual signing as DFE                      |

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

Form 5500 (2017)  
v. 170203

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------|--------------|--|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|--|-----------|--|
| <b>3a</b> Plan administrator's name and address <input checked="" type="checkbox"/> Same as Plan Sponsor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>3b</b> Administrator's EIN<br><br><b>3c</b> Administrator's telephone number<br><br><div style="background-color: #cccccc; height: 40px; width: 100%;"></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>4</b> 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:<br><b>a</b> Sponsor's name<br><b>c</b> Plan Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>4b</b> EIN<br><br><b>4d</b> PN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>5</b> Total number of participants at the beginning of the plan year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;"><b>5</b></td> <td style="text-align: right;">8392</td> </tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>5</b>     | 8392 |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>5</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 8392                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>6</b> Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines <b>6a(1)</b> , <b>6a(2)</b> , <b>6b</b> , <b>6c</b> , and <b>6d</b> ).<br><br><b>a(1)</b> Total number of active participants at the beginning of the plan year .....<br><b>a(2)</b> Total number of active participants at the end of the plan year .....<br><br><b>b</b> Retired or separated participants receiving benefits .....<br><b>c</b> Other retired or separated participants entitled to future benefits .....<br><b>d</b> Subtotal. Add lines <b>6a(2)</b> , <b>6b</b> , and <b>6c</b> .....<br><b>e</b> Deceased participants whose beneficiaries are receiving or are entitled to receive benefits. ....<br><b>f</b> Total. Add lines <b>6d</b> and <b>6e</b> .....<br><br><b>g</b> Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item) .....<br><br><b>h</b> Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested ..... | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;"><b>6a(1)</b></td> <td></td> </tr> <tr> <td style="width: 10%; text-align: center;"><b>6a(2)</b></td> <td></td> </tr> <tr> <td style="width: 10%; text-align: center;"><b>6b</b></td> <td style="text-align: right;">3970</td> </tr> <tr> <td style="width: 10%; text-align: center;"><b>6c</b></td> <td style="text-align: right;">2751</td> </tr> <tr> <td style="width: 10%; text-align: center;"><b>6d</b></td> <td style="text-align: right;">6721</td> </tr> <tr> <td style="width: 10%; text-align: center;"><b>6e</b></td> <td style="text-align: right;">1972</td> </tr> <tr> <td style="width: 10%; text-align: center;"><b>6f</b></td> <td style="text-align: right;">8693</td> </tr> <tr> <td style="width: 10%; text-align: center;"><b>6g</b></td> <td></td> </tr> <tr> <td style="width: 10%; text-align: center;"><b>6h</b></td> <td></td> </tr> </table> | <b>6a(1)</b> |      | <b>6a(2)</b> |  | <b>6b</b> | 3970 | <b>6c</b> | 2751 | <b>6d</b> | 6721 | <b>6e</b> | 1972 | <b>6f</b> | 8693 | <b>6g</b> |  | <b>6h</b> |  |
| <b>6a(1)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>6a(2)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>6b</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3970                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>6c</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2751                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>6d</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 6721                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>6e</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1972                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>6f</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8693                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>6g</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>6h</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>7</b> Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item) .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;"><b>7</b></td> <td></td> </tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>7</b>     |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |
| <b>7</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |      |              |  |           |      |           |      |           |      |           |      |           |      |           |  |           |  |

**8a** If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:

1A 1B

**b** If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:

|                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>9a</b> Plan funding arrangement (check all that apply)<br><b>(1)</b> <input type="checkbox"/> Insurance<br><b>(2)</b> <input type="checkbox"/> Code section 412(e)(3) insurance contracts<br><b>(3)</b> <input checked="" type="checkbox"/> Trust<br><b>(4)</b> <input type="checkbox"/> General assets of the sponsor | <b>9b</b> Plan benefit arrangement (check all that apply)<br><b>(1)</b> <input checked="" type="checkbox"/> Insurance<br><b>(2)</b> <input type="checkbox"/> Code section 412(e)(3) insurance contracts<br><b>(3)</b> <input checked="" type="checkbox"/> Trust<br><b>(4)</b> <input type="checkbox"/> General assets of the sponsor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**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)** ☐ **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 \_\_\_\_\_

|                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                    |                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <b>SCHEDULE SB</b><br><b>(Form 5500)</b><br><br>Department of the Treasury<br>Internal Revenue Service<br><br>Department of Labor<br>Employee Benefits Security Administration<br><br>Pension Benefit Guaranty Corporation | <b>Single-Employer Defined Benefit Plan</b><br><b>Actuarial Information</b><br><br>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).<br><br>▶ <b>File as an attachment to Form 5500 or 5500-SF.</b> | OMB No. 1210-0110<br><br><b>2017</b><br><br><b>This Form is Open to Public Inspection</b> |
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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.

|                                                                                                         |                                                                    |
|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| <b>A</b> Name of plan<br><u>PPG INDUSTRIES, INC. RETIREMENT PLAN F</u>                                  | <b>B</b> Three-digit plan number (PN) ▶ <u>097</u>                 |
| <b>C</b> Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF<br><u>PPG INDUSTRIES, INC.</u> | <b>D</b> Employer Identification Number (EIN)<br><u>25-0730780</u> |

|                                                                                                                                           |                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>E</b> Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B | <b>F</b> Prior year plan size: <input type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input checked="" type="checkbox"/> More than 500 |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|

|               |                          |
|---------------|--------------------------|
| <b>Part I</b> | <b>Basic Information</b> |
|---------------|--------------------------|

|                                                                                                                                                                                                                 |                            |                           |                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------------|--------------------------|
| <b>1</b> Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2017</u>                                                                                                                               |                            |                           |                          |
| <b>2</b> Assets:                                                                                                                                                                                                |                            |                           |                          |
| <b>a</b> Market value .....                                                                                                                                                                                     | <b>2a</b>                  | <u>440627130</u>          |                          |
| <b>b</b> Actuarial value .....                                                                                                                                                                                  | <b>2b</b>                  | <u>396564417</u>          |                          |
| <b>3</b> Funding target/participant count breakdown                                                                                                                                                             | (1) Number of participants | (2) Vested Funding Target | (3) Total Funding Target |
| <b>a</b> For retired participants and beneficiaries receiving payment .....                                                                                                                                     | <u>4774</u>                | <u>243167868</u>          | <u>243167868</u>         |
| <b>b</b> For terminated vested participants .....                                                                                                                                                               | <u>3775</u>                | <u>121219580</u>          | <u>121219580</u>         |
| <b>c</b> For active participants .....                                                                                                                                                                          |                            |                           |                          |
| <b>d</b> Total .....                                                                                                                                                                                            | <u>8549</u>                | <u>364387448</u>          | <u>364387448</u>         |
| <b>4</b> If the plan is in at-risk status, check the box and complete lines (a) and (b)..... <input type="checkbox"/>                                                                                           |                            |                           |                          |
| <b>a</b> Funding target disregarding prescribed at-risk assumptions .....                                                                                                                                       | <b>4a</b>                  |                           |                          |
| <b>b</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 ..... | <b>4b</b>                  |                           |                          |
| <b>5</b> Effective interest rate .....                                                                                                                                                                          | <b>5</b>                   | <u>5.80 %</u>             |                          |
| <b>6</b> Target normal cost .....                                                                                                                                                                               | <b>6</b>                   | <u>3300000</u>            |                          |

**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.

|                                                                   |                               |                     |                                        |
|-------------------------------------------------------------------|-------------------------------|---------------------|----------------------------------------|
| <b>SIGN HERE</b>                                                  |                               |                     |                                        |
|                                                                   | Signature of actuary          | <u>09/27/2018</u>   | Date                                   |
| <u>NICHOLAS FRIES</u>                                             |                               | <u>17-07926</u>     | Most recent enrollment number          |
|                                                                   | Type or print name of actuary | <u>214-830-8031</u> | Telephone number (including area code) |
| <u>MERCER</u>                                                     | Firm name                     |                     |                                        |
| <u>200 PUBLIC SQUARE SUITE 3760</u><br><u>CLEVELAND, OH 44114</u> | 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 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------|
| <b>7</b> Balance at beginning of prior year after applicable adjustments (line 13 from prior year) .....                                                     | 137114654             |                        |
| <b>8</b> Portion elected for use to offset prior year's funding requirement (line 35 from prior year) .....                                                  |                       |                        |
| <b>9</b> Amount remaining (line 7 minus line 8) .....                                                                                                        | 137114654             |                        |
| <b>10</b> Interest on line 9 using prior year's actual return of 5.87% .....                                                                                 | 8041972               |                        |
| <b>11</b> Prior year's excess contributions to be added to prefunding balance:                                                                               |                       |                        |
| <b>a</b> Present value of excess contributions (line 38a from prior year) .....                                                                              |                       | 96094080               |
| <b>b(1)</b> 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 5.87% ..... |                       | 5640722                |
| <b>b(2)</b> Interest on line 38b from prior year Schedule SB, using prior year's actual return .....                                                         |                       |                        |
| <b>c</b> Total available at beginning of current plan year to add to prefunding balance .....                                                                |                       | 101734802              |
| <b>d</b> Portion of (c) to be added to prefunding balance .....                                                                                              |                       |                        |
| <b>12</b> Other reductions in balances due to elections or deemed elections .....                                                                            | 40102168              |                        |
| <b>13</b> Balance at beginning of current year (line 9 + line 10 + line 11d – line 12) .....                                                                 | 105054458             |                        |

**Part III Funding Percentages**

|                                                                                                                                                                            |           |         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|
| <b>14</b> Funding target attainment percentage .....                                                                                                                       | <b>14</b> | 80.00%  |
| <b>15</b> Adjusted funding target attainment percentage .....                                                                                                              | <b>15</b> | 102.81% |
| <b>16</b> Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement ..... | <b>16</b> | 122.94% |
| <b>17</b> If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage. ....                                        | <b>17</b> | %       |

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

| (a) Date<br>(MM-DD-YYYY) | (b) Amount paid by<br>employer(s) | (c) Amount paid by<br>employees | (a) Date<br>(MM-DD-YYYY) | (b) Amount paid by<br>employer(s) | (c) Amount paid by<br>employees |
|--------------------------|-----------------------------------|---------------------------------|--------------------------|-----------------------------------|---------------------------------|
|                          |                                   |                                 |                          |                                   |                                 |
|                          |                                   |                                 |                          |                                   |                                 |
|                          |                                   |                                 |                          |                                   |                                 |
|                          |                                   |                                 |                          |                                   |                                 |
|                          |                                   |                                 |                          |                                   |                                 |
|                          |                                   |                                 |                          |                                   |                                 |
|                          |                                   |                                 |                          |                                   |                                 |
| <b>Totals ▶</b>          |                                   |                                 | <b>18(b)</b>             |                                   | <b>18(c)</b>                    |

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

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

**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**

|                                                                                                                                                                                              |                        |                        |                        |                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|------------------------|-----------------------------------------------------|
| <b>21</b> Discount rate:                                                                                                                                                                     |                        |                        |                        |                                                     |
| <b>a</b> Segment rates:                                                                                                                                                                      | 1st segment:<br>4.16 % | 2nd segment:<br>5.72 % | 3rd segment:<br>6.48 % | <input type="checkbox"/> N/A, full yield curve used |
| <b>b</b> Applicable month (enter code) .....                                                                                                                                                 |                        |                        |                        | <b>21b</b> 4                                        |
| <b>22</b> Weighted average retirement age .....                                                                                                                                              |                        |                        |                        | <b>22</b>                                           |
| <b>23</b> Mortality table(s) (see instructions) <input type="checkbox"/> Prescribed - combined <input checked="" type="checkbox"/> Prescribed - separate <input type="checkbox"/> Substitute |                        |                        |                        |                                                     |

**Part VI Miscellaneous Items**

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

**Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years**

|                                                                                                                                      |           |  |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------|--|
| <b>28</b> Unpaid minimum required contributions for all prior years .....                                                            | <b>28</b> |  |
| <b>29</b> Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a) ..... | <b>29</b> |  |
| <b>30</b> Remaining amount of unpaid minimum required contributions (line 28 minus line 29) .....                                    | <b>30</b> |  |

**Part VIII Minimum Required Contribution For Current Year**

|                                                                                                                                                                                      |                     |                    |               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------|---------------|
| <b>31</b> Target normal cost and excess assets (see instructions):                                                                                                                   |                     |                    |               |
| <b>a</b> Target normal cost (line 6) .....                                                                                                                                           | <b>31a</b>          | 3300000            |               |
| <b>b</b> Excess assets, if applicable, but not greater than line 31a .....                                                                                                           | <b>31b</b>          | 0                  |               |
| <b>32</b> Amortization installments:                                                                                                                                                 | Outstanding Balance |                    | Installment   |
| <b>a</b> Net shortfall amortization installment .....                                                                                                                                |                     |                    |               |
| <b>b</b> Waiver amortization installment .....                                                                                                                                       |                     |                    |               |
| <b>33</b> 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 ..... | <b>33</b>           |                    |               |
| <b>34</b> Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33) .....                                                         | <b>34</b>           | 3300000            |               |
|                                                                                                                                                                                      | Carryover balance   | Prefunding balance | Total balance |
| <b>35</b> Balances elected for use to offset funding requirement .....                                                                                                               | 3300000             |                    | 3300000       |
| <b>36</b> Additional cash requirement (line 34 minus line 35) .....                                                                                                                  | <b>36</b>           | 0                  |               |
| <b>37</b> Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c) .....                                                  | <b>37</b>           |                    |               |
| <b>38</b> Present value of excess contributions for current year (see instructions)                                                                                                  |                     |                    |               |
| <b>a</b> Total (excess, if any, of line 37 over line 36) .....                                                                                                                       | <b>38a</b>          |                    |               |
| <b>b</b> Portion included in line 38a attributable to use of prefunding and funding standard carryover balances .....                                                                | <b>38b</b>          |                    |               |
| <b>39</b> Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37) .....                                                                      | <b>39</b>           |                    |               |
| <b>40</b> Unpaid minimum required contributions for all years .....                                                                                                                  | <b>40</b>           |                    |               |

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

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

|                                                                                                                                                                                                                                              |                                                                                                                                                                                                                             |                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| <div>SCHEDULE C</div> <div>(Form 5500)</div> <div>Department of the Treasury<br/>Internal Revenue Service</div> <div>Department of Labor<br/>Employee Benefits Security Administration</div> <div>Pension Benefit Guaranty Corporation</div> | <div>Service Provider Information</div> <div>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).</div> <div>▶ File as an attachment to Form 5500.</div> | OMB No. 1210-0110                       |
|                                                                                                                                                                                                                                              |                                                                                                                                                                                                                             | 2017                                    |
|                                                                                                                                                                                                                                              |                                                                                                                                                                                                                             | This Form is Open to Public Inspection. |

|                                                                                            |                                                      |     |
|--------------------------------------------------------------------------------------------|------------------------------------------------------|-----|
| For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017 |                                                      |     |
| A Name of plan<br>PPG INDUSTRIES, INC. RETIREMENT PLAN F                                   | B Three-digit plan number (PN) ▶                     | 097 |
|                                                                                            |                                                      |     |
| C Plan sponsor's name as shown on line 2a of Form 5500<br>PPG INDUSTRIES, INC.             | D Employer Identification Number (EIN)<br>25-0730780 |     |

|        |                                                 |
|--------|-------------------------------------------------|
| Part I | Service Provider Information (see instructions) |
|--------|-------------------------------------------------|

You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

- a Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions).. . . . . ☐ Yes ☒ No
- b If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

|                                                                                                            |
|------------------------------------------------------------------------------------------------------------|
| (b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation |
|                                                                                                            |
| (b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation |
|                                                                                                            |
| (b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation |
|                                                                                                            |
| (b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation |
|                                                                                                            |

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**(b)** Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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**(b)** Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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**(b)** Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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**(b)** Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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**(b)** Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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**(b)** Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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**(b)** Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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**(b)** Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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**2. Information on Other Service Providers Receiving Direct or Indirect Compensation.** Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

**(a)** Enter name and EIN or address (see instructions)

PPG INDUSTRIES, INC.

25-0730780

| (b)<br>Service Code(s) | (c)<br>Relationship to employer, employee organization, or person known to be a party-in-interest | (d)<br>Enter direct compensation paid by the plan. If none, enter -0-. | (e)<br>Did service provider receive indirect compensation? (sources other than plan or plan sponsor) | (f)<br>Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures? | (g)<br>Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-. | (h)<br>Did the service provider give you a formula instead of an amount or estimated amount? |
|------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 11 16 29 65            | PLAN SPONSOR                                                                                      | 1020515                                                                | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                  | Yes <input type="checkbox"/> No <input type="checkbox"/>                                                                       |                                                                                                                                                                                 | Yes <input type="checkbox"/> No <input type="checkbox"/>                                     |

**(a)** Enter name and EIN or address (see instructions)

MERCER

13-2834414

| (b)<br>Service Code(s) | (c)<br>Relationship to employer, employee organization, or person known to be a party-in-interest | (d)<br>Enter direct compensation paid by the plan. If none, enter -0-. | (e)<br>Did service provider receive indirect compensation? (sources other than plan or plan sponsor) | (f)<br>Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures? | (g)<br>Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-. | (h)<br>Did the service provider give you a formula instead of an amount or estimated amount? |
|------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 16                     | NONE                                                                                              | 154603                                                                 | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                  | Yes <input type="checkbox"/> No <input type="checkbox"/>                                                                       |                                                                                                                                                                                 | Yes <input type="checkbox"/> No <input type="checkbox"/>                                     |

**(a)** Enter name and EIN or address (see instructions)

K&L GATES

25-0921018

| (b)<br>Service Code(s) | (c)<br>Relationship to employer, employee organization, or person known to be a party-in-interest | (d)<br>Enter direct compensation paid by the plan. If none, enter -0-. | (e)<br>Did service provider receive indirect compensation? (sources other than plan or plan sponsor) | (f)<br>Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures? | (g)<br>Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-. | (h)<br>Did the service provider give you a formula instead of an amount or estimated amount? |
|------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 29                     | NONE                                                                                              | 56349                                                                  | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                  | Yes <input type="checkbox"/> No <input type="checkbox"/>                                                                       |                                                                                                                                                                                 | Yes <input type="checkbox"/> No <input type="checkbox"/>                                     |

**2. Information on Other Service Providers Receiving Direct or Indirect Compensation.** Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

**(a)** Enter name and EIN or address (see instructions)

SCHNEIDER DOWNS

25-1408703

| (b)<br>Service Code(s) | (c)<br>Relationship to employer, employee organization, or person known to be a party-in-interest | (d)<br>Enter direct compensation paid by the plan. If none, enter -0-. | (e)<br>Did service provider receive indirect compensation? (sources other than plan or plan sponsor) | (f)<br>Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures? | (g)<br>Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-. | (h)<br>Did the service provider give you a formula instead of an amount or estimated amount? |
|------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 10                     | NONE                                                                                              | 38203                                                                  | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                  | Yes <input type="checkbox"/> No <input type="checkbox"/>                                                                       |                                                                                                                                                                                 | Yes <input type="checkbox"/> No <input type="checkbox"/>                                     |

**(a)** Enter name and EIN or address (see instructions)

OCTOBER THREE CONSULTING LLC

27-1175487

| (b)<br>Service Code(s) | (c)<br>Relationship to employer, employee organization, or person known to be a party-in-interest | (d)<br>Enter direct compensation paid by the plan. If none, enter -0-. | (e)<br>Did service provider receive indirect compensation? (sources other than plan or plan sponsor) | (f)<br>Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures? | (g)<br>Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-. | (h)<br>Did the service provider give you a formula instead of an amount or estimated amount? |
|------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 15                     | NONE                                                                                              | 532509                                                                 | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                  | Yes <input type="checkbox"/> No <input type="checkbox"/>                                                                       |                                                                                                                                                                                 | Yes <input type="checkbox"/> No <input type="checkbox"/>                                     |

**(a)** Enter name and EIN or address (see instructions)

| (b)<br>Service Code(s) | (c)<br>Relationship to employer, employee organization, or person known to be a party-in-interest | (d)<br>Enter direct compensation paid by the plan. If none, enter -0-. | (e)<br>Did service provider receive indirect compensation? (sources other than plan or plan sponsor) | (f)<br>Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures? | (g)<br>Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-. | (h)<br>Did the service provider give you a formula instead of an amount or estimated amount? |
|------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
|                        |                                                                                                   |                                                                        | Yes <input type="checkbox"/> No <input type="checkbox"/>                                             | Yes <input type="checkbox"/> No <input type="checkbox"/>                                                                       |                                                                                                                                                                                 | Yes <input type="checkbox"/> No <input type="checkbox"/>                                     |

**Part I Service Provider Information (continued)**

**3.** If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received \$1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

| (a) Enter service provider name as it appears on line 2             | (b) Service Codes<br>(see instructions)                                                                                                                            | (c) Enter amount of indirect compensation |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                                                                     |                                                                                                                                                                    |                                           |
| (d) Enter name and EIN (address) of source of indirect compensation | (e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation. |                                           |
|                                                                     |                                                                                                                                                                    |                                           |
| (a) Enter service provider name as it appears on line 2             | (b) Service Codes<br>(see instructions)                                                                                                                            | (c) Enter amount of indirect compensation |
|                                                                     |                                                                                                                                                                    |                                           |
| (d) Enter name and EIN (address) of source of indirect compensation | (e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation. |                                           |
|                                                                     |                                                                                                                                                                    |                                           |
| (a) Enter service provider name as it appears on line 2             | (b) Service Codes<br>(see instructions)                                                                                                                            | (c) Enter amount of indirect compensation |
|                                                                     |                                                                                                                                                                    |                                           |
| (d) Enter name and EIN (address) of source of indirect compensation | (e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation. |                                           |
|                                                                     |                                                                                                                                                                    |                                           |

**Part II Service Providers Who Fail or Refuse to Provide Information**

**4** Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

| (a) Enter name and EIN or address of service provider (see instructions) | (b) Nature of Service Code(s) | (c) Describe the information that the service provider failed or refused to provide |
|--------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------|
|                                                                          |                               |                                                                                     |
| (a) Enter name and EIN or address of service provider (see instructions) | (b) Nature of Service Code(s) | (c) Describe the information that the service provider failed or refused to provide |
|                                                                          |                               |                                                                                     |
| (a) Enter name and EIN or address of service provider (see instructions) | (b) Nature of Service Code(s) | (c) Describe the information that the service provider failed or refused to provide |
|                                                                          |                               |                                                                                     |
| (a) Enter name and EIN or address of service provider (see instructions) | (b) Nature of Service Code(s) | (c) Describe the information that the service provider failed or refused to provide |
|                                                                          |                               |                                                                                     |
| (a) Enter name and EIN or address of service provider (see instructions) | (b) Nature of Service Code(s) | (c) Describe the information that the service provider failed or refused to provide |
|                                                                          |                               |                                                                                     |
| (a) Enter name and EIN or address of service provider (see instructions) | (b) Nature of Service Code(s) | (c) Describe the information that the service provider failed or refused to provide |
|                                                                          |                               |                                                                                     |

**Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)**  
(complete as many entries as needed)

|                    |                     |
|--------------------|---------------------|
| <b>a</b> Name:     | <b>b</b> EIN:       |
| <b>c</b> Position: |                     |
| <b>d</b> Address:  | <b>e</b> Telephone: |
|                    |                     |

Explanation:

|                    |                     |
|--------------------|---------------------|
| <b>a</b> Name:     | <b>b</b> EIN:       |
| <b>c</b> Position: |                     |
| <b>d</b> Address:  | <b>e</b> Telephone: |
|                    |                     |

Explanation:

|                    |                     |
|--------------------|---------------------|
| <b>a</b> Name:     | <b>b</b> EIN:       |
| <b>c</b> Position: |                     |
| <b>d</b> Address:  | <b>e</b> Telephone: |
|                    |                     |

Explanation:

|                    |                     |
|--------------------|---------------------|
| <b>a</b> Name:     | <b>b</b> EIN:       |
| <b>c</b> Position: |                     |
| <b>d</b> Address:  | <b>e</b> Telephone: |
|                    |                     |

Explanation:

|                    |                     |
|--------------------|---------------------|
| <b>a</b> Name:     | <b>b</b> EIN:       |
| <b>c</b> Position: |                     |
| <b>d</b> Address:  | <b>e</b> Telephone: |
|                    |                     |

Explanation:

|                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p style="text-align: center;"><b>SCHEDULE D</b><br/><b>(Form 5500)</b></p> <p style="text-align: center; font-size: small;">Department of the Treasury<br/>Internal Revenue Service</p> <hr/> <p style="text-align: center; font-size: small;">Department of Labor<br/>Employee Benefits Security Administration</p> | <p style="text-align: center;"><b>DFE/Participating Plan Information</b></p> <p style="text-align: center; font-size: small;">This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).</p> <p style="text-align: center;">▶ <b>File as an attachment to Form 5500.</b></p> | <p style="text-align: center; font-size: small;">OMB No. 1210-0110</p> <hr/> <p style="text-align: center; font-size: large;"><b>2017</b></p> <hr/> <p style="text-align: center; font-size: small;"><b>This Form is Open to Public Inspection.</b></p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017

|                                                                                                     |                                                                    |            |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------|
| <b>A</b> Name of plan<br><u>PPG INDUSTRIES, INC. RETIREMENT PLAN F</u>                              | <b>B</b> Three-digit plan number (PN) ▶                            | <u>097</u> |
| <b>C</b> Plan or DFE sponsor's name as shown on line 2a of Form 5500<br><u>PPG INDUSTRIES, INC.</u> | <b>D</b> Employer Identification Number (EIN)<br><u>25-0730780</u> |            |

|               |                                                                                                                                                                                  |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Part I</b> | <b>Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs)</b><br>(Complete as many entries as needed to report all interests in DFEs) |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**a** Name of MTIA, CCT, PSA, or 103-12 IE: PPG INDUSTRIES INC PENSION PLAN TR

**b** Name of sponsor of entity listed in (a): PPG INDUSTRIES, INC.

|                                       |                               |                                                                                                                      |
|---------------------------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN <u>25-0730780-001</u> | <b>d</b> Entity code <u>M</u> | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>582104887</u> |
|---------------------------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------|

**a** Name of MTIA, CCT, PSA, or 103-12 IE:

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

|                 |                      |                                                                                                     |
|-----------------|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN | <b>d</b> Entity code | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 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):

|                 |                      |                                                                                                     |
|-----------------|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN | <b>d</b> Entity code | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 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):

|                 |                      |                                                                                                     |
|-----------------|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN | <b>d</b> Entity code | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 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):

|                 |                      |                                                                                                     |
|-----------------|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN | <b>d</b> Entity code | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 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):

|                 |                      |                                                                                                     |
|-----------------|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN | <b>d</b> Entity code | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 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):

|                 |                      |                                                                                                     |
|-----------------|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN | <b>d</b> Entity code | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 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):

**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)**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)**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)**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)**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)**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)**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)**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)**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)**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  
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  
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  
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

|                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                              |                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>SCHEDULE H</b><br><b>(Form 5500)</b><br><br><small>Department of the Treasury<br/>Internal Revenue Service</small><br><br><small>Department of Labor<br/>Employee Benefits Security Administration</small><br><br><small>Pension Benefit Guaranty Corporation</small> | <b>Financial Information</b><br><br>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).<br><br><b>► File as an attachment to Form 5500.</b> | <small>OMB No. 1210-0110</small><br><br><b>2017</b><br><br><b>This Form is Open to Public Inspection</b> |
| For calendar plan year 2017 or fiscal plan year beginning <u>01/01/2017</u> and ending <u>12/31/2017</u>                                                                                                                                                                 |                                                                                                                                                                                                                                                                              |                                                                                                          |
| <b>A</b> Name of plan<br><u>PPG INDUSTRIES, INC. RETIREMENT PLAN F</u>                                                                                                                                                                                                   | <b>B</b> Three-digit plan number (PN) <span style="float: right;">►</span>                                                                                                                                                                                                   | <u>097</u>                                                                                               |
| <b>C</b> Plan sponsor's name as shown on line 2a of Form 5500<br><u>PPG INDUSTRIES, INC.</u>                                                                                                                                                                             | <b>D</b> Employer Identification Number (EIN)<br><u>25-0730780</u>                                                                                                                                                                                                           |                                                                                                          |

| Part I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Asset and Liability Statement                                                                     |                 | (a) Beginning of Year | (b) End of Year |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------|-----------------------|-----------------|
| <b>1</b> 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. <b>Round off amounts to the nearest dollar.</b> 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. |                                                                                                   |                 |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Assets</b>                                                                                     |                 |                       |                 |
| <b>a</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Total noninterest-bearing cash .....                                                              | <b>1a</b>       |                       |                 |
| <b>b</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Receivables (less allowance for doubtful accounts):                                               |                 |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(1)</b> Employer contributions .....                                                           | <b>1b(1)</b>    | 16900000              |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(2)</b> Participant contributions .....                                                        | <b>1b(2)</b>    |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(3)</b> Other.....                                                                             | <b>1b(3)</b>    |                       |                 |
| <b>c</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | General investments:                                                                              |                 |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(1)</b> Interest-bearing cash (include money market accounts & certificates of deposit) .....  | <b>1c(1)</b>    |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(2)</b> U.S. Government securities.....                                                        | <b>1c(2)</b>    |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(3)</b> Corporate debt instruments (other than employer securities):                           |                 |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(A)</b> Preferred .....                                                                        | <b>1c(3)(A)</b> |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(B)</b> All other.....                                                                         | <b>1c(3)(B)</b> |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(4)</b> Corporate stocks (other than employer securities):                                     |                 |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(A)</b> Preferred .....                                                                        | <b>1c(4)(A)</b> |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(B)</b> Common .....                                                                           | <b>1c(4)(B)</b> |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(5)</b> Partnership/joint venture interests .....                                              | <b>1c(5)</b>    |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(6)</b> Real estate (other than employer real property) .....                                  | <b>1c(6)</b>    |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(7)</b> Loans (other than to participants) .....                                               | <b>1c(7)</b>    |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(8)</b> Participant loans .....                                                                | <b>1c(8)</b>    |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(9)</b> Value of interest in common/collective trusts.....                                     | <b>1c(9)</b>    |                       | 0               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(10)</b> Value of interest in pooled separate accounts.....                                    | <b>1c(10)</b>   |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(11)</b> Value of interest in master trust investment accounts .....                           | <b>1c(11)</b>   | 423750883             | 582104887       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(12)</b> Value of interest in 103-12 investment entities .....                                 | <b>1c(12)</b>   |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(13)</b> Value of interest in registered investment companies (e.g., mutual funds).....        | <b>1c(13)</b>   |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(14)</b> Value of funds held in insurance company general account (unallocated contracts)..... | <b>1c(14)</b>   |                       |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(15)</b> Other .....                                                                           | <b>1c(15)</b>   |                       |                 |

| <b>1d</b> Employer-related investments:                              |              | (a) Beginning of Year | (b) End of Year |
|----------------------------------------------------------------------|--------------|-----------------------|-----------------|
| (1) Employer securities .....                                        | <b>1d(1)</b> |                       |                 |
| (2) Employer real property .....                                     | <b>1d(2)</b> |                       |                 |
| <b>e</b> Buildings and other property used in plan operation .....   | <b>1e</b>    |                       |                 |
| <b>f</b> Total assets (add all amounts in lines 1a through 1e) ..... | <b>1f</b>    | 440650883             | 582104887       |

**Liabilities**

|                                                                           |           |        |         |
|---------------------------------------------------------------------------|-----------|--------|---------|
| <b>g</b> Benefit claims payable .....                                     | <b>1g</b> |        |         |
| <b>h</b> Operating payables .....                                         | <b>1h</b> | 116589 | 76519   |
| <b>i</b> Acquisition indebtedness .....                                   | <b>1i</b> |        |         |
| <b>j</b> Other liabilities .....                                          | <b>1j</b> |        | 1199358 |
| <b>k</b> Total liabilities (add all amounts in lines 1g through 1j) ..... | <b>1k</b> | 116589 | 1275877 |

**Net Assets**

|                                                           |           |           |           |
|-----------------------------------------------------------|-----------|-----------|-----------|
| <b>l</b> Net assets (subtract line 1k from line 1f) ..... | <b>1l</b> | 440534294 | 580829010 |
|-----------------------------------------------------------|-----------|-----------|-----------|

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

|                                                                                                |        | (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)  |            | 51601735  |
| (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 <b>income</b> amounts in column (b) and enter total.....               | 2d     |            | 51601735  |

**Expenses**

|                                                                                     |       |          |          |
|-------------------------------------------------------------------------------------|-------|----------|----------|
| e Benefit payment and payments to provide benefits:                                 |       |          |          |
| (1) Directly to participants or beneficiaries, including direct rollovers.....      | 2e(1) | 53897327 |          |
| (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) |          | 53897327 |
| 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) | 249155   |          |
| (2) Contract administrator fees .....                                               | 2i(2) |          |          |
| (3) Investment advisory and management fees .....                                   | 2i(3) | 916290   |          |
| (4) Other .....                                                                     | 2i(4) | 1024421  |          |
| (5) Total administrative expenses. Add lines 2i(1) through (4).....                 | 2i(5) |          | 2189866  |
| j Total expenses. Add all <b>expense</b> amounts in column (b) and enter total..... | 2j    |          | 56087193 |

**Net Income and Reconciliation**

|                                                          |       |  |           |
|----------------------------------------------------------|-------|--|-----------|
| k Net income (loss). Subtract line 2j from line 2d ..... | 2k    |  | -4485458  |
| l Transfers of assets:                                   |       |  |           |
| (1) To this plan.....                                    | 2l(1) |  | 145979532 |
| (2) From this plan .....                                 | 2l(2) |  | 1199358   |

**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: SCHNEIDER DOWNS & CO., INC.

(2) EIN: 25-1408703

**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  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----|----|---------|
| <b>c</b> 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.) .....                                          | <b>4c</b> |     | X  |         |
| <b>d</b> 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.) .....                               | <b>4d</b> |     | X  |         |
| <b>e</b> Was this plan covered by a fidelity bond? .....                                                                                                                                                                      | <b>4e</b> | X   |    | 1500000 |
| <b>f</b> Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty? .....                                                                                       | <b>4f</b> |     | X  |         |
| <b>g</b> 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? .....                                                    | <b>4g</b> |     | X  |         |
| <b>h</b> 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? .....                                          | <b>4h</b> |     | X  |         |
| <b>i</b> Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.) .....                                                                | <b>4i</b> | X   |    |         |
| <b>j</b> 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.) ..... | <b>4j</b> |     | X  |         |
| <b>k</b> Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC? .....                                                           | <b>4k</b> |     | X  |         |
| <b>l</b> Has the plan failed to provide any benefit when due under the plan? .....                                                                                                                                            | <b>4l</b> |     | X  |         |
| <b>m</b> If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.) .....                                                                                                  | <b>4m</b> |     | X  |         |
| <b>n</b> 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. ....                                      | <b>4n</b> |     | X  |         |

**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) |
|--------------------------------------|--------------|-------------|
| VITRO FLAT GLASS LLC RETIREMENT PLAN | 81-3489093   | 001         |
|                                      |              |             |
|                                      |              |             |
|                                      |              |             |

**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 4070936. (See instructions.)

|                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <div>SCHEDULE R<br/>(Form 5500)<br/><br/>Department of the Treasury<br/>Internal Revenue Service<br/><br/>Department of Labor<br/>Employee Benefits Security Administration<br/><br/>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<br>PPG INDUSTRIES, INC. RETIREMENT PLAN F                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                  | B Three-digit plan number (PN) ► 097                                                            |
| C Plan sponsor's name as shown on line 2a of Form 5500<br>PPG INDUSTRIES, INC.                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                  | D Employer Identification Number (EIN)<br>25-0730780                                            |
| 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                                                                                               |
| 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):<br><br>EIN(s):<br><br>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)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A<br>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<br>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? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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. <input type="checkbox"/> Increase <input type="checkbox"/> Decrease <input type="checkbox"/> Both <input checked="" type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| 11 a Does the ESOP hold any preferred stock? <input type="checkbox"/> Yes <input type="checkbox"/> 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.) <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                        |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| 12 Does the ESOP hold any stock that is not readily tradable on an established securities market? <input type="checkbox"/> Yes <input type="checkbox"/> 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:

|                                                                          |            |  |
|--------------------------------------------------------------------------|------------|--|
| <b>a</b> The current year .....                                          | <b>14a</b> |  |
| <b>b</b> The plan year immediately preceding the current plan year ..... | <b>14b</b> |  |
| <b>c</b> The second preceding plan year .....                            | <b>14c</b> |  |

- 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:

|                                                                                                       |            |  |
|-------------------------------------------------------------------------------------------------------|------------|--|
| <b>a</b> The corresponding number for the plan year immediately preceding the current plan year ..... | <b>15a</b> |  |
| <b>b</b> The corresponding number for the second preceding plan year .....                            | <b>15b</b> |  |

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

|                                                                                                                                                                        |            |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--|
| <b>a</b> Enter the number of employers who withdrew during the preceding plan year .....                                                                               | <b>16a</b> |  |
| <b>b</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 ..... | <b>16b</b> |  |

- 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: 22.8% Investment-Grade Debt: 59.4% High-Yield Debt: 6.7% Real Estate: 7.6% Other: 3.5%

- 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):

PPG INDUSTRIES, INC.  
RETIREMENT PLAN F

Financial Statements  
As of December 31, 2017 and 2016 and  
for the year ended December 31, 2017  
  
and Independent Auditors' Report Thereon



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## C O N T E N T S

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| FINANCIAL STATEMENTS:                                                                             |             |
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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.



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## INDEPENDENT AUDITORS' REPORT

To the Participants and Plan Administrator of the PPG Industries, Inc. Retirement Plan F:

### ***Report on the Financial Statements***

We were engaged to audit the accompanying financial statements of the PPG Industries, Inc. Retirement Plan F (Plan), which comprise 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 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 audits 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 (DOL) Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 (ERISA), the Plan administrator instructed us not to perform, and we did not perform, any auditing procedures with respect to the information summarized in Note 10, which was certified by Bank of New York Mellon, N.A., 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 a certification 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.

***Report on Form and Content in Compliance With DOL 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, are presented in compliance with the DOL's Rules and Regulations for Reporting and Disclosure under ERISA.

*Schneider Downs & Co. Inc.*

Pittsburgh, Pennsylvania  
October 9, 2018

PPG INDUSTRIES, INC. RETIREMENT PLAN F  
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

|                                                    | <u>December 31</u>           |                              |
|----------------------------------------------------|------------------------------|------------------------------|
|                                                    | <u>2017</u>                  | <u>2016</u>                  |
| ASSETS                                             |                              |                              |
| Investment at fair value, PPG Industries, Inc.     |                              |                              |
| Pension Plan Trust Commingled Fund                 | \$ 582,104,887               | \$ 423,750,883               |
| Employer contribution receivable                   | <u>-</u>                     | <u>16,900,000</u>            |
| Total Assets                                       | 582,104,887                  | 440,650,883                  |
| LIABILITIES                                        |                              |                              |
| Accrued administrative expense                     | 76,519                       | 116,589                      |
| Payable to Vitro Flat Glass LLC Pension Plan Trust | <u>1,199,358</u>             | <u>-</u>                     |
| Total Liabilities                                  | 1,275,877                    | 116,589                      |
| NET ASSETS AVAILABLE FOR BENEFITS                  | <u><u>\$ 580,829,010</u></u> | <u><u>\$ 440,534,294</u></u> |

See notes to financial statements.

PPG INDUSTRIES, INC. RETIREMENT PLAN F

STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS  
FOR THE YEAR ENDED DECEMBER 31, 2017

ADDITIONS:

|                                                    |               |
|----------------------------------------------------|---------------|
| Plan interest in PPG Industries, Inc. Pension Plan |               |
| Trust Commingled Fund investment income            | \$ 51,601,735 |

DEDUCTIONS:

|                                        |                  |
|----------------------------------------|------------------|
| Benefits paid directly to participants | 53,897,327       |
| Administrative expenses                | <u>2,189,866</u> |

|                  |                   |
|------------------|-------------------|
| Total Deductions | <u>56,087,193</u> |
|------------------|-------------------|

|                                             |             |
|---------------------------------------------|-------------|
| Net Decrease Before Transfer Of Plan Assets | (4,485,458) |
|---------------------------------------------|-------------|

|                                                                      |                    |
|----------------------------------------------------------------------|--------------------|
| TRANSFERS FROM OTHER PPG INDUSTRIES, INC. DEFINED BENEFIT PLANS, net | <u>145,979,532</u> |
|----------------------------------------------------------------------|--------------------|

|                                                                                        |             |
|----------------------------------------------------------------------------------------|-------------|
| Net Increase Before Transfer of Plan Assets to Vitro Flat Glass LLC Pension Plan Trust | 141,494,074 |
|----------------------------------------------------------------------------------------|-------------|

|                                                     |                    |
|-----------------------------------------------------|--------------------|
| TRANSFER TO VITRO FLAT GLASS LLC PENSION PLAN TRUST | <u>(1,199,358)</u> |
|-----------------------------------------------------|--------------------|

|              |             |
|--------------|-------------|
| Net Increase | 140,294,716 |
|--------------|-------------|

NET ASSETS AVAILABLE FOR BENEFITS:

|                   |                    |
|-------------------|--------------------|
| Beginning of year | <u>440,534,294</u> |
|-------------------|--------------------|

|             |                              |
|-------------|------------------------------|
| End of year | <u><u>\$ 580,829,010</u></u> |
|-------------|------------------------------|

See notes to financial statements.

PPG INDUSTRIES, INC. RETIREMENT PLAN F

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2017 AND 2016

(In Millions of Dollars)

NOTE 1 - DESCRIPTION OF THE PLAN

The following brief description of the PPG Industries, Inc. (Company) Retirement Plan F (Plan) is provided for general information purposes only. Participants should refer to the Plan document for complete information.

General and Eligibility - The Plan is a defined benefit pension plan that was established on January 28, 2013 and provides benefits for participants who are determined to be eligible based on requirements as defined in each appendix of the Plan document. The Plan is frozen to new entrants in 2006.

The Plan was amended September 1, 2017 to allow certain participants to elect a one-time immediate distribution, or lump-sum, option. If an eligible participant elected to have his vested benefit paid, the present value of the vested benefit was distributed as soon as administratively practicable, but no earlier than December 1, 2017. For purposes of calculation, the present value of the vested benefit was the actuarial equivalent of the participant's vested balance. This lump-sum option resulted in the distribution of \$27 from the Plan.

On August 9, 2017, the Company approved a plan to merge the PPG Industries, Inc. Retirement Plan B (Plan B) with the Plan effective December 31, 2017. Plan B's net assets and benefit obligations were transferred from Plan B to this Plan. This resulted in an increase in net assets of \$19 and the benefit obligation of \$32.

On October 3, 2016, the Company completed the sale of its flat glass manufacturing and glass coatings operations to Vitro S.A.B. de C.V (Vitro), effective October 1, 2016. The Company transferred the Plan's liabilities associated with those Plan participants impacted by the transaction to Vitro during 2016. The final transfer of assets of \$1 was recorded as a payable to the Vitro Flat Glass LLC Pension Plan Trust as of December 31, 2017 since it was not determinable in 2016. The transfer of these funds occurred on August 6, 2018.

On November 30, 2017, the Company approved the spinoff and merger of PPG Industries, Inc. Retirement Plan C (Plan C) inactive retirees into the Plan before the end of 2017. The Company transferred an initial amount of assets \$176 and benefit obligation of \$180 from Plan C to Plan F on December 29, 2017, which represents approximately 90% of the estimated transfer. An additional transfer of assets is expected to occur in 2018 once determined.

The Global Director of Compensation and Benefits of the Company is the Plan administrator who controls and manages the operation and administration of the Plan. The Bank of New York Mellon, N.A. (BNY Mellon) serves as the trustee of the Plan. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA).

Benefits - Eligible employees become vested after five years of continuous service and are entitled to pension benefits upon retirement as defined by the Plan document. The Plan provides for normal retirement upon reaching normal retirement age, as defined in the Plan document, and has provisions for early retirement and disability benefits for those persons who are eligible to receive such benefits. Monthly benefits under the Plan for all former hourly employees are equal to those benefits determined under terms of the appropriate index in the Plan document, as amended to the date of retirement or termination. Monthly benefits under the Plan for all salaried employees vary depending on the employee's date of retirement, final average monthly earnings and the years of continuous service, as defined by the appropriate index in the Plan document. Such benefits may be reduced by early retirement, survivor benefits, or other elected options.

PPG INDUSTRIES, INC. RETIREMENT PLAN F

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2017 AND 2016

(In Millions of Dollars)

NOTE 1 - DESCRIPTION OF THE PLAN (Continued)

Transfers - In 2017, the following transfers were made to (from) this Plan as follows:

|        |    |             |
|--------|----|-------------|
| Plan C | \$ | 178         |
| Plan B |    | 19          |
| Plan C |    | <u>(51)</u> |
|        | \$ | <u>146</u>  |

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A summary of significant accounting policies consistently applied by the Plan administrator in the preparation of the accompanying financial statements is as follows:

Basis of Accounting - The accompanying financial statements of the Plan have been prepared on the accrual basis of accounting.

Use of Accounting Estimates - The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) requires the Plan administrator to make estimates and assumptions that affect the reported amounts of assets, liabilities and changes therein, the actuarial present value of accumulated plan benefits and the changes therein, and disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

Investment Valuation and Income Recognition - The Plan's investment in the PPG Industries, Inc. Pension Plan Trust Commingled Fund (Trust) is reported at fair value, which is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Company's U.S. Benefits Investment Committee determines the Plan's valuation policies utilizing information provided by the investment advisers, custodians and insurance company. See Note 4 for discussion of fair value measurement.

Purchases and sales of securities are recorded on a trade-date by the Trust. Interest income is recorded on the accrual basis by the Trust. Dividends are recorded on the ex-dividend date by the Trust. The Plan's interest in PPG Industries, Inc. Pension Plan Trust Commingled Fund investment income includes the Plan's gains and losses on investments bought and sold as well as held during the year, along with interest and dividends.

Risks and Uncertainties - The Plan utilizes various investment instruments, including equity securities, debt securities, real estate, other assets and interest-bearing cash. Investment securities, in general, are exposed to various risks, such as interest rate, credit risk and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

Plan contributions are made, and the actuarial present value of accumulated plan benefits are reported, 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 could be material to the financial statements.

PPG INDUSTRIES, INC. RETIREMENT PLAN F

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2017 AND 2016

(In Millions of Dollars)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

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

Expenses - The Plan's expenses are paid either by the Plan or the Company, as provided by the Plan document. Certain expenses incurred in connection with the general administration of the Plan that are paid by the Plan are recorded as deductions in the accompanying statement of changes in net assets available for benefits. In addition, certain investment-related expenses are included in Plan interest in PPG Industries, Inc. Pension Plan Trust Commingled Fund investment income presented in the accompanying statement of changes in net assets available for benefits.

Recent Accounting Pronouncement - In February 2017, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2017-06 Plan Accounting: Employee Benefit Plan Master Trust Reporting (ASU 2017-06), which clarifies presentation requirements for a plan's interest in a master trust and requires more detailed disclosure of the plan's interest in the master trust. The amendment removes the requirement to disclose the percentage interest in the master trust for plans with divided interest and requires that all plans disclose the dollar amount of their interest in each of these general types of investments. The amendment also requires all plans to disclose their master trust's other asset and liability balances and the dollar amount of the plan's interest in each of those balances. ASU 2017-06 is effective for the Plan beginning after December 15, 2018, with early adoption permitted and retrospective application required. The Plan administrator is currently assessing the impact of ASU 2017-06.

In August 2018, the FASB issued ASU No. 2018-13 Fair Value Measurement (Topic 820) Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement (ASU 2018-13). ASU 2018-13 modifies the disclosure requirements on fair value measurements in Topic 820, Fair Value Measurement, based on the concepts in the Concepts Statement, including the consideration of costs and benefits. This includes removal of the following disclosure requirements: (1) the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, (2) the policy for timing of transfers between levels, (3) the valuation processes for Level 3 fair value measurements, and (4) for nonpublic entities, the changes in unrealized gains and losses for the period included in earnings for recurring Level 3 fair value measurements held at the end of the reporting period. It also includes modifications to the following disclosure requirements: (1) in lieu of a rollforward for Level 3 fair value measurements, disclosure of transfers into and out of Level 3 of the fair value hierarchy and purchases and issues of Level 3 assets and liabilities, (2) for investments in certain entities that calculate net asset value, disclosure of the timing of liquidation of an investee's assets and the date when restrictions from redemption might lapse only if the investee has communicated the timing to the entity or announced the timing publicly, and (3) clarification that the measurement uncertainty disclosure is to communicate information about the uncertainty in measurement as of the reporting date. It also includes the following additional disclosure requirement, which is required for public entities: the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. For certain unobservable inputs, an entity may disclose other quantitative information (such as the median or arithmetic average) in lieu of the weighted average if the entity determines that other quantitative information would be a more reasonable and rational method to reflect the distribution of unobservable inputs used to develop Level 3 fair value measurements. ASU 2018-13 is effective for the Plan beginning after December 15, 2019, with early adoption permitted. The Plan administrator is currently assessing the impact of ASU 2018-13.

Subsequent Events - The Plan administrator has evaluated subsequent events through October 9, 2018, the date on which the financial statements were available to be issued.

PPG INDUSTRIES, INC. RETIREMENT PLAN F

NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016  
(In Millions of Dollars)

NOTE 3 - ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS

Accumulated plan benefits are those future periodic payments, including lump-sum distributions that are attributable under the Plan's provisions to the service that employees have rendered as of the valuation date. Accumulated plan benefits include benefits expected to be paid to (a) retired, terminated or transferred employees or their beneficiaries, (b) beneficiaries of employees who have died and (c) present employees or their beneficiaries. Benefits payable under all circumstances, including retirement, death, disability and termination of employment, are included to the extent that they are deemed attributable to employee service rendered to the date upon which the benefit information is presented.

As of December 31, the actuarial present value of accumulated plan benefits is as follows:

|                                              | <u>2017</u>   | <u>2016</u>   |
|----------------------------------------------|---------------|---------------|
| Vested benefits:                             |               |               |
| Inactive participants with deferred benefits | \$ 141        | \$ 129        |
| Inactive participants receiving benefits     | <u>377</u>    | <u>233</u>    |
|                                              | <u>\$ 518</u> | <u>\$ 362</u> |

The changes in the actuarial value of accumulated plan benefits for the year ended December 31, 2017 was as follows:

|                                                                               |               |
|-------------------------------------------------------------------------------|---------------|
| Actuarial present value of accumulated plan benefits                          |               |
| Beginning of year, January 1                                                  | \$ 362        |
| Increase (decrease) during the year attributable to:                          |               |
| Benefits accumulated and losses                                               | 16            |
| Increase for interest due to decrease in discount period                      | 22            |
| Benefits paid directly to participants                                        | (27)          |
| Benefits paid – Lump Sum Window                                               | (27)          |
| Change in assumptions                                                         | (11)          |
| Change in liability due to 4044 true-up                                       | (29)          |
| Increase due to Plan B merger into Plan F                                     | 32            |
| Change due to Plan C to Plan F spin off                                       | <u>180</u>    |
| Net Increase                                                                  | <u>156</u>    |
| Actuarial present value of accumulated plan benefits End of year, December 31 | <u>\$ 518</u> |

The actuarial present value of accumulated plan benefits was determined by the Plan's actuary, Mercer, and is the 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 for death, disability, withdrawal or retirement) between the valuation date and the expected dates of payment.

The significant actuarial assumptions used in determining accumulated plan benefits were (a) the Mercer-modified RP-2014 mortality table (MRP-2007) and the Mercer-modified MP-2016 projection scale (MMP-2016) at December 31, 2017, and the Mercer-modified RP-2014 mortality table (MRP-2007) and the Mercer-modified MP-2014 generational projection scale (MMP-2007) at December 31, 2016, (b) an assumed average retirement age of 61 at December 31, 2017 and 2016, and (c) an interest rate of 6.75% and 6.50% as of December 31, 2017 and 2016, respectively.

PPG INDUSTRIES, INC. RETIREMENT PLAN F

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2017 AND 2016

(In Millions of Dollars)

NOTE 3 - ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS (Continued)

The foregoing actuarial assumptions are based on the presumption that the Plan will continue. If the Plan were to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits.

The Plan was created in January 2013, and the estimated actuarial value of the accumulated plan benefits transferred to this Plan was determined under ERISA Section 4044. A true-up of this transfer was conducted and completed in December 2017, resulting in an adjustment to the accumulated plan benefits during the year ended December 31, 2017.

NOTE 4 - INTEREST IN PPG INDUSTRIES, INC. PENSION PLAN TRUST COMMINGLED FUND

The Plan's investments are in the Trust, which was established for the investment of assets of the Plan and several other Company-sponsored retirement plans. Each participating retirement plan has an undivided interest in the Trust. The assets of the Trust are held by BNY Mellon. The Trust was established prior to the creation of the Plan and since the date of the creation of the Plan, the Plan was allocated its interest in the assets and earnings of the Trust. The investment assets of the Plan consist of an undivided interest in the Total Combined PPG Fund (Fund) of the Trust. Use of the Fund permits the commingling of the Trust assets of the pension plans of the Company for investment and administrative purposes.

The value of the Plan's interest in the Trust is based on the beginning of year value of the Plan's interest in the Trust plus actual contributions and allocated investment income and losses less actual distributions and allocated administrative expenses. Investment gains and losses and administrative expenses relating to the Trust are allocated to the individual plans based upon the amount of time that the Plan's assets were invested in the Trust. At December 31, 2017 and 2016, the Plan's interest in the net assets of the Trust was approximately 48.4% and 37.8%, respectively.

The net assets of the Trust as of December 31 are summarized as follows:

|                                                    | <u>2017</u>     | <u>2016</u>     |
|----------------------------------------------------|-----------------|-----------------|
| Assets of the Total Combined PPG Fund:             |                 |                 |
| Investments:                                       |                 |                 |
| Equity securities                                  | \$ 451          | \$ 491          |
| Debt securities                                    | 631             | 521             |
| Real estate                                        | 99              | 92              |
| Other assets                                       | 34              | 21              |
| Securities lending collateral                      | 26              | 2               |
| Total investments                                  | <u>1,241</u>    | <u>1,127</u>    |
| Receivable for investments sold                    | 144             | 18              |
| Payable for investments purchased                  | (158)           | (22)            |
| Obligation to return securities lending collateral | (26)            | (2)             |
| Income receivable                                  | <u>2</u>        | <u>1</u>        |
| Net assets available for benefits                  | <u>\$ 1,203</u> | <u>\$ 1,122</u> |

PPG INDUSTRIES, INC. RETIREMENT PLAN F

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2017 AND 2016

(In Millions of Dollars)

NOTE 4 - INTEREST IN PPG INDUSTRIES, INC. PENSION PLAN TRUST COMMINGLED FUND (Continued)

The net earnings/losses of the Trust are allocated monthly to each plan participating in the Trust based on the relationship of the undivided interest of each plan in the Trust at the end of the month to the total of the undivided interests of the three plans participating in the Trust. The changes in the net assets of the Trust for the year ended December 31, 2017 are summarized as follows:

|                                                     |    |              |
|-----------------------------------------------------|----|--------------|
| Net appreciation in fair value of investments       | \$ | 148          |
| Interest and dividends                              |    | 21           |
| Investment advisory and management fees             |    | (5)          |
| Net investment gain                                 |    | <u>164</u>   |
| Net transfers                                       |    | (75)         |
| Administrative expenses                             |    | (8)          |
| Net increase                                        |    | <u>81</u>    |
| Beginning of year net assets available for benefits |    | <u>1,122</u> |
| End of year net assets available for benefits       | \$ | <u>1,203</u> |

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quotes prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described as follows:

Level 1 - Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2 - Inputs to the valuation methodology include:

- quoted prices for similar assets or liabilities in active markets;
- quote prices for identical or similar assets or liabilities in active markets;
- inputs other than quoted prices that are observable for the asset or liabilities;
- inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 - Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observable inputs and minimize the use of unobservable inputs.

PPG INDUSTRIES, INC. RETIREMENT PLAN F

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2017 AND 2016

(In Millions of Dollars)

NOTE 4 - INTEREST IN PPG INDUSTRIES, INC. PENSION PLAN TRUST COMMINGLED FUND (Continued)

The availability of observable market data is monitored to assess the appropriate classification of financial instruments within the fair value hierarchy. Changes in economic conditions or model-based valuation techniques might require the transfer of financial instruments from one fair value level to another. In such instances, the transfer is reported at the beginning of the reporting period. For the years ended December 31, 2017 and 2016, there were no transfers.

Following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2017 and 2016.

Equity Securities - Valued at the closing price reported on the active market on which the individual securities are traded. Holdings in publicly traded equity securities of issuers in both developed markets and emerging economies are valued using pricing models maximizing the use of observable inputs for similar securities.

Debt Securities - Valued using pricing models maximizing the use of observable inputs for similar securities. This includes basing value on yields currently available on comparable securities of issuers with similar credit ratings. When quoted prices are not available for identical or similar securities, inputs used for the valuation can include a discounted cash flows approach that maximizes observable inputs, such as current yields of similar instruments, but includes adjustments for certain risks that might not be observable, such as credit and liquidity risks or a broker quote if available.

Real Estate - Valued using external appraisals that are performed at least annually by reputable, independent appraisal firms. External appraisals are performed in accordance with the Uniform Standards of Professional Appraisal Practices (USPAP). Key inputs and assumptions to determine fair value include, among others, rental revenue and expense amounts and the related revenue and expense growth rates, terminal capitalization rates and discount rates. Property valuations are also reviewed on a regular basis and are adjusted if there has been a significant change in circumstances related to the property since the last valuation.

Other Assets - Consists of primarily limited partnership funds that target investments into senior secured debt obligations of small and medium enterprises. Key inputs to determine fair value include, but are not limited to, the enterprise value of a portfolio company, the nature and realizable value of any collateral, the portfolio company's ability to make payments and its earnings and discounted cash flows, the markets in which the portfolio company does business, comparisons to publicly traded securities, and changes in the interest rate environment and the credit markets generally that may affect the price at which similar investments may be made.

Interest-Bearing Cash - Valued using net asset value (NAV), which approximates fair value based upon the short-term nature of this investment.

PPG INDUSTRIES, INC. RETIREMENT PLAN F

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2017 AND 2016

(In Millions of Dollars)

NOTE 4 - INTEREST IN PPG INDUSTRIES, INC. PENSION PLAN TRUST COMMINGLED FUND (Continued)

The assets of the Trust that are reported at fair value on a recurring basis as of December 31 are as follows:

|                                | 2017          |               |               |                 |
|--------------------------------|---------------|---------------|---------------|-----------------|
|                                | Level 1       | Level 2       | Level 3       | Total           |
| Equity securities              | \$ 127        | \$ 324        | -             | \$ 451          |
| Debt securities                | 68            | 477           | \$ 86         | 631             |
| Real estate                    | -             | -             | 99            | 99              |
| Other assets                   | -             | -             | 34            | 34              |
| Securities lending collateral: |               |               |               |                 |
| Interest-bearing cash          | -             | 26            | -             | 26              |
| Total assets at fair value     | <u>\$ 195</u> | <u>\$ 827</u> | <u>\$ 219</u> | <u>\$ 1,241</u> |

|                                | 2016          |               |               |                 |
|--------------------------------|---------------|---------------|---------------|-----------------|
|                                | Level 1       | Level 2       | Level 3       | Total           |
| Equity securities              | \$ 133        | \$ 358        | -             | \$ 491          |
| Debt securities                | -             | 437           | \$ 84         | 521             |
| Real estate                    | -             | -             | 92            | 92              |
| Other assets                   | -             | -             | 21            | 21              |
| Securities lending collateral: |               |               |               |                 |
| Interest-bearing cash          | -             | 2             | -             | 2               |
| Total assets at fair value     | <u>\$ 133</u> | <u>\$ 797</u> | <u>\$ 197</u> | <u>\$ 1,127</u> |

The change in the fair value of the Trust's Level 3 assets for the year ended December 31, 2017 is as follows.

|                                      | Debt<br>Securities | Real<br>Estate | Other<br>Assets | Total         |
|--------------------------------------|--------------------|----------------|-----------------|---------------|
| Beginning balance, December 31, 2016 | \$ 84              | \$ 92          | \$ 21           | \$ 197        |
| Realized gain, net                   | 1                  | 4              | -               | 5             |
| Unrealized (loss) gain, net          | (1)                | 3              | -               | 2             |
| Purchases                            | 224                | -              | 16              | 240           |
| Sales                                | (222)              | -              | (3)             | (225)         |
| Ending balance, December 31, 2017    | <u>\$ 86</u>       | <u>\$ 99</u>   | <u>\$ 34</u>    | <u>\$ 219</u> |

PPG INDUSTRIES, INC. RETIREMENT PLAN F

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2017 AND 2016

(In Millions of Dollars)

NOTE 4 - INTEREST IN PPG INDUSTRIES, INC. PENSION PLAN TRUST COMMINGLED FUND (Continued)

The following table represents the Plan's Level 3 financial instruments, the valuation techniques used to measure the fair value of those financial instruments at December 31, 2017 and 2016, respectively, and the significant unobservable inputs and the ranges of values for those inputs.

|                 | Fair Value<br>December 31,<br>2017      2016 |       | Principal<br>Valuation<br>Technique | Significant<br>Unobservable<br>Inputs | Range of<br>Significant<br>Input Values | Weighted<br>Average |
|-----------------|----------------------------------------------|-------|-------------------------------------|---------------------------------------|-----------------------------------------|---------------------|
|                 |                                              |       |                                     |                                       |                                         |                     |
| Debt securities | \$ 86                                        | \$ 84 | Third party vendor                  | Market interest rates                 | 2.97 - 44.33 %                          | 5.82 %              |
| Real estate     | \$ 99                                        | \$ 92 | Discounted cash flow                | Discount rate                         | 4.80 - 10.20 %                          | 6.35 %              |
|                 |                                              |       |                                     | Terminal cap rate                     | 4.00 - 8.00 %                           | 5.45 %              |
|                 |                                              |       |                                     | Credit spreads                        | 1.00 - 7.70 %                           | 1.73 %              |
|                 |                                              |       |                                     | Loan to value                         | 21.20 - 113.40 %                        | 41.64 %             |
|                 |                                              |       |                                     | Sales (per square foot)               | \$ 25.20 - \$ 67.90                     | \$ 46.55            |
| Other assets    | \$ 34                                        | \$ 21 | Market rates                        | Market interest rates                 | 2.30 - 39.50 %                          | 10.13 %             |
|                 |                                              |       | Market comparables                  | EBITDA multiples                      | 4.00x - 35.00x                          | 10.10x              |
|                 |                                              |       |                                     | Revenue multiples                     | 0.80x - 7.50x                           | 3.20x               |
|                 |                                              |       |                                     | Broker Dealer quotes                  |                                         |                     |

In estimating fair value of the investments in Level 3, the Benefits Investment Committee may use third-party pricing sources or appraisers. In substantiating the reasonableness of the pricing data provided by third parties, the Benefits Investment Committee evaluates a variety of factors including review of methods and assumptions used by external sources, recently executed transactions, existing contracts, economic conditions, industry and market developments, and overall credit ratings.

NOTE 5 - SECURITIES LENDING

The Trust is authorized to engage in the lending of certain investments under the terms of a Securities Lending Authorization Agreement. Securities lending is an investment management enhancement that utilizes certain existing securities of the Trust to earn additional income. Securities lending involves the loaning of securities to approved banks and broker/dealers. In return for the loaned securities, the trustee, prior to or simultaneous with the delivery of the loaned securities to the borrower, receives collateral in the form of cash or U.S. government securities as a safeguard against possible default of any borrower on the return of the loan under terms that permit the Trust to repledge or sell the securities. The collateral is marked to market on a daily basis. In the event the counterparty is unable to meet its contractual obligation under the securities lending arrangement, the Plan may incur losses equal to the amount by which the market value of the securities differ from the amount of collateral held. The Plan mitigates credit risk associated with securities lending arrangements by monitoring the fair value of the securities loaned on a daily basis, with additional collateral obtained or refunded as necessary.

The Trust maintains full ownership rights to the securities loaned and accordingly, classifies loaned securities as investments. Because the securities received as collateral may be repledged or sold, the Trust recognizes the amount of collateral received and a corresponding obligation to return such collateral on the statements of net assets available for benefits. (See Note 4.) The fair value of securities on loan was approximately \$25 and \$2 and the fair value of collateral was approximately \$26 and \$2, respectively, at December 31, 2017 and 2016.

PPG INDUSTRIES, INC. RETIREMENT PLAN F

NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016  
(In Millions of Dollars)

NOTE 5 - SECURITIES LENDING (Continued)

|                                               | Gross<br>Amounts of<br>Recognized<br>Liabilities | Net Amount<br>of Liabilities<br>Presented in<br>the Financial<br>Statements | Gross Amounts Not Offset<br>in Financial Statements |                               | Net<br>Amount |
|-----------------------------------------------|--------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------|---------------|
|                                               |                                                  |                                                                             | Financial<br>Instruments                            | Cash<br>Collateral<br>Pledged |               |
| December 31, 2017                             |                                                  |                                                                             |                                                     |                               |               |
| Securities Lending<br>Authorization Agreement |                                                  |                                                                             |                                                     |                               |               |
| Mellon Bank, N.A.                             | \$ 26                                            | \$ 26                                                                       | \$ 25                                               | N/A                           | \$ 1          |
| December 31, 2016                             |                                                  |                                                                             |                                                     |                               |               |
| Securities Lending<br>Authorization Agreement |                                                  |                                                                             |                                                     |                               |               |
| Mellon Bank, N.A.                             | \$ 2                                             | \$ 2                                                                        | \$ 2                                                | N/A                           | -             |

NOTE 6 - FUNDING POLICY

Contributions to provide benefits under the Plan are made solely by the Company. The Company's funding policy is to make contributions to the Plan based on the calculations of the Plan's actuary using the unit credit cost method, which consists of normal cost, plus amortization of unfunded prior service costs over a 40-year period or less.

In 2017, the Company contributed cash of \$16.9 to the Plan relating to the 2016 Plan year, which is recorded as a receivable as of December 31, 2016. The Company met the minimum funding requirements of ERISA for the years ended December 31, 2017 and 2016.

NOTE 7 - PLAN TERMINATION

Although the Company has not expressed any intention to do so, it has the right under the Plan to discontinue its contributions to the Plan at any time and terminate the Plan subject to the provisions set forth in the Plan document and ERISA.

In the event the Plan terminates, the net assets of the Plan will be allocated, as prescribed by ERISA and its related regulations, generally to provide the following benefits in the order indicated:

1. Benefits attributable to employee contributions, taking into account those paid out before termination.
2. Annuity benefits that former employees or their beneficiaries have been receiving for at least three years, or that employees eligible to retire for that three-year period would have been receiving if they had retired with benefits in the normal form of annuity under the Plan. The priority amount is limited to the lowest benefit that was payable (or would have been payable) during those three years. The amount is further limited to the lowest benefit that would be payable under Plan provisions in effect at any time during the three years preceding Plan termination.

PPG INDUSTRIES, INC. RETIREMENT PLAN F

NOTES TO FINANCIAL STATEMENTS  
DECEMBER 31, 2017 AND 2016  
(In Millions of Dollars)

NOTE 7 - PLAN TERMINATION (Continued)

3. Other vested benefits insured by the Pension Benefit Guaranty Corporation (PBGC) (a U.S. government agency) up to the applicable limitations.
4. All other vested benefits (that is, vested benefits not insured by the PBGC).
5. All nonvested benefits.

Certain benefits under the Plan are insured by the 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's termination. Whether all participants receive their benefits should the Plan terminate at some future time will depend on the sufficiency, at that time, of the Plan's net assets to provide for accumulated benefit obligations and may also depend on the financial condition of the Plan sponsor and the level of benefits guaranteed by the PBGC.

NOTE 8 - TAX STATUS

The Plan obtained its latest determination letter on March 23, 2017, in which the Internal Revenue Service (IRS) states that the Plan, as then designed, was in compliance with the applicable requirements of the Internal Revenue Code (IRC). The Plan has been amended since receiving the determination letter. However, the Plan administrator believes that the Plan is currently designed and being operated in compliance with the applicable requirements of the IRC.

U.S. 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 administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2017 and 2016, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions. In March 2018, the Plan administrator was notified by the Department of Labor that the Plan has been selected for an examination for the time period from January 1, 2015 through March 2018. The examination is not yet finalized as of October 9, 2018.

NOTE 9 - RELATED-PARTY TRANSACTIONS AND PARTY-IN-INTEREST TRANSACTIONS

The Plan invests in certain funds managed by BNY Mellon, the trustee of the Plan. The Trust also holds the common stock of PPG Industries, Inc., the Plan sponsor. Therefore, these transactions qualify as party-in-interest transactions. The Plan paid certain expenses related to Plan operations and investment activity to various service providers. These transactions are party-in-interest transactions under ERISA.

PPG INDUSTRIES, INC. RETIREMENT PLAN F

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2017 AND 2016

(In Millions of Dollars)

NOTE 10 - CERTIFIED INVESTMENTS (UNAUDITED)

The Plan administrator has elected the method of compliance permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. Investments held at December 31, 2017 and 2016, and plan interest in PPG Industries, Inc. Pension Plan Trust Commingled Fund investment income for the year ended December 31, 2017, that is disclosed in the accompanying financial statements, was obtained or derived from information supplied to the Plan administrator and certified as complete and accurate by BNY Mellon, the trustee of the Plan.

|                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                    |                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <b>SCHEDULE SB</b><br><b>(Form 5500)</b><br><br><small>Department of the Treasury<br/>Internal Revenue Service</small><br><br><small>Department of Labor<br/>Employee Benefits Security Administration</small><br><br><small>Pension Benefit Guaranty Corporation</small> | <b>Single-Employer Defined Benefit Plan</b><br><b>Actuarial Information</b><br><br>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).<br><br><b>► File as an attachment to Form 5500 or 5500-SF.</b> | OMB No. 1210-0110<br><br><b>2017</b><br><br><b>This Form is Open to Public Inspection</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|

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.

|                                                                                                                                                         |                                                                                                                                                                                                                  |                                                                 |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----|
| <b>A</b> Name of plan<br>PPG INDUSTRIES, INC. RETIREMENT PLAN F                                                                                         | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;"><b>B</b> Three-digit plan number (PN) ►</td> <td style="width: 30%; text-align: center;">097</td> </tr> </table> | <b>B</b> Three-digit plan number (PN) ►                         | 097 |
| <b>B</b> Three-digit plan number (PN) ►                                                                                                                 | 097                                                                                                                                                                                                              |                                                                 |     |
| <b>C</b> Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF<br><br>PPG INDUSTRIES, INC.                                                    | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td><b>D</b> Employer Identification Number (EIN)<br/><br/>25-0730780</td> </tr> </table>                                                | <b>D</b> Employer Identification Number (EIN)<br><br>25-0730780 |     |
| <b>D</b> Employer Identification Number (EIN)<br><br>25-0730780                                                                                         |                                                                                                                                                                                                                  |                                                                 |     |
| <b>E</b> Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B               |                                                                                                                                                                                                                  |                                                                 |     |
| <b>F</b> Prior year plan size: <input type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input checked="" type="checkbox"/> More than 500 |                                                                                                                                                                                                                  |                                                                 |     |

|                                                                                                                                                                                                          |                            |                           |                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------------|--------------------------|
| <b>Part I Basic Information</b>                                                                                                                                                                          |                            |                           |                          |
| <b>1</b> Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2017</u>                                                                                                                        |                            |                           |                          |
| <b>2</b> Assets:                                                                                                                                                                                         |                            |                           |                          |
| a Market value.....                                                                                                                                                                                      | <b>2a</b>                  | 440,627,130               |                          |
| b Actuarial value .....                                                                                                                                                                                  | <b>2b</b>                  | 396,564,417               |                          |
| <b>3</b> 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 .....                                                                                                                                     | 4,774                      | 243,167,868               | 243,167,868              |
| b For terminated vested participants .....                                                                                                                                                               | 3,775                      | 121,219,580               | 121,219,580              |
| c For active participants .....                                                                                                                                                                          | 0                          | 0                         | 0                        |
| d Total .....                                                                                                                                                                                            | 8,549                      | 364,387,448               | 364,387,448              |
| <b>4</b> If the plan is in at-risk status, check the box and complete lines (a) and (b) <input type="checkbox"/>                                                                                         |                            |                           |                          |
| a Funding target disregarding prescribed at-risk assumptions .....                                                                                                                                       | <b>4a</b>                  |                           |                          |
| 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 ..... | <b>4b</b>                  |                           |                          |
| <b>5</b> Effective interest rate .....                                                                                                                                                                   | <b>5</b>                   | 5.80%                     |                          |
| <b>6</b> Target normal cost .....                                                                                                                                                                        | <b>6</b>                   | 3,300,000                 |                          |

**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.

|                      |                                                                                          |                                                               |
|----------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| <b>SIGN<br/>HERE</b> | <u>NICHOLAS FRIES NGCF</u><br>Signature of actuary                                       | <u>09/27/2018</u><br>Date                                     |
|                      | <u>NICHOLAS FRIES</u><br>Type or print name of actuary                                   | <u>1707926</u><br>Most recent enrollment number               |
|                      | <u>MERCER</u><br>Firm name                                                               | <u>214-830-8031</u><br>Telephone number (including area code) |
|                      | <u>200 PUBLIC SQUARE, SUITE 3760</u><br><u>CLEVELAND OH 44114</u><br>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 V Assumptions Used to Determine Funding Target and Target Normal Cost**

|                                                                                                                                                                                              |                        |                        |                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|-----------------------------------------------------|
| <b>21</b> Discount rate:                                                                                                                                                                     |                        |                        |                                                     |
| <b>a</b> Segment rates:                                                                                                                                                                      | 1st segment:<br>4.16 % | 2nd segment:<br>5.72 % | 3rd segment:<br>6.48 %                              |
|                                                                                                                                                                                              |                        |                        | <input type="checkbox"/> N/A, full yield curve used |
| <b>b</b> Applicable month (enter code).....                                                                                                                                                  |                        |                        | <b>21b</b> 4                                        |
| <b>22</b> Weighted average retirement age .....                                                                                                                                              |                        |                        | <b>22</b>                                           |
| <b>23</b> Mortality table(s) (see instructions) <input type="checkbox"/> Prescribed - combined <input checked="" type="checkbox"/> Prescribed - separate <input type="checkbox"/> Substitute |                        |                        |                                                     |

**Part VI Miscellaneous Items**

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

**Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years**

|                                                                                                                                     |           |   |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------|---|
| <b>28</b> Unpaid minimum required contributions for all prior years .....                                                           | <b>28</b> | 0 |
| <b>29</b> Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)..... | <b>29</b> | 0 |
| <b>30</b> Remaining amount of unpaid minimum required contributions (line 28 minus line 29) .....                                   | <b>30</b> | 0 |

**Part VIII Minimum Required Contribution For Current Year**

|                                                                                                                                                                                      |                   |                     |               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------|---------------|
| <b>31</b> Target normal cost and excess assets (see instructions):                                                                                                                   |                   |                     |               |
| <b>a</b> Target normal cost (line 6) .....                                                                                                                                           |                   | <b>31a</b>          | 3,300,000     |
| <b>b</b> Excess assets, if applicable, but not greater than line 31a .....                                                                                                           |                   | <b>31b</b>          | 0             |
| <b>32</b> Amortization installments:                                                                                                                                                 |                   |                     |               |
|                                                                                                                                                                                      |                   | Outstanding Balance | Installment   |
| <b>a</b> Net shortfall amortization installment.....                                                                                                                                 |                   | 0                   | 0             |
| <b>b</b> Waiver amortization installment .....                                                                                                                                       |                   | 0                   | 0             |
| <b>33</b> 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 ..... |                   | <b>33</b>           |               |
| <b>34</b> Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....                                                           |                   | <b>34</b>           | 3,300,000     |
|                                                                                                                                                                                      | Carryover balance | Prefunding balance  | Total balance |
| <b>35</b> Balances elected for use to offset funding requirement.....                                                                                                                | 3,300,000         | 0                   | 3,300,000     |
| <b>36</b> Additional cash requirement (line 34 minus line 35).....                                                                                                                   |                   | <b>36</b>           | 0             |
| <b>37</b> Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....                                                   |                   | <b>37</b>           | 0             |
| <b>38</b> Present value of excess contributions for current year (see instructions)                                                                                                  |                   |                     |               |
| <b>a</b> Total (excess, if any, of line 37 over line 36) .....                                                                                                                       |                   | <b>38a</b>          | 0             |
| <b>b</b> Portion included in line 38a attributable to use of prefunding and funding standard carryover balances .....                                                                |                   | <b>38b</b>          |               |
| <b>39</b> Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37).....                                                                       |                   | <b>39</b>           | 0             |
| <b>40</b> Unpaid minimum required contributions for all years .....                                                                                                                  |                   | <b>40</b>           | 0             |

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

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

## **Schedule SB, Line 24 – Changes in Actuarial Assumptions**

- The expense component of normal cost was updated to reflect our expectations for the current plan year.

PPG Industries Inc. Retirement Plan F  
EIN: 25-0730780  
Plan: 097

Schedule of Assets Held at End of Year  
Schedule H, Line 4i  
December 31, 2017

| Identity of Issuer     | Description of Investment     | Cost                  | Current Value         |
|------------------------|-------------------------------|-----------------------|-----------------------|
| * PPG Industries, Inc. | PPG Pension Master Trust Unit | <u>\$ 582,104,887</u> | <u>\$ 582,104,887</u> |

\* Party in Interest

## Schedule SB, Part V — Summary of Plan Provisions

### Benefits Included or Excluded

Unless noted below, all benefits provided by the plan, as restated and amended through the measurement date, are included in this valuation.

- **Most recent plan amendment included:** Amendments adopted by the valuation date or effective by the end of the plan year are included in this valuation.
- **Plan amendments excluded:** Amendments adopted after the valuation date or effective after the current plan year are excluded from the valuation.
- **Late retirement increases:**
  - *Active participants:* Current active participants over normal retirement age are valued using their accrued benefit. PPG provides suspension of benefit notices so actives are not entitled to late retirement increased until after age 70.5. Therefore, late retirement actuarial increases are deemed to be immaterial for the purposes of this valuation.
  - *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 Sections 415(b) and 401(a)(17) have been incorporated into our calculations.
- **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 percent 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:* This valuation excludes restricted contingent event benefits that occurred before the valuation date but includes contingent event benefits which are expected to occur on or after the valuation date regardless of anticipated funding-based limitations.
- *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.
- **Unpredictable contingent event benefits:** The plan does not have any unpredictable contingent event benefits.

## Schedule SB, Part V — Summary of Plan Provisions

### Plan Provision Changes Since Prior Valuation

- Maximum compensation amounts and maximum benefit amounts under IRS rules were updated from 2016 to 2017.

### Summary of Major Plan Provisions

The following is a summary of what we understand to be the most relevant plan provisions for purposes of actuarial valuations. This summary should not be used for purposes of determining plan benefits under the plans.

The Retirement Income Plan and the Retirement Pension Plan were restructured effective as of January 28, 2013. As a result of the restructuring, the Retirement Income Plan and Retirement Pension Plan were replaced by six separate pension plans.

| <b>Plan Name</b>  | <b>Appendices</b>                                                                                                                                                                                                                                                                    |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Retirement Plan A | Former Retirement Income Plan: Salaried<br>Former Retirement Pension Plan: Fresno, Mt. Zion<br>This plan merged into Retirement Plan C as of December 31, 2016.                                                                                                                      |
| Retirement Plan B | Former Retirement Income Plan: Salaried, Shelby, Lexington, Chester                                                                                                                                                                                                                  |
| Retirement Plan C | Former Retirement Income Plan: Salaried, Cleveland, Crestline, Glass Voluntary, Tipton<br>Former Retirement Pension Plan: Barberton, Circleville, Creighton, Delaware, East Point, Greensboro, Lake Charles, Louisville, Memphis C&S, Natrium, Oak Creek, Springdale, Lansing, Ewart |
| Retirement Plan D | This plan was terminated with final benefits distributed June 30, 2014                                                                                                                                                                                                               |
| Retirement Plan E | Former Retirement Income Plan: Salaried, Shelby, Lexington, Chester<br>This plan merged into Retirement Plan F as of July 31, 2016.                                                                                                                                                  |

## Schedule SB, Part V — Summary of Plan Provisions

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Retirement Plan F | <p>Former Retirement Income Plan: Salaried, Atlanta Ink, Baltimore, Barberton, Beaumont, Brine-Field, Glass-CIO, Circleville, Cleveland, Columbus, Corpus Christi, Crestline, Glass-Cutters, Dallas C&amp;S, Delaware, East Point, Elizabethport, Fort Lauderdale, Fresno, Glass-Clerical, Glass Voluntary, Greensboro, Greensburg, Houston, Jersey City, Knoxville, Kokomo, Lake Charles, Lincoln, Memphis C&amp;R, Memphis C&amp;S, Mt. Zion, Natrium, Oak Creek, Roanoke, Springdale Clerical, Springdale Hourly, Stockertown, Tipton, PRC-DeSoto International, Inc.,</p> <p>Former Retirement Pension Plan: Barberton, Circleville, Creighton, Creighton Clerical, Crystal City, Crystal City Clerical, Delaware, East Point, Ford City, Ford City Clerical, Fresno, Greensboro, Greensburg, Kokomo, Lake Charles, Louisville, Memphis C&amp;S, Mt. Zion, Natrium, Oak Creek, Roanoke, Springdale, Stockertown, Torrance, Cumberland, Lansing, Evert</p> |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Glass CIO

|                                                                |                                                                                                                                                                                                                              |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                                 | January 14, 1950                                                                                                                                                                                                             |
| Group Number                                                   | 050                                                                                                                                                                                                                          |
| Status of the plan                                             | The Appendix is frozen to new entrants and no longer has ongoing benefit accruals.                                                                                                                                           |
| Significant events that occurred during the year               | None                                                                                                                                                                                                                         |
| <b>Definitions</b>                                             |                                                                                                                                                                                                                              |
| • Type of Plan                                                 | Dollar per month                                                                                                                                                                                                             |
| • Normal Form                                                  | Life annuity                                                                                                                                                                                                                 |
| • Continuous Service                                           | From date of hire                                                                                                                                                                                                            |
| • Plan eligibility                                             | Date of hire                                                                                                                                                                                                                 |
| • Employee Contributions                                       | None                                                                                                                                                                                                                         |
| • Class                                                        | Hourly employees covered by Bargaining Agreement                                                                                                                                                                             |
| • Accrued Benefit                                              | <p>A + B + C plus \$5.00 where:</p> <p>A=\$26.00 x continuous service (maximum 18 years)</p> <p>B=\$28.00 x continuous service (between 19 and 28 years)</p> <p>C=\$30.00 x continuous service (over 28 years)</p>           |
| – Participants of the Glass CIO plan at the Ford City location | <p>A + B + C + D where:</p> <p>A=\$18.95 x continuous service (maximum 18 years)</p> <p>B=\$20.20 x continuous service (between 19 and 28 years)</p> <p>C=\$21.70 x continuous service (over 28 years)</p> <p>D = \$5.00</p> |

## Schedule SB, Part V — Summary of Plan Provisions

|                                               |                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Auto Glass Divestiture</b>                 | Continuous service for purposes of benefit accruals was frozen effective September 30, 2008 due to the divestiture of the auto glass business.                                                                                                                                                             |
| <b>Normal retirement</b>                      |                                                                                                                                                                                                                                                                                                            |
| • Eligibility                                 | Age 65                                                                                                                                                                                                                                                                                                     |
| • Benefit                                     | Accrued Benefit payable immediately                                                                                                                                                                                                                                                                        |
| <b>Early retirement</b>                       |                                                                                                                                                                                                                                                                                                            |
| • Eligibility                                 | Age 60 plus 10 years continuous service or<br>Age 55 plus years of service equals 85                                                                                                                                                                                                                       |
| • Benefit                                     | See Exhibit A                                                                                                                                                                                                                                                                                              |
| <b>Special early retirement</b>               |                                                                                                                                                                                                                                                                                                            |
| • Eligibility                                 | Age 62 with 15 years continuous service                                                                                                                                                                                                                                                                    |
| • Benefit                                     | Accrued Benefit payable immediately plus temporary supplement payable to 65 equal to the benefit using \$16/\$18/\$20 levels and service at retirement.                                                                                                                                                    |
| <b>Special 30-year retirement<sup>3</sup></b> |                                                                                                                                                                                                                                                                                                            |
| • Eligibility                                 | 30 years continuous service                                                                                                                                                                                                                                                                                |
| • Benefit                                     | Accrued Benefit x early retirement factor payable immediately, subject to minimum guaranteed Benefit of \$1,215.00 prior to 62 and minimum guaranteed Benefit of \$415.00 after 62 and prior to 65; if over 56, the \$1,215.00 is increased to \$1,515.00 (effective 4/1/2000 this minimum is irrelevant). |
| <b>Deferred vested</b>                        |                                                                                                                                                                                                                                                                                                            |
| • Eligibility                                 | 5 years continuous service                                                                                                                                                                                                                                                                                 |
| • Benefit                                     | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                                                                                                                                        |
| <b>Disability<sup>4</sup></b>                 |                                                                                                                                                                                                                                                                                                            |
| • Eligibility                                 | 10 years continuous service                                                                                                                                                                                                                                                                                |
| • Benefit                                     | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$14.00 x Continuous Service (maximum 25 years) less Disability payments                                                                                                     |

<sup>3</sup> The Special 30- Year benefit is subject to a minimum guaranteed benefit of \$915.00 prior to age 62, if over age 56 the \$915.00 is increased to \$1,215.00. The minimum guaranteed benefit is \$415.00 after age 62 and prior to age 65.

<sup>4</sup> Also includes the Special 30-Year Benefit.

## Schedule SB, Part V — Summary of Plan Provisions

|                              |                                                                                                                                             |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pre-retirement death</b>  |                                                                                                                                             |
| • Eligibility                | 5 years continuous service                                                                                                                  |
| • Benefit                    | Surviving Spouse receives 60% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage         |
| <b>Post retirement death</b> | Reduction in Benefit required for J&S Coverage is removed in event of spouse's death after commencement date of pension with waiting period |

### ***Barberton – hired prior to 3/03/2008***

|                                                  |                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | July 20, 1950                                                                                                                                                                                                                                                                                                                                |
| Group Number                                     | 051                                                                                                                                                                                                                                                                                                                                          |
| Status of the plan                               | Effective March 3, 2008, this Appendix is frozen to new entrants. Active participants that have less than 60 points (age + service) as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2011. Active participants that have greater than 60 points as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2020. |
| Significant events that occurred during the year | None                                                                                                                                                                                                                                                                                                                                         |

#### **Definitions**

|                          |                                                  |
|--------------------------|--------------------------------------------------|
| • Type of Plan           | Dollar per month                                 |
| • Normal Form            | Life annuity                                     |
| • Continuous Service     | From date of hire                                |
| • Plan eligibility       | Date of hire if prior to March 3, 2008           |
| • Employee Contributions | None                                             |
| • Class                  | Hourly employees covered by Bargaining Agreement |
| • Accrued Benefit        | \$50.00 x continuous service                     |

#### **Normal retirement**

|               |                                     |
|---------------|-------------------------------------|
| • Eligibility | Age 65                              |
| • Benefit     | Accrued Benefit payable immediately |

#### **Early retirement**

|               |                                                                                                                     |
|---------------|---------------------------------------------------------------------------------------------------------------------|
| • Eligibility | Age 60 plus 10 years continuous service or<br>Age 55 plus years of service equals 85                                |
| • Benefit     | Accrued Benefit reduced 2.4% for each year prior to 62 or for each Year of Service less than 37, whichever is less. |

#### **Special 30-year retirement**

|               |                                         |
|---------------|-----------------------------------------|
| • Eligibility | Age 55 plus 30 years continuous service |
|---------------|-----------------------------------------|

## Schedule SB, Part V — Summary of Plan Provisions

|                             |                                                                                                                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Benefit                   | Accrued Benefit reduced 2.4% for each year prior to 62 or for each Year of Service less than 37, whichever is less, plus a temporary supplement of \$550.00 payable to 62.          |
| <b>Deferred vested</b>      |                                                                                                                                                                                     |
| • Eligibility               | 5 years continuous service                                                                                                                                                          |
| • Benefit                   | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                 |
| <b>Disability</b>           |                                                                                                                                                                                     |
| • Eligibility               | 15 years continuous service                                                                                                                                                         |
| • Benefit                   | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$13.00 x Continuous Service less Disability payments |
| <b>Pre-retirement death</b> |                                                                                                                                                                                     |
| • Eligibility               | 5 years continuous service                                                                                                                                                          |
| • Benefit                   | Surviving Spouse receives 55% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                 |

### ***Oak Creek – hired prior to 10/22/2007***

|                                                  |                                                                                                                                         |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | October 21, 1950                                                                                                                        |
| Group Number                                     | 053                                                                                                                                     |
| Status of the plan                               | Effective October 22, 2007, this Appendix is frozen to new entrants. The Appendix has ongoing benefit accruals until December 31, 2020. |
| Significant events that occurred during the year | None                                                                                                                                    |
| <b>Definitions</b>                               |                                                                                                                                         |
| • Type of Plan                                   | Dollar per month                                                                                                                        |
| • Normal Form                                    | Life annuity                                                                                                                            |
| • Continuous Service                             | From date of hire                                                                                                                       |
| • Plan eligibility                               | Date of hire if prior to October 22, 2007                                                                                               |
| • Employee Contributions                         | None                                                                                                                                    |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                        |
| • Accrued Benefit                                | \$50.00 x continuous service                                                                                                            |

## Schedule SB, Part V — Summary of Plan Provisions

|                                                                                                                                   |                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Normal retirement</b>                                                                                                          |                                                                                                                                                                                                                            |
| • Eligibility                                                                                                                     | Age 65                                                                                                                                                                                                                     |
| • Benefit                                                                                                                         | Accrued Benefit payable immediately                                                                                                                                                                                        |
| <b>Early retirement<sup>5</sup></b>                                                                                               |                                                                                                                                                                                                                            |
| • Eligibility                                                                                                                     | Age 60 plus 10 years continuous service or<br>Age 55 plus years of service equals 85                                                                                                                                       |
| • Benefit                                                                                                                         | Accrued Benefit reduced 2.4% for each year prior to 65; no reduction if at least age 62 at time of retirement. Effective 2/1/2005 a temporary supplement of \$550.00 per month payable until age 62 for 55/85 retirements. |
| <b>Special 25-year retirement<sup>6</sup></b>                                                                                     |                                                                                                                                                                                                                            |
| • Eligibility                                                                                                                     | Age 58 plus 25 years continuous service                                                                                                                                                                                    |
| • Benefit                                                                                                                         | Accrued Benefit reduced 3.6% for each year prior to 62.                                                                                                                                                                    |
| <b>Deferred vested</b>                                                                                                            |                                                                                                                                                                                                                            |
| • Eligibility                                                                                                                     | 5 years continuous service                                                                                                                                                                                                 |
| • Benefit                                                                                                                         | Accrued Benefit deferred to 65 or reduced 7.2% for each year prior to 65 once eligible for early.                                                                                                                          |
| <b>Disability</b>                                                                                                                 |                                                                                                                                                                                                                            |
| • Eligibility                                                                                                                     | 10 years continuous service                                                                                                                                                                                                |
| • Benefit                                                                                                                         | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$20.00 x Continuous Service less Disability payments                                        |
| <b>Pre-retirement death</b>                                                                                                       |                                                                                                                                                                                                                            |
| • Eligibility                                                                                                                     | 5 years continuous service                                                                                                                                                                                                 |
| • Benefit                                                                                                                         | Surviving Spouse receives 60% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                                                        |
| <b>Optional form conversion factors</b>                                                                                           |                                                                                                                                                                                                                            |
| Joint & Survivor conversion tables were changed from the 90 ± 5 table to the 95 ± 5 table for retirements after February 1, 2002. |                                                                                                                                                                                                                            |

<sup>5</sup> Various early retirement windows effective December 1, 2007, October 1, 2008, October 1, 2009 and October 1, 2010.

<sup>6</sup> Special 25-year pension reduction reduced to 3.6% per year effective February 1, 2005, QPSA & QJSA % increased to 60% effective February 1, 2005.

## Schedule SB, Part V — Summary of Plan Provisions

### ***Lake Charles – hired prior to 9/01/2006***

|                                                  |                                                                                                                                                                            |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | February 23, 1955                                                                                                                                                          |
| Group Number                                     | 058                                                                                                                                                                        |
| Status of the plan                               | Effective September 1, 2006, this Appendix is frozen to new entrants. The Appendix has ongoing benefit accruals until December 31, 2020                                    |
| Significant events that occurred during the year | None                                                                                                                                                                       |
| <b>Definitions</b>                               |                                                                                                                                                                            |
| • Type of Plan                                   | Dollar per month                                                                                                                                                           |
| • Normal Form                                    | Life annuity                                                                                                                                                               |
| • Continuous Service                             | From date of hire                                                                                                                                                          |
| • Plan eligibility                               | Date of hire if prior to September 1, 2006                                                                                                                                 |
| • Employee Contributions                         | None                                                                                                                                                                       |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                                                           |
| • Accrued Benefit                                | \$51.00 x continuous service                                                                                                                                               |
| <b>Normal retirement</b>                         |                                                                                                                                                                            |
| • Eligibility                                    | Age 65                                                                                                                                                                     |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                                                        |
| <b>Early retirement</b>                          |                                                                                                                                                                            |
| • Eligibility                                    | Age 60 plus 10 years continuous service or<br>Age 55 plus years of service equals 85                                                                                       |
| • Benefit                                        | Accrued Benefit reduced 2.4% for each year prior to 60 or for each Year of Service less than 35, whichever is less.                                                        |
| <b>Special 30-year retirement</b>                |                                                                                                                                                                            |
| • Eligibility                                    | Age 55 plus 30 years continuous service                                                                                                                                    |
| • Benefit                                        | Accrued Benefit reduced 2.4% for each year prior to 60 or for each Year of Service less than 35, whichever is less, plus a temporary supplement of \$550.00 payable to 62. |
| <b>Deferred vested</b>                           |                                                                                                                                                                            |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                 |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                        |
| <b>Disability</b>                                |                                                                                                                                                                            |
| • Eligibility                                    | 10 years continuous service                                                                                                                                                |

## Schedule SB, Part V — Summary of Plan Provisions

|                                        |                                                                                                                                                                                     |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Benefit                              | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$15.00 x Continuous Service less Disability payments |
| <b>Pre-retirement death</b>            |                                                                                                                                                                                     |
| • Eligibility                          | 5 years continuous service                                                                                                                                                          |
| • Benefit                              | Surviving Spouse receives 60% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                 |
| <b>Optional form conversion factor</b> | The Joint & Survivor conversion table was changed from the 90% ± 5 table to the 95% ± 5 table effective May 1, 2000.                                                                |

### Greensburg

|                                                  |                                                                                                                                                                                                       |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | December 30, 1954                                                                                                                                                                                     |
| Group Number                                     | 060                                                                                                                                                                                                   |
| Status of the plan                               | The Appendix is frozen to new entrants and no longer has ongoing benefit accruals.                                                                                                                    |
| Significant events that occurred during the year | None                                                                                                                                                                                                  |
| <b>Definitions</b>                               |                                                                                                                                                                                                       |
| • Type of Plan                                   | Dollar per month                                                                                                                                                                                      |
| • Normal Form                                    | Life annuity                                                                                                                                                                                          |
| • Continuous Service                             | From date of hire                                                                                                                                                                                     |
| • Plan eligibility                               | Date of hire                                                                                                                                                                                          |
| • Employee Contributions                         | None                                                                                                                                                                                                  |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                                                                                      |
| • Accrued Benefit                                | A + B + C plus \$5.00 where:<br>A = \$21.00 x Continuous Service (Maximum 18 Years)<br>B = \$23.00 x Continuous Service (Between 19 and 28 Years)<br>C = \$25.00 x Continuous Service (Over 28 Years) |
| <b>Normal retirement</b>                         |                                                                                                                                                                                                       |
| • Eligibility                                    | Age 65                                                                                                                                                                                                |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                                                                                   |
| <b>Early retirement</b>                          |                                                                                                                                                                                                       |
| • Eligibility                                    | Age 60 plus 10 years continuous service or<br>Age 55 plus years of service equals 85                                                                                                                  |
| • Benefit                                        | Accrued Benefit reduced for each year prior to 62. See Early Retirement Reduction Percentage Exhibit                                                                                                  |

## Schedule SB, Part V — Summary of Plan Provisions

|                                   |                                                                                                                                                                                                                                                            |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Special early retirement</b>   |                                                                                                                                                                                                                                                            |
| • Eligibility                     | Age 62 with 15 years continuous service                                                                                                                                                                                                                    |
| • Benefit                         | Accrued Benefit payable immediately plus temporary supplement equal to Accrued Benefit, payable to 65                                                                                                                                                      |
| <b>Special 30-year retirement</b> |                                                                                                                                                                                                                                                            |
| • Eligibility                     | 30 years continuous service                                                                                                                                                                                                                                |
| • Benefit                         | Accrued Benefit x early retirement factor payable immediately, subject to minimum guaranteed Benefit of \$1,215.00 prior to 62 and minimum guaranteed Benefit of \$415.00 after 62 and prior to 65; if over 56, the \$1,215.00 is increased to \$1,515.00. |
| <b>Deferred vested</b>            |                                                                                                                                                                                                                                                            |
| • Eligibility                     | 5 years continuous service                                                                                                                                                                                                                                 |
| • Benefit                         | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                                                                                        |
| <b>Disability<sup>7</sup></b>     |                                                                                                                                                                                                                                                            |
| • Eligibility                     | 10 years continuous service                                                                                                                                                                                                                                |
| • Benefit                         | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$14.00 x Continuous Service (maximum 25 years) less Disability payments                                                     |
| <b>Pre-retirement death</b>       |                                                                                                                                                                                                                                                            |
| • Eligibility                     | 5 years continuous service                                                                                                                                                                                                                                 |
| • Benefit                         | Surviving Spouse receives 60% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                                                                                        |
| <b>Post retirement death</b>      | Reduction in Benefit required for J&S Coverage is removed in event of spouse's death after commencement date of pension with waiting period                                                                                                                |

### ***Natrium – hired prior to 2/16/2006***

|                                                  |                                                                                                                                      |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | Restated plan: July 2, 1956                                                                                                          |
| Group Number                                     | 064                                                                                                                                  |
| Status of the plan                               | Effective July 16, 2006, this Appendix is frozen to new entrants. The Appendix has ongoing benefit accruals until December 31, 2020. |
| Significant events that occurred during the year | None                                                                                                                                 |

<sup>7</sup> Also includes the Special 30 Year Benefit.

## Schedule SB, Part V — Summary of Plan Provisions

|                                     |                                                                                                                                                                                     |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Definitions</b>                  |                                                                                                                                                                                     |
| • Type of Plan                      | Dollar per month                                                                                                                                                                    |
| • Normal Form                       | Life annuity                                                                                                                                                                        |
| • Continuous Service                | From date of hire                                                                                                                                                                   |
| • Plan eligibility                  | Date of hire if prior to February 16, 2006                                                                                                                                          |
| • Employee Contributions            | None                                                                                                                                                                                |
| • Class                             | Hourly employees covered by Bargaining Agreement                                                                                                                                    |
| • Accrued Benefit                   | \$51.00 x continuous service                                                                                                                                                        |
| <b>Normal retirement</b>            |                                                                                                                                                                                     |
| • Eligibility                       | Age 65                                                                                                                                                                              |
| • Benefit                           | Accrued Benefit payable immediately                                                                                                                                                 |
| <b>Early retirement<sup>8</sup></b> |                                                                                                                                                                                     |
| • Eligibility                       | Age 60 plus 10 years continuous service or<br>Age 55 plus years of service equals 85                                                                                                |
| • Benefit                           | Accrued Benefit reduced 2.4% for each year prior to 60 or for each Year of Service less than 35, whichever is less                                                                  |
| <b>Special 30-year retirement</b>   |                                                                                                                                                                                     |
| • Eligibility                       | Age 55 plus 30 years continuous service                                                                                                                                             |
| • Benefit                           | Accrued Benefit reduced 2.4% for each year prior to 60 or for each Year of Service less than 35, whichever is less, plus a temporary supplement of \$550.00 payable to 62           |
| <b>Deferred vested</b>              |                                                                                                                                                                                     |
| • Eligibility                       | 5 years continuous service                                                                                                                                                          |
| • Benefit                           | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                 |
| <b>Disability</b>                   |                                                                                                                                                                                     |
| • Eligibility                       | 10 years continuous service                                                                                                                                                         |
| • Benefit                           | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$17.50 x Continuous Service less Disability payments |
| <b>Pre-retirement death</b>         |                                                                                                                                                                                     |
| • Eligibility                       | 5 years continuous service                                                                                                                                                          |
| • Benefit                           | Surviving Spouse receives 60% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                 |

<sup>8</sup> Early retirement windows effective April 1, 2005 and March 1, 2007 will increase the temporary supplement to \$900.00.

## Schedule SB, Part V — Summary of Plan Provisions

### ***Natrium II – hired on or after 2/16/2006***

|                                                  |                                                                                                                                                                                     |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | July 2, 1956                                                                                                                                                                        |
| Group Number                                     | 064                                                                                                                                                                                 |
| Status of the plan                               | Effective August 19, 2010, this Appendix is frozen to new entrants. The Appendix has ongoing benefit accruals until December 31, 2020.                                              |
| Significant events that occurred during the year | None                                                                                                                                                                                |
| <b>Definitions</b>                               |                                                                                                                                                                                     |
| • Type of Plan                                   | Dollar per month                                                                                                                                                                    |
| • Normal Form                                    | Life annuity                                                                                                                                                                        |
| • Continuous Service                             | From date of hire                                                                                                                                                                   |
| • Plan eligibility                               | Date of hire if on or after February 16, 2006                                                                                                                                       |
| • Employee Contributions                         | None                                                                                                                                                                                |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                                                                    |
| • Accrued Benefit                                | \$33.00 x continuous service                                                                                                                                                        |
| <b>Normal retirement</b>                         |                                                                                                                                                                                     |
| • Eligibility                                    | SSNRA                                                                                                                                                                               |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                                                                 |
| <b>Early retirement</b>                          |                                                                                                                                                                                     |
| • Eligibility                                    | Age 60 plus 10 years continuous service                                                                                                                                             |
| • Benefit                                        | Accrued Benefit reduced 2.4% for each year prior to SSNRA or for each Year of Service less than 35, whichever is less                                                               |
| <b>Deferred vested</b>                           |                                                                                                                                                                                     |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                          |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to SSNRA once eligible for early.                                                                              |
| <b>Disability</b>                                |                                                                                                                                                                                     |
| • Eligibility                                    | 10 years continuous service                                                                                                                                                         |
| • Benefit                                        | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$10.00 x Continuous Service less Disability payments |
| <b>Pre-retirement death</b>                      |                                                                                                                                                                                     |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                          |
| • Benefit                                        | Surviving Spouse receives 60% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                 |

## Schedule SB, Part V — Summary of Plan Provisions

### ***Springdale Hourly***

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | October 24, 1957                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Group Number                                     | 067                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Status of the plan                               | Effective June 30, 2008, this Appendix is frozen to new entrants. Active participants that have less than 60 points (age + service) as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2011. Active participants that have greater than 60 points as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2020.                                                                                                                      |
| Significant events that occurred during the year | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Definitions</b>                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| • Type of Plan                                   | Dollar per month                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| • Normal Form                                    | Life annuity                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| • Continuous Service                             | From date of hire                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| • Plan eligibility                               | Date of hire if prior to June 30, 2008                                                                                                                                                                                                                                                                                                                                                                                                                            |
| • Employee Contributions                         | None                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                                                                                                                                                                                                                                                                                                                                                  |
| • Accrued Benefit                                | \$46.00 x continuous service                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Normal retirement</b>                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| • Eligibility                                    | Age 65                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Early retirement</b>                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| • Eligibility                                    | <ul style="list-style-type: none"> <li>• Age 60 plus 10 years continuous service</li> <li>• Age 56 plus years of service equals 85</li> <li>• Age 58 with 30 years continuous service</li> </ul>                                                                                                                                                                                                                                                                  |
| • Benefit                                        | <ul style="list-style-type: none"> <li>• Accrued Benefit reduced for each year prior to 62 for 60 and 10 and 55/85 retirements prior to 11/1/2002. See Early Retirement Reduction Percentage Exhibit</li> <li>• Effective 11/1/2002 reduction was changed to .002% per month under age 62</li> <li>• The greater of the Early Retirement Benefit calculated above and the accrued benefit as of 1/1/1988 payable immediately for 58 and 30 retirements</li> </ul> |
| <b>Special early retirement</b>                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| • Eligibility                                    | Age 62 with 13 years continuous service                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • Benefit                                        | Accrued Benefit payable immediately plus temporary supplement equal to \$10.00 x Continuous Service payable to 65; Accrued Benefit recomputed at 65                                                                                                                                                                                                                                                                                                               |

## Schedule SB, Part V — Summary of Plan Provisions

|                              |                                                                                                                                                                                                        |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Deferred vested</b>       |                                                                                                                                                                                                        |
| • Eligibility                | 5 years continuous service                                                                                                                                                                             |
| • Benefit                    | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                                    |
| <b>Disability</b>            |                                                                                                                                                                                                        |
| • Eligibility                | 10 years continuous service                                                                                                                                                                            |
| • Benefit                    | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$16.00 x Continuous Service (maximum \$400.00) less Disability payments |
| <b>Pre-retirement death</b>  |                                                                                                                                                                                                        |
| • Eligibility                | 5 years continuous service                                                                                                                                                                             |
| • Benefit                    | Surviving Spouse receives 55% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                                    |
| <b>Post retirement death</b> | Reduction in Benefit required for J&S Coverage is removed in event of spouse's death after commencement date of pension with waiting period                                                            |

### ***Kokomo***

|                                                  |                                                          |
|--------------------------------------------------|----------------------------------------------------------|
| Effective date                                   | August 1, 1959                                           |
| Group Number                                     | 072                                                      |
| Status of the plan                               | The Appendix has no active employees remaining.          |
| Significant events that occurred during the year | None                                                     |
| <b>Definitions</b>                               |                                                          |
| • Type of Plan                                   | Dollar per month                                         |
| • Normal Form                                    | Life annuity                                             |
| • Continuous Service                             | From date of hire                                        |
| • Plan eligibility                               | Date of hire                                             |
| • Employee Contributions                         | None                                                     |
| • Class                                          | Hourly employees covered by Bargaining Agreement         |
| • Accrued Benefit                                | \$19.50 x continuous service                             |
| <b>Normal retirement</b>                         |                                                          |
| • Eligibility                                    | Age 65                                                   |
| • Benefit                                        | Accrued Benefit payable immediately                      |
| <b>Early retirement</b>                          |                                                          |
| • Eligibility                                    | Age 60 plus 10 years continuous service                  |
| • Benefit                                        | Accrued Benefit reduced 6.667% for each year prior to 62 |

## Schedule SB, Part V — Summary of Plan Provisions

|                                                  |                                                                                                                                                                                                       |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Special early retirement</b>                  |                                                                                                                                                                                                       |
| • Eligibility                                    | Age 55 plus years of service equals 85                                                                                                                                                                |
| • Benefit                                        | Accrued Benefit reduced 6.667% for each year prior to 62 plus temporary supplement equal to \$500.00 payable to 62                                                                                    |
| <b>Deferred vested</b>                           |                                                                                                                                                                                                       |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                            |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                                   |
| <b>Disability</b>                                |                                                                                                                                                                                                       |
| • Eligibility                                    | 10 years continuous service                                                                                                                                                                           |
| • Benefit                                        | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$.50 x Continuous Service less Disability payments                     |
| <b>Pre-retirement death</b>                      |                                                                                                                                                                                                       |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                            |
| • Benefit                                        | Surviving Spouse receives 50% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                                   |
| <b>Mt. Zion</b>                                  |                                                                                                                                                                                                       |
| Effective date                                   | August 31, 1966                                                                                                                                                                                       |
| Group Number                                     | 073                                                                                                                                                                                                   |
| Status of the plan                               | The Appendix is frozen to new entrants and no longer has employees earning ongoing benefit accruals.                                                                                                  |
| Significant events that occurred during the year | None                                                                                                                                                                                                  |
| <b>Definitions</b>                               |                                                                                                                                                                                                       |
| • Type of Plan                                   | Dollar per month                                                                                                                                                                                      |
| • Normal Form                                    | Life annuity                                                                                                                                                                                          |
| • Continuous Service                             | From date of hire                                                                                                                                                                                     |
| • Plan eligibility                               | Date of hire                                                                                                                                                                                          |
| • Employee Contributions                         | None                                                                                                                                                                                                  |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                                                                                      |
| • Accrued Benefit                                | A + B + C plus \$5.00 where:<br>A = \$25.00 x continuous service (maximum 18 years)<br>B = \$27.00 x continuous service (between 19 and 28 years)<br>C = \$29.00 x continuous service (over 28 years) |

## Schedule SB, Part V — Summary of Plan Provisions

|                                   |                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Normal retirement</b>          |                                                                                                                                                                                                                                                                                                                                                  |
| • Eligibility                     | Age 65                                                                                                                                                                                                                                                                                                                                           |
| • Benefit                         | Accrued Benefit payable immediately                                                                                                                                                                                                                                                                                                              |
| <b>Early retirement</b>           |                                                                                                                                                                                                                                                                                                                                                  |
| • Eligibility                     | Age 60 plus 10 years continuous service<br>Age 55 plus years of service equals 85                                                                                                                                                                                                                                                                |
| • Benefit                         | Accrued Benefit reduced for each year prior to 62. See Early Retirement Reduction Percentage Exhibit                                                                                                                                                                                                                                             |
| <b>Special early retirement</b>   |                                                                                                                                                                                                                                                                                                                                                  |
| • Eligibility                     | Age 62 plus 15 years of continuous service                                                                                                                                                                                                                                                                                                       |
| • Benefit                         | Accrued Benefit payable immediately plus temporary supplement payable to age 65 equal to the benefit calculated using rates of \$17/\$19/\$21 and service at 12/31/1999 plus service earned after 7/1/2002                                                                                                                                       |
| <b>Special 30 year retirement</b> |                                                                                                                                                                                                                                                                                                                                                  |
| • Eligibility                     | 30 years continuous service                                                                                                                                                                                                                                                                                                                      |
| • Benefit                         | Accrued Benefit x early retirement factor payable immediately, subject to minimum guaranteed Benefit of \$1,215 prior to 62 and minimum guaranteed Benefit of \$415 after 62 and prior to 65; if over 56, the \$1,215 is increased to \$1,515. At age 62, benefit is recalculated using service at 12/31/1999 plus service earned after 7/1/2002 |
| <b>Deferred vested</b>            |                                                                                                                                                                                                                                                                                                                                                  |
| • Eligibility                     | 5 years continuous service                                                                                                                                                                                                                                                                                                                       |
| • Benefit                         | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                                                                                                                                                                              |
| <b>Disability<sup>9</sup></b>     |                                                                                                                                                                                                                                                                                                                                                  |
| • Eligibility                     | 10 years continuous service                                                                                                                                                                                                                                                                                                                      |
| • Benefit                         | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$14.00 x Continuous Service (maximum \$350.00) less Disability payments                                                                                                                                           |
| <b>Pre-retirement death</b>       |                                                                                                                                                                                                                                                                                                                                                  |
| • Eligibility                     | 5 years continuous service                                                                                                                                                                                                                                                                                                                       |
| • Benefit                         | Surviving Spouse receives 60% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                                                                                                                                                                              |

<sup>9</sup> Also includes the Special 30-Year Benefit.

## Schedule SB, Part V — Summary of Plan Provisions

|                              |                                                                                                                                             |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Post retirement death</b> | Reduction in Benefit required for J&S Coverage is removed in event of spouse's death after commencement date of pension with waiting period |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|

### ***East Point – hired prior to 12/01/2007***

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | October 1, 1964                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Group Number                                     | 076                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Status of the plan                               | Effective December 1, 2007, this Appendix is frozen to new entrants (employees hired on or after December 1, 2007 are eligible for DC benefits only). Effective October 3, 2011 Active participants that have less than 60 points (age + service) as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2011. Active participants that have greater than 60 points as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2020. |
| Significant events that occurred during the year | None                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

#### **Definitions**

|                          |                                                  |
|--------------------------|--------------------------------------------------|
| • Type of Plan           | Dollar per month                                 |
| • Normal Form            | Life annuity                                     |
| • Continuous Service     | From date of hire                                |
| • Plan eligibility       | Date of hire if prior to December 1, 2007        |
| • Employee Contributions | None                                             |
| • Class                  | Hourly employees covered by Bargaining Agreement |
| • Accrued Benefit        | \$36.50 x continuous service                     |

#### **Normal retirement**

|               |                                     |
|---------------|-------------------------------------|
| • Eligibility | Age 65                              |
| • Benefit     | Accrued Benefit payable immediately |

#### **Early retirement**

|               |                                                           |
|---------------|-----------------------------------------------------------|
| • Eligibility | Age 62 plus 10 years continuous service                   |
| • Benefit     | Accrued Benefit reduced 6.667% for each year prior to 65. |

#### **Deferred vested**

|               |                                                                                                     |
|---------------|-----------------------------------------------------------------------------------------------------|
| • Eligibility | 5 years continuous service                                                                          |
| • Benefit     | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early. |

#### **Disability**

|               |                                                                                                                                                                                     |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Eligibility | 15 years continuous service                                                                                                                                                         |
| • Benefit     | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$10.95 x Continuous Service less Disability payments |

## Schedule SB, Part V — Summary of Plan Provisions

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pre-retirement death</b>                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| • Benefit                                        | Surviving Spouse receives 50% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Glass Clerical</b>                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Effective date                                   | April 1, 1956                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Group Number                                     | 078                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Status of the plan                               | The union was decertified effective at the end of August 2002. Beginning January 1, 2003 these employees became covered in the RIP. The Appendix has no active employees remaining.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Significant events that occurred during the year | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Definitions</b>                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| • Type of Plan                                   | Dollar per month                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • Normal Form                                    | Life annuity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • Continuous Service                             | From date of hire                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| • Plan eligibility                               | Date of hire                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • Employee Contributions                         | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • Accrued Benefit                                | <p>A + B + C where:</p> <p>A = \$23.00 x Continuous Service (Maximum 18 Years)</p> <p>B = \$25.00 x Continuous Service (Between 19 and 28 Years)</p> <p>C = \$27.00 x Continuous Service (Over 28 Years)</p> <p>— Participants of the Glass Clerical Plan at the Ford City location</p> <p>A + B + C where:</p> <p>A = \$18.95 x Continuous Service (Maximum 18 Years)</p> <p>B = \$20.20 x Continuous Service (Between 19 and 28 Years)</p> <p>C = \$21.70 x Continuous Service (Over 28 Years)</p> <p>— Participants of the Glass Clerical Plan at the Crystal City location</p> <p>A + B + C where:</p> <p>A = \$20.50 x Continuous Service (Maximum 18 Years)</p> <p>B = \$22.50 x Continuous Service (Between 19 and 28 Years)</p> <p>C = \$24.50 x Continuous Service (Over 28 Years)</p> |
| <b>Normal retirement</b>                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| • Eligibility                                    | Age 65                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## Schedule SB, Part V — Summary of Plan Provisions

|                                                    |                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Early retirement</b>                            |                                                                                                                                                                                                                                                                                                                                                                         |
| • Eligibility                                      | Age 62 plus 10 years continuous service<br>Age 55 plus years of service equals 85                                                                                                                                                                                                                                                                                       |
| • Benefit                                          | Accrued Benefit reduced for each year prior to 62 for 60 and 10 retirements<br>See Exhibit A otherwise                                                                                                                                                                                                                                                                  |
| <b>Special early retirement</b>                    |                                                                                                                                                                                                                                                                                                                                                                         |
| • Eligibility                                      | Age 52 with 15 years of continuous service (as of 12/31/1996)                                                                                                                                                                                                                                                                                                           |
| • Benefit                                          | Accrued Benefit payable immediately plus temporary supplement payable to age 65 equal to the benefit calculated using levels of \$23/\$25/\$27 and service at 12/31/1996                                                                                                                                                                                                |
| <b>Special 30-Year</b>                             |                                                                                                                                                                                                                                                                                                                                                                         |
| • Eligibility                                      | 30 years continuous service (if hired before 9/1/1996)                                                                                                                                                                                                                                                                                                                  |
| • Benefit                                          | Accrued Benefit based on continuous service as of 12/31/1996 x early retirement factor payable immediately, subject to minimum guaranteed Benefit of \$1,215.00 prior to 62 and minimum guaranteed Benefit of \$415.00 after 62 and prior to 65; if over 56, the \$1,215.00 is increased to \$1,515.00. At age 62, benefit is recalculated using service at 12/31/1996. |
| — Glass Clerical Plan at the Ford City location    | The Special 30-Year Benefit is subject to a minimum guaranteed benefit of \$915.00 prior to age 62; if over age 56 the \$915.00 is increased to \$1,215.00. The minimum guaranteed benefit is \$415.00 after age 62 and prior to age 65.                                                                                                                                |
| — Glass Clerical Plan at the Crystal City location | The Special 30-Year Benefit is subject to a minimum guaranteed benefit of \$1,515.00. The minimum guaranteed benefit is \$415.00 after age 62 and prior to age 65                                                                                                                                                                                                       |
| <b>Deferred vested</b>                             |                                                                                                                                                                                                                                                                                                                                                                         |
| • Eligibility                                      | 5 years continuous service                                                                                                                                                                                                                                                                                                                                              |
| • Benefit                                          | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                                                                                                                                                                                                     |
| <b>Disability<sup>10</sup></b>                     |                                                                                                                                                                                                                                                                                                                                                                         |
| • Eligibility                                      | 10 years continuous service                                                                                                                                                                                                                                                                                                                                             |
| • Benefit                                          | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$14.00 x Continuous Service (maximum 25 years) less Disability payments                                                                                                                                                                  |

<sup>10</sup> Also includes the Special 30-Year Benefit.

## Schedule SB, Part V — Summary of Plan Provisions

|                                                  |                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pre-retirement death</b>                      |                                                                                                                                                                                                                                                                                                                                                   |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                                                                                                                                                                        |
| • Benefit                                        | Surviving Spouse receives 60% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                                                                                                                                                                               |
| <b>Post retirement death</b>                     | Reduction in Benefit required for J&S Coverage is removed in event of spouse's death after commencement date of pension with waiting period                                                                                                                                                                                                       |
| <b>Fresno</b>                                    |                                                                                                                                                                                                                                                                                                                                                   |
| Effective date                                   | April 22, 1968                                                                                                                                                                                                                                                                                                                                    |
| Group Number                                     | 081                                                                                                                                                                                                                                                                                                                                               |
| Status of the plan                               | Effective September 29, 2011, this Appendix is frozen to new entrants. Active participants that have less than 60 points (age + service) as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2011. Active participants that have greater than 60 points as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2020. |
| Significant events that occurred during the year | None                                                                                                                                                                                                                                                                                                                                              |
| <b>Definitions</b>                               |                                                                                                                                                                                                                                                                                                                                                   |
| • Type of Plan                                   | Dollar per month                                                                                                                                                                                                                                                                                                                                  |
| • Normal Form                                    | Life annuity                                                                                                                                                                                                                                                                                                                                      |
| • Continuous Service                             | From date of hire                                                                                                                                                                                                                                                                                                                                 |
| • Plan eligibility                               | Date of hire                                                                                                                                                                                                                                                                                                                                      |
| • Employee Contributions                         | None                                                                                                                                                                                                                                                                                                                                              |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                                                                                                                                                                                                                                  |
| • Accrued Benefit                                | A + B + C plus \$5.00 where:<br>A = \$25.00 x Continuous Service (Maximum 18 Years)<br>B = \$27.00 x Continuous Service (Between 19 and 28 Years)<br>C = \$29.00 x Continuous Service (Over 28 Years)                                                                                                                                             |
| <b>Normal retirement</b>                         |                                                                                                                                                                                                                                                                                                                                                   |
| • Eligibility                                    | Age 65                                                                                                                                                                                                                                                                                                                                            |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                                                                                                                                                                                                                               |

## Schedule SB, Part V — Summary of Plan Provisions

|                                   |                                                                                                                                                                                                                                                        |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Early retirement</b>           |                                                                                                                                                                                                                                                        |
| • Eligibility                     | Age 60 plus 10 years continuous service<br>Age 55 plus years of service equals 85                                                                                                                                                                      |
| • Benefit                         | Accrued Benefit reduced for each year prior to 62. See Early Retirement Reduction Percentage Exhibit                                                                                                                                                   |
| <b>Special early retirement</b>   |                                                                                                                                                                                                                                                        |
| • Eligibility                     | Age 62 with 15 years of continuous service                                                                                                                                                                                                             |
| • Benefit                         | Accrued Benefit payable immediately plus temporary supplement payable to age 65 equal to the benefit using \$17/\$19/\$21 levels and service at retirement                                                                                             |
| <b>Special 30-year retirement</b> |                                                                                                                                                                                                                                                        |
| • Eligibility                     | 30 years continuous service                                                                                                                                                                                                                            |
| • Benefit                         | Accrued Benefit x early retirement factor payable immediately, subject to minimum guaranteed Benefit of \$1,215.00 prior to 62 and minimum guaranteed Benefit of \$415.00 after 62 and prior to 65; if over 56, the \$1,215.00 is increased to \$1,515 |
| <b>Deferred vested</b>            |                                                                                                                                                                                                                                                        |
| • Eligibility                     | 5 years continuous service                                                                                                                                                                                                                             |
| • Benefit                         | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                                                                                    |
| <b>Disability<sup>11</sup></b>    |                                                                                                                                                                                                                                                        |
| • Eligibility                     | 10 years continuous service                                                                                                                                                                                                                            |
| • Benefit                         | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$14.00 x Continuous Service (maximum \$350.00) less Disability payments                                                 |
| <b>Pre-retirement death</b>       |                                                                                                                                                                                                                                                        |
| • Eligibility                     | 5 years continuous service                                                                                                                                                                                                                             |
| • Benefit                         | Surviving Spouse receives 60% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                                                                                    |
| <b>Post retirement death</b>      | Reduction in Benefit required for J&S Coverage is removed in event of spouse's death after commencement date of pension with waiting period                                                                                                            |

<sup>11</sup> Also includes the Special 30-Year Benefit.

## Schedule SB, Part V — Summary of Plan Provisions

### *Delaware – hired prior to 2/25/2007*

|                                                  |                                                                                                                                                                                     |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | February 3, 1969                                                                                                                                                                    |
| Group Number                                     | 082                                                                                                                                                                                 |
| Status of the plan                               | Effective February 25, 2007, the Appendix is frozen to new entrants. The Appendix has ongoing benefit accruals until December 31, 2020.                                             |
| Significant events that occurred during the year | None                                                                                                                                                                                |
| <b>Definitions</b>                               |                                                                                                                                                                                     |
| • Type of Plan                                   | Dollar per month                                                                                                                                                                    |
| • Normal Form                                    | Life annuity                                                                                                                                                                        |
| • Continuous Service                             | From date of hire                                                                                                                                                                   |
| • Plan eligibility                               | Date of hire if prior to February 25, 2007                                                                                                                                          |
| • Employee Contributions                         | None                                                                                                                                                                                |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                                                                    |
| • Accrued Benefit                                | \$50.00 x Continuous Service                                                                                                                                                        |
| <b>Normal retirement</b>                         |                                                                                                                                                                                     |
| • Eligibility                                    | Age 65                                                                                                                                                                              |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                                                                 |
| <b>Early retirement<sup>12</sup></b>             |                                                                                                                                                                                     |
| • Eligibility                                    | Age 60 plus 10 years continuous service<br>Age 55 plus years of service equals 85                                                                                                   |
| • Benefit                                        | Accrued Benefit reduced 2.4% for each year prior to 62. Effective 3/1/2001 a temporary supplement of \$550 per month payable until age 62 for 55/85 retirements.                    |
| <b>Deferred vested</b>                           |                                                                                                                                                                                     |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                          |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 6.0% for each year prior to 65 once eligible for early (early for TVs only with 60 and 10).                                               |
| <b>Disability</b>                                |                                                                                                                                                                                     |
| • Eligibility                                    | 10 years continuous service                                                                                                                                                         |
| • Benefit                                        | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$21.00 x Continuous Service less Disability payments |

<sup>12</sup> Early retirement windows effective June 1, 2007, January 1, 2008, June 1, 2008 and April 1, 2010 will increase the temporary supplement to \$900.00.

## Schedule SB, Part V — Summary of Plan Provisions

|                             |                                                                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pre-retirement death</b> |                                                                                                                                     |
| • Eligibility               | 5 years continuous service                                                                                                          |
| • Benefit                   | Surviving Spouse receives 60% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage |

### ***Delaware II – hired on or after 2/25/2007***

|                                                  |                                                                                                                                                                   |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | February 3, 1969                                                                                                                                                  |
| Group Number                                     | 082                                                                                                                                                               |
| Status of the plan                               | The Appendix has ongoing benefit accruals and new employees are eligible to participate once they satisfy the participation requirements until December 31, 2020. |
| Significant events that occurred during the year | None                                                                                                                                                              |

#### **Definitions**

|                          |                                                  |
|--------------------------|--------------------------------------------------|
| • Type of Plan           | Dollar per month                                 |
| • Normal Form            | Life annuity                                     |
| • Continuous Service     | From date of hire                                |
| • Plan eligibility       | Date of hire                                     |
| • Employee Contributions | None                                             |
| • Class                  | Hourly employees covered by Bargaining Agreement |
| • Accrued Benefit        | \$35.00 x Continuous Service                     |

#### **Normal retirement**

|               |                                     |
|---------------|-------------------------------------|
| • Eligibility | Age 65                              |
| • Benefit     | Accrued Benefit payable immediately |

#### **Early retirement**

|               |                                                                                                                                                                  |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Eligibility | Age 60 plus 10 years continuous service<br>Age 55 plus years of service equals 85                                                                                |
| • Benefit     | Accrued Benefit reduced 2.4% for each year prior to 62. Effective 3/1/2001 a temporary supplement of \$550 per month payable until age 62 for 55/85 retirements. |

#### **Deferred vested**

|               |                                                                                                                                       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------|
| • Eligibility | 5 years continuous service                                                                                                            |
| • Benefit     | Accrued Benefit deferred to 65 or reduced 6.0% for each year prior to 65 once eligible for early (early for TVs only with 60 and 10). |

## Schedule SB, Part V — Summary of Plan Provisions

|                             |                                                                                                                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disability</b>           |                                                                                                                                                                                     |
| • Eligibility               | 10 years continuous service                                                                                                                                                         |
| • Benefit                   | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$15.00 x Continuous Service less Disability payments |
| <b>Pre-retirement death</b> |                                                                                                                                                                                     |
| • Eligibility               | 5 years continuous service                                                                                                                                                          |
| • Benefit                   | Surviving Spouse receives 60% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                 |

### **Memphis C&S**

|                                                  |                                                                                                                                           |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | July 1, 1969                                                                                                                              |
| Group Number                                     | 083                                                                                                                                       |
| Status of the plan                               | Spun off to PPG Auto Glass effective October 1, 2000. Decertified April 1, 2001, and became covered by Auto Glass Retirement Income Plan. |
| Significant events that occurred during the year | None                                                                                                                                      |

#### **Definitions**

|                          |                                                  |
|--------------------------|--------------------------------------------------|
| • Type of Plan           | Dollar per month                                 |
| • Normal Form            | Life annuity                                     |
| • Continuous Service     | From date of hire                                |
| • Plan eligibility       | Date of hire                                     |
| • Employee Contributions | None                                             |
| • Class                  | Hourly employees covered by Bargaining Agreement |
| • Accrued Benefit        | \$13.00 x Continuous Service (maximum 35 years)  |

#### **Normal retirement**

|               |                                     |
|---------------|-------------------------------------|
| • Eligibility | Age 65                              |
| • Benefit     | Accrued Benefit payable immediately |

#### **Early retirement**

|               |                                                         |
|---------------|---------------------------------------------------------|
| • Eligibility | Age 60 plus 10 years continuous service                 |
| • Benefit     | Accrued Benefit reduced 7.2% for each year prior to 65. |

#### **Deferred vested**

|               |                                                                                                   |
|---------------|---------------------------------------------------------------------------------------------------|
| • Eligibility | 5 years continuous service                                                                        |
| • Benefit     | Accrued Benefit deferred to 65 or reduced 7.2% for each year prior to 65 once eligible for early. |

## Schedule SB, Part V — Summary of Plan Provisions

|                             |                                                                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disability</b>           |                                                                                                                                     |
| • Eligibility               | 10 years continuous service                                                                                                         |
| • Benefit                   | Accrued Benefit payable immediately                                                                                                 |
| <b>Pre-retirement death</b> |                                                                                                                                     |
| • Eligibility               | 5 years continuous service                                                                                                          |
| • Benefit                   | Surviving Spouse receives 50% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage |

### ***Circleville – hired prior to 11/01/2004***

|                                                  |                                                                                                                                                                       |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | June 20, 1965                                                                                                                                                         |
| Group Number                                     | 087                                                                                                                                                                   |
| Status of the plan                               | Effective November 1, 2004, this Appendix is frozen to new entrants. Effective September 17, 2012, the Appendix has ongoing benefit accruals until December 31, 2020. |
| Significant events that occurred during the year | None                                                                                                                                                                  |
| <b>Definitions</b>                               |                                                                                                                                                                       |
| • Type of Plan                                   | Dollar per month                                                                                                                                                      |
| • Normal Form                                    | Life annuity                                                                                                                                                          |
| • Continuous Service                             | From date of hire                                                                                                                                                     |
| • Plan eligibility                               | Date of hire if prior to November 1, 2004                                                                                                                             |
| • Employee Contributions                         | None                                                                                                                                                                  |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                                                      |
| • Accrued Benefit                                | \$50.50 x Continuous Service                                                                                                                                          |
| <b>Normal retirement</b>                         |                                                                                                                                                                       |
| • Eligibility                                    | Age 65                                                                                                                                                                |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                                                   |
| <b>Early retirement</b>                          |                                                                                                                                                                       |
| • Eligibility                                    | Age 60 plus 10 years continuous service<br>55 plus years of service equals 85                                                                                         |
| • Benefit                                        | Accrued Benefit reduced 2.4% for each year prior to 62. Effective 9/1/2001 a temporary supplement of \$550.00 per month payable until age 62 for 55/85 retirements.   |
| <b>Deferred vested</b>                           |                                                                                                                                                                       |
| • Eligibility                                    | 5 years continuous service                                                                                                                                            |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                   |

## Schedule SB, Part V — Summary of Plan Provisions

|                                        |                                                                                                                                                                                        |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disability</b>                      |                                                                                                                                                                                        |
| • Eligibility                          | 10 years continuous service                                                                                                                                                            |
| • Benefit                              | Accrued Benefit payable immediately, plus if not eligible for Social Security, a temporary supplement payable to age 65 equal to \$25.25 x Continuous Service less Disability payments |
| <b>Pre-retirement death</b>            |                                                                                                                                                                                        |
| • Eligibility                          | 5 years continuous service                                                                                                                                                             |
| • Benefit                              | Surviving Spouse receives 60% of Benefit effective 7/1/2001 calculated as if participant retired early at first possible date and elected J&S Coverage                                 |
| <b>Optional form conversion factor</b> | Joint & Survivor conversion tables were changed from the 90% $\pm$ 5 to the 95% $\pm$ 5 table for retirements on or after August 1, 1995.                                              |

### ***Circleville II – hired on or after 11/01/2004***

|                                                  |                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | June 20, 1965                                                                                                                                                                                                                                                                                                                                                              |
| Group Number                                     | 087                                                                                                                                                                                                                                                                                                                                                                        |
| Status of the plan                               | Effective July 20, 2009, this Appendix is frozen to new entrants. Effective September 17, 2012, active participants that have less than 60 points (age + service) as of 12/31/2012 will not have ongoing benefit accruals after 12/31/2012. Active participants that have greater than 60 points as of 12/31/2012 will not have ongoing benefit accruals after 12/31/2020. |
| Significant events that occurred during the year | None                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Definitions</b>                               |                                                                                                                                                                                                                                                                                                                                                                            |
| • Type of Plan                                   | Dollar per month                                                                                                                                                                                                                                                                                                                                                           |
| • Normal Form                                    | Life annuity                                                                                                                                                                                                                                                                                                                                                               |
| • Continuous Service                             | From date of hire                                                                                                                                                                                                                                                                                                                                                          |
| • Plan eligibility                               | Date of hire                                                                                                                                                                                                                                                                                                                                                               |
| • Employee Contributions                         | None                                                                                                                                                                                                                                                                                                                                                                       |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                                                                                                                                                                                                                                                           |
| • Accrued Benefit                                | \$33.00 x Continuous Service                                                                                                                                                                                                                                                                                                                                               |
| <b>Normal retirement</b>                         |                                                                                                                                                                                                                                                                                                                                                                            |
| • Eligibility                                    | SSNRA                                                                                                                                                                                                                                                                                                                                                                      |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                                                                                                                                                                                                                                                        |
| <b>Early retirement</b>                          |                                                                                                                                                                                                                                                                                                                                                                            |
| • Eligibility                                    | Age 60 plus 10 years continuous service                                                                                                                                                                                                                                                                                                                                    |
| • Benefit                                        | Accrued Benefit reduced 2.4% for each year prior to SSNRA – 3.                                                                                                                                                                                                                                                                                                             |

## Schedule SB, Part V — Summary of Plan Provisions

|                             |                                                                                                                                                                                        |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Deferred vested</b>      |                                                                                                                                                                                        |
| • Eligibility               | 5 years continuous service                                                                                                                                                             |
| • Benefit                   | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                    |
| <b>Disability</b>           |                                                                                                                                                                                        |
| • Eligibility               | 10 years continuous service                                                                                                                                                            |
| • Benefit                   | Accrued Benefit payable immediately, plus if not eligible for Social Security, a temporary supplement payable to age 65 equal to \$16.50 x Continuous Service less Disability payments |
| <b>Pre-retirement death</b> |                                                                                                                                                                                        |
| • Eligibility               | 5 years continuous service                                                                                                                                                             |
| • Benefit                   | Surviving Spouse receives 60% of Benefit effective 7/1/2001 calculated as if participant retired early at first possible date and elected J&S Coverage                                 |

### Roanoke C&S

|                                                  |                                                                                                                                                                                                                 |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | August 1, 1971                                                                                                                                                                                                  |
| Group Number                                     | 088                                                                                                                                                                                                             |
| Status of the plan                               | Union Contract expired on August 31, 1999. All accrued benefits under this appendix were frozen at that date. Benefit accruals for service after August 31, 1999 are earned under the Glass Voluntary appendix. |
| Significant events that occurred during the year | None                                                                                                                                                                                                            |
| <b>Definitions</b>                               |                                                                                                                                                                                                                 |
| • Type of Plan                                   | Dollar per month                                                                                                                                                                                                |
| • Normal Form                                    | Life annuity                                                                                                                                                                                                    |
| • Continuous Service                             | From date of hire                                                                                                                                                                                               |
| • Plan eligibility                               | Date of hire                                                                                                                                                                                                    |
| • Employee Contributions                         | None                                                                                                                                                                                                            |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                                                                                                |
| • Accrued Benefit                                | \$13.00 x Continuous Service (maximum 35 years)                                                                                                                                                                 |
| <b>Normal retirement</b>                         |                                                                                                                                                                                                                 |
| • Eligibility                                    | Age 65                                                                                                                                                                                                          |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                                                                                             |
| <b>Early retirement</b>                          |                                                                                                                                                                                                                 |
| • Eligibility                                    | Age 60 plus 10 years continuous service                                                                                                                                                                         |
| • Benefit                                        | Accrued Benefit reduced 7.2% for each year prior to 65.                                                                                                                                                         |

## Schedule SB, Part V — Summary of Plan Provisions

|                                                  |                                                                                                                                     |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Deferred vested</b>                           |                                                                                                                                     |
| • Eligibility                                    | 5 years continuous service                                                                                                          |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 7.2% for each year prior to 65 once eligible for early.                                   |
| <b>Disability</b>                                |                                                                                                                                     |
| • Eligibility                                    | 10 years continuous service                                                                                                         |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                 |
| <b>Pre-retirement death</b>                      |                                                                                                                                     |
| • Eligibility                                    | 5 years continuous service                                                                                                          |
| • Benefit                                        | Surviving Spouse receives 50% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage |
| <b>Stokertown</b>                                |                                                                                                                                     |
| Effective date                                   | January 1, 1979                                                                                                                     |
| Group Number                                     | 091                                                                                                                                 |
| Status of the plan                               | Facility sold effective September 30, 1994. All non-vested employees were vested regardless of service.                             |
| Significant events that occurred during the year | None                                                                                                                                |
| <b>Definitions</b>                               |                                                                                                                                     |
| • Type of Plan                                   | Dollar per month                                                                                                                    |
| • Normal Form                                    | Life annuity                                                                                                                        |
| • Continuous Service                             | From date of hire                                                                                                                   |
| • Plan eligibility                               | Date of hire                                                                                                                        |
| • Employee Contributions                         | None                                                                                                                                |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                    |
| • Accrued Benefit                                | \$18.00 x Continuous Service (maximum 35 years)                                                                                     |
| <b>Normal retirement</b>                         |                                                                                                                                     |
| • Eligibility                                    | Age 65                                                                                                                              |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                 |
| <b>Early retirement</b>                          |                                                                                                                                     |
| • Eligibility                                    | Age 55 plus 10 years continuous service                                                                                             |
| • Benefit                                        | Accrued Benefit reduced 5.00% for each year prior to 65.                                                                            |

## Schedule SB, Part V — Summary of Plan Provisions

|                                                  |                                                                                                                                     |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Deferred vested</b>                           |                                                                                                                                     |
| • Eligibility                                    | 5 years continuous service                                                                                                          |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 5.0% for each year prior to 65 once eligible for early.                                   |
| <b>Disability</b>                                |                                                                                                                                     |
| • Eligibility                                    | 15 years continuous service                                                                                                         |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                 |
| <b>Pre-retirement death</b>                      |                                                                                                                                     |
| • Eligibility                                    | 5 years continuous service                                                                                                          |
| • Benefit                                        | Surviving Spouse receives 55% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage |
| <b>Torrance</b>                                  |                                                                                                                                     |
| Effective date                                   | November 1, 1987                                                                                                                    |
| Group Number                                     | 094                                                                                                                                 |
| Status of the plan                               | The Torrance plant was shut down in early 2000.                                                                                     |
| Significant events that occurred during the year | None                                                                                                                                |
| <b>Definitions</b>                               |                                                                                                                                     |
| • Type of Plan                                   | Dollar per month                                                                                                                    |
| • Normal Form                                    | Life annuity                                                                                                                        |
| • Continuous Service                             | From date of hire                                                                                                                   |
| • Plan eligibility                               | Date of hire                                                                                                                        |
| • Employee Contributions                         | None                                                                                                                                |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                    |
| • Accrued Benefit                                | \$30.00 x Continuous Service (maximum 35 years)                                                                                     |
| <b>Normal retirement</b>                         |                                                                                                                                     |
| • Eligibility                                    | Age 65                                                                                                                              |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                 |
| <b>Early retirement</b>                          |                                                                                                                                     |
| • Eligibility                                    | Age 62 plus 10 years continuous service                                                                                             |
| • Benefit                                        | Accrued Benefit unreduced                                                                                                           |

## Schedule SB, Part V — Summary of Plan Provisions

|                                                  |                                                                                                                                                                                           |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Deferred vested</b>                           |                                                                                                                                                                                           |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 7.2% for each year prior to 65 once eligible for early.                                                                                         |
| <b>Disability</b>                                |                                                                                                                                                                                           |
| • Eligibility                                    | 10 years continuous service                                                                                                                                                               |
| • Benefit                                        | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to age 65 equal to \$12.00 x Continuous Service less Disability payments   |
| <b>Pre-retirement death</b>                      |                                                                                                                                                                                           |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                |
| • Benefit                                        | Surviving Spouse receives 50% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                       |
| <b>Crystal City</b>                              |                                                                                                                                                                                           |
| Effective date                                   | January 1, 1989                                                                                                                                                                           |
| Group Number                                     | 095                                                                                                                                                                                       |
| Status of the plan                               | The Appendix has no active employees remaining.                                                                                                                                           |
| Significant events that occurred during the year | None                                                                                                                                                                                      |
| <b>Definitions</b>                               |                                                                                                                                                                                           |
| • Type of Plan                                   | Dollar per month                                                                                                                                                                          |
| • Normal Form                                    | Life annuity                                                                                                                                                                              |
| • Continuous Service                             | From date of hire                                                                                                                                                                         |
| • Plan eligibility                               | Date of hire                                                                                                                                                                              |
| • Employee Contributions                         | None                                                                                                                                                                                      |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                                                                          |
| • Accrued Benefit                                | A + B + C where:<br>A = \$20.50 x Continuous Service (maximum 18 years)<br>B = \$22.50 x Continuous Service (maximum 19 and 28 years)<br>C = \$24.50 x Continuous Service (over 28 years) |
| <b>Normal retirement</b>                         |                                                                                                                                                                                           |
| • Eligibility                                    | Age 65                                                                                                                                                                                    |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                                                                       |

## Schedule SB, Part V — Summary of Plan Provisions

|                                   |                                                                                                                                                                                                    |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Early retirement</b>           |                                                                                                                                                                                                    |
| • Eligibility                     | Age 60 plus 10 years continuous service<br>Age 55 plus years of service equals 85                                                                                                                  |
| • Benefit                         | Accrued Benefit reduced for each year prior to 62. See Exhibit A.                                                                                                                                  |
| <b>Special early retirement</b>   |                                                                                                                                                                                                    |
| • Eligibility                     | 62 plus 15 years continuous service                                                                                                                                                                |
| • Benefit                         | Accrued Benefit payable immediately plus temporary supplement equal to Accrued Benefit payable to 65                                                                                               |
| <b>Special 30-year retirement</b> |                                                                                                                                                                                                    |
| • Eligibility                     | 30 years continuous service                                                                                                                                                                        |
| • Benefit                         | Accrued Benefit x early retirement factor payable immediately, subject to minimum guaranteed Benefit of \$1,515.00 prior to 62 and minimum guaranteed Benefit of \$415.00 after 62 and prior to 65 |
| <b>Deferred vested</b>            |                                                                                                                                                                                                    |
| • Eligibility                     | 5 years continuous service                                                                                                                                                                         |
| • Benefit                         | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                                |
| <b>Disability<sup>13</sup></b>    |                                                                                                                                                                                                    |
| • Eligibility                     | 10 years continuous service                                                                                                                                                                        |
| • Benefit                         | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to age 65 equal to \$14.00 x Continuous Service less Disability payments            |
| <b>Pre-retirement death</b>       |                                                                                                                                                                                                    |
| • Eligibility                     | 5 years continuous service                                                                                                                                                                         |
| • Benefit                         | Surviving Spouse receives 60% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                                |
| <b>Post retirement death</b>      | Reduction in Benefit required for J&S Coverage is removed in event of spouse's death after commencement date of pension with waiting period                                                        |

<sup>13</sup> Also includes the Special 30-year benefit.

## Schedule SB, Part V — Summary of Plan Provisions

### ***Louisville – hired before 10/08/2006***

|                                                  |                                                                                                                                                                                                                        |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | January 1, 1990                                                                                                                                                                                                        |
| Group Number                                     | 097                                                                                                                                                                                                                    |
| Status of the plan                               | Effective October 8, 2006, this Appendix is frozen to new entrants (employees hired on or after October 8, 2006 are eligible for DC benefits only). The Appendix has ongoing benefit accruals until December 31, 2020. |
| Significant events that occurred during the year | None                                                                                                                                                                                                                   |
| <b>Definitions</b>                               |                                                                                                                                                                                                                        |
| • Type of Plan                                   | Dollar per month                                                                                                                                                                                                       |
| • Normal Form                                    | Life annuity                                                                                                                                                                                                           |
| • Continuous Service                             | From later of date of hire or 01/01/1990                                                                                                                                                                               |
| • Plan eligibility                               | Date of hire if prior to October 8, 2006                                                                                                                                                                               |
| • Employee Contributions                         | None                                                                                                                                                                                                                   |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                                                                                                       |
| • Accrued Benefit                                | \$36.00 x Continuous Service                                                                                                                                                                                           |
| <b>Normal retirement</b>                         |                                                                                                                                                                                                                        |
| • Eligibility                                    | Age 65                                                                                                                                                                                                                 |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                                                                                                    |
| <b>Early retirement</b>                          |                                                                                                                                                                                                                        |
| • Eligibility                                    | Age 62 plus 10 years continuous service                                                                                                                                                                                |
| • Benefit                                        | Accrued Benefit reduced 4.80% effective 11/1/2002 for each year prior to 65                                                                                                                                            |
| <b>Deferred vested</b>                           |                                                                                                                                                                                                                        |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                                             |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 7.2% for each year prior to 65 once eligible for early.                                                                                                                      |
| <b>Disability</b>                                |                                                                                                                                                                                                                        |
| • Eligibility                                    | 10 years continuous service                                                                                                                                                                                            |
| • Benefit                                        | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to age 65 equal to \$18.00 x Continuous Service less Disability payments                                |
| <b>Pre-retirement death</b>                      |                                                                                                                                                                                                                        |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                                             |
| • Benefit                                        | Surviving Spouse receives 50% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage                                                                                    |

## Schedule SB, Part V — Summary of Plan Provisions

### ***Lansing***

|                                                  |                                                                                                                                              |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | January 25, 1999                                                                                                                             |
| Group Number                                     | 086                                                                                                                                          |
| Status of the plan                               | Spun off to PPG Auto Glass effective October 1, 2000. Decertified February 1, 2001, and became covered by Auto Glass Retirement Income Plan. |
| Significant events that occurred during the year | None                                                                                                                                         |
| <b>Definitions</b>                               |                                                                                                                                              |
| • Type of Plan                                   | Dollar per month                                                                                                                             |
| • Normal Form                                    | Life annuity                                                                                                                                 |
| • Continuous Service                             | From date of hire                                                                                                                            |
| • Plan eligibility                               | Date of hire                                                                                                                                 |
| • Employee Contributions                         | None                                                                                                                                         |
| • Class                                          | Hourly employees                                                                                                                             |
| • Accrued Benefit                                | \$20.00 x Continuous Service (maximum 35 years)                                                                                              |
| <b>Normal retirement</b>                         |                                                                                                                                              |
| • Eligibility                                    | Age 65                                                                                                                                       |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                          |
| <b>Early retirement</b>                          |                                                                                                                                              |
| • Eligibility                                    | Age 60 plus 10 years continuous service                                                                                                      |
| • Benefit                                        | Accrued Benefit reduced 7.2% for each year prior to 65                                                                                       |
| <b>Deferred vested</b>                           |                                                                                                                                              |
| • Eligibility                                    | 5 years continuous service                                                                                                                   |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 7.2% for each year prior to 65 once eligible for early.                                            |
| <b>Disability</b>                                |                                                                                                                                              |
| • Eligibility                                    | 10 years continuous service                                                                                                                  |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                          |
| <b>Pre-retirement death</b>                      |                                                                                                                                              |
| • Eligibility                                    | 5 years continuous service                                                                                                                   |
| • Benefit                                        | Surviving Spouse receives 50% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage          |

## Schedule SB, Part V — Summary of Plan Provisions

### Evart

|                                                  |                                                                                                                                                |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | January 1, 1999                                                                                                                                |
| Group Number                                     | 098                                                                                                                                            |
| Status of the plan                               | This Appendix is frozen to new entrants and no longer has ongoing benefit accruals.                                                            |
| Significant events that occurred during the year | None                                                                                                                                           |
| <b>Definitions</b>                               |                                                                                                                                                |
| • Type of Plan                                   | Dollar per month                                                                                                                               |
| • Normal Form                                    | Life annuity                                                                                                                                   |
| • Continuous Service                             | From date of hire                                                                                                                              |
| • Plan eligibility                               | Date of hire                                                                                                                                   |
| • Employee Contributions                         | None                                                                                                                                           |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                               |
| • Accrued Benefit                                | \$26.00 x Continuous Service                                                                                                                   |
| <b>Auto Glass Divestiture</b>                    | Continuous service for purposes of benefit accruals was frozen effective September 30, 2008 due to the divestiture of the auto glass business. |
| <b>Normal retirement</b>                         |                                                                                                                                                |
| • Eligibility                                    | Age 65                                                                                                                                         |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                            |
| <b>Early retirement</b>                          |                                                                                                                                                |
| • Eligibility                                    | Age 60 plus 10 years continuous service                                                                                                        |
| • Benefit                                        | Accrued Benefit reduced 6.67% for each year prior to 65                                                                                        |
| <b>Deferred vested</b>                           |                                                                                                                                                |
| • Eligibility                                    | 5 years continuous service                                                                                                                     |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 6.67% for each year prior to 65 once eligible for early.                                             |
| <b>Disability</b>                                |                                                                                                                                                |
| • Eligibility                                    | 10 years continuous service                                                                                                                    |
| • Benefit                                        | Accrued Benefit payable immediately plus a temporary supplement payment payable to 65 equal to \$4.00 x Continuous Service effective 1/01/06   |
| <b>Pre-retirement death</b>                      |                                                                                                                                                |
| • Eligibility                                    | 5 years continuous service                                                                                                                     |
| • Benefit                                        | Surviving Spouse receives 50% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage            |

## Schedule SB, Part V — Summary of Plan Provisions

### ***Greensboro C&S***

|                                                  |                                                                                                                                     |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | February 15, 1973                                                                                                                   |
| Group Number                                     | 184                                                                                                                                 |
| Status of the plan                               | Spun off to PPG Auto Glass effective October 1, 2000                                                                                |
| Significant events that occurred during the year | None                                                                                                                                |
| <b>Definitions</b>                               |                                                                                                                                     |
| • Type of Plan                                   | Dollar per month                                                                                                                    |
| • Normal Form                                    | Life annuity                                                                                                                        |
| • Continuous Service                             | From date of hire                                                                                                                   |
| • Plan eligibility                               | Date of hire                                                                                                                        |
| • Employee Contributions                         | None                                                                                                                                |
| • Class                                          | Hourly employees covered by Bargaining Agreement                                                                                    |
| • Accrued Benefit                                | \$18.50 x Continuous Service                                                                                                        |
| <b>Normal retirement</b>                         |                                                                                                                                     |
| • Eligibility                                    | Age 65                                                                                                                              |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                 |
| <b>Early retirement</b>                          |                                                                                                                                     |
| • Eligibility                                    | Age 60 plus 10 years continuous service                                                                                             |
| • Benefit                                        | Accrued Benefit reduced 7.2% for each year prior to 65                                                                              |
| <b>Deferred vested</b>                           |                                                                                                                                     |
| • Eligibility                                    | 5 years continuous service                                                                                                          |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 7.2% for each year prior to 65 once eligible for early.                                   |
| <b>Disability</b>                                |                                                                                                                                     |
| • Eligibility                                    | 10 years continuous service                                                                                                         |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                 |
| <b>Pre-retirement death</b>                      |                                                                                                                                     |
| • Eligibility                                    | 5 years continuous service                                                                                                          |
| • Benefit                                        | Surviving Spouse receives 50% of Benefit calculated as if participant retired early at first possible date and elected J&S Coverage |

## Schedule SB, Part V — Summary of Plan Provisions

### Hourly Pension Plans Benefit Level Summary

| Number | Appendix Name     | Date of<br>Most Recent<br>Contract | Benefit<br>Level on<br>1/1/2016 | Benefit Level in Year of Contract* |       |       |
|--------|-------------------|------------------------------------|---------------------------------|------------------------------------|-------|-------|
|        |                   |                                    |                                 | 1                                  | 2     | 3     |
| 051    | Barberton         | 03/03/2008                         | 50.00                           | 50.00                              | 50.00 | 50.00 |
| 053    | Oak Creek         | 10/29/2007                         | 50.00                           | 50.00                              | 50.00 | 50.00 |
| 058    | Lake Charles      | 09/01/2006                         | 51.00                           | 51.00                              | 51.00 | 51.00 |
| 064    | Natrium           | 02/16/2006                         | 51.00                           | 48.00                              | 48.00 | 51.00 |
| 064    | Natrium II        | 08/18/2005                         | 33.00                           | 33.00                              | 33.00 | 33.00 |
| 067    | Springdale Hourly | 06/30/2008                         | 46.00                           | 46.00                              | 46.00 | 46.00 |
| 072    | Kokomo            | 04/01/1989                         | 19.50                           | 17.50                              | 18.50 | 19.50 |
| 076    | East Point        | 10/08/2007                         | 36.50                           | 36.50                              | 36.50 | 36.50 |
| 082    | Delaware          | 02/25/2007                         | 50.00                           | 50.00                              | 50.00 | 50.00 |
| 082    | Delaware II       | 02/25/2007                         | 35.00                           | 35.00                              | 35.00 | 35.00 |
| 083    | Memphis C&S       | 03/31/1998                         | 13.00                           | 13.00                              | 13.00 | 13.00 |
| 087    | Circleville       | 09/26/2004                         | 50.50                           | 50.50                              | 50.50 | 50.50 |
| 087    | Circleville II    | 09/26/2004                         | 33.00                           | 33.00                              | 33.00 | 33.00 |
| 088    | Roanoke C&S       | 08/29/1996                         | 13.00                           | 12.00                              | 12.00 | 13.00 |
| 091    | Stockertown       | 10/08/1992                         | 18.00                           | 16.00                              | 17.00 | 18.00 |
| 094    | Torrance          | 09/27/1999                         | 30.00                           | 30.00                              | 30.00 | 30.00 |
| 098    | Evart             | 05/20/2007                         | 26.00                           | 26.00                              | 26.00 | 26.00 |
| 086    | Lansing           | 01/25/1999                         | 20.00                           | 20.00                              | 20.00 | 20.00 |
| 184    | Greensboro C&S    | 01/11/2002                         | 20.00                           | 20.00                              | 20.50 | 21.00 |

#### Benefit Level Depends on Service

##### Same Benefit Level for Following Appendices

|     |                          |            |       |       |       |       |
|-----|--------------------------|------------|-------|-------|-------|-------|
| 050 | Glass CIO<br>(Ford City) | 02/09/1990 | 18.95 | 18.95 | 18.95 | 18.95 |
|     |                          |            | 20.20 | 20.20 | 20.20 | 20.20 |
|     |                          |            | 21.70 | 21.70 | 21.70 | 21.70 |

\* Minimum required contribution has been determined based on funding target and normal cost recognizing the highest benefit committed to as of January 1, 2017.

## Schedule SB, Part V — Summary of Plan Provisions

| Number | Appendix Name                     | Date of Most Recent Contract | Benefit Level on 1/1/2016 | Benefit Level in Year of Contract* |          |          |
|--------|-----------------------------------|------------------------------|---------------------------|------------------------------------|----------|----------|
|        |                                   |                              |                           | 1                                  | 2        | 3        |
| 050    | Glass CIO**<br>(except Ford City) | 03/19/2003                   | \$ 26.00                  | \$ 25.00                           | \$ 25.00 | \$ 25.00 |
|        |                                   |                              | 28.00                     | 27.00                              | 27.00    | 27.00    |
|        |                                   |                              | 30.00                     | 29.00                              | 29.00    | 29.00    |
| 060    | Greensburg                        | 06/05/1990                   | 21.00                     | 21.00                              | 21.00    | 21.00    |
|        |                                   |                              | 23.00                     | 23.00                              | 23.00    | 23.00    |
|        |                                   |                              | 25.00                     | 25.00                              | 25.00    | 25.00    |
| 073    | Mt. Zion                          | 03/12/2003                   | 25.00                     | 25.00                              | 25.00    | 25.00    |
|        |                                   |                              | 27.00                     | 27.00                              | 27.00    | 27.00    |
|        |                                   |                              | 29.00                     | 29.00                              | 29.00    | 29.00    |
| 078    | Glass Clerical<br>(Ford City)     | 02/01/1990                   | 18.95                     | 18.95                              | 18.95    | 18.95    |
|        |                                   |                              | 20.20                     | 20.20                              | 20.20    | 20.20    |
|        |                                   |                              | 21.70                     | 21.70                              | 21.70    | 21.70    |
| 078    | Glass Clerical<br>(Creighton)     | 08/30/1999                   | 23.00                     | 23.00                              | 23.00    | 23.00    |
|        |                                   |                              | 25.00                     | 25.00                              | 25.00    | 25.00    |
|        |                                   |                              | 27.00                     | 27.00                              | 27.00    | 27.00    |
| 078    | Glass Clerical<br>(Crystal City)  | 10/30/1990                   | 20.50                     | 20.50                              | N/A      | N/A      |
|        |                                   |                              | 22.50                     | 22.50                              | N/A      | N/A      |
|        |                                   |                              | 24.50                     | 24.50                              | N/A      | N/A      |
| 081    | Fresno                            | 10/22/2008                   | 25.00                     | 25.00                              | 25.00    | 25.00    |
|        |                                   |                              | 27.00                     | 27.00                              | 27.00    | 27.00    |
|        |                                   |                              | 29.00                     | 29.00                              | 29.00    | 29.00    |
| 095    | Crystal City                      | 10/30/1990                   | 20.50                     | 20.50                              | N/A      | N/A      |
|        |                                   |                              | 22.50                     | 22.50                              | N/A      | N/A      |
|        |                                   |                              | 24.50                     | 24.50                              | N/A      | N/A      |
| 097    | Louisville                        | 10/05/2006                   | 36.00                     | 36.00                              | 36.00    | 36.00    |

\* Minimum required contribution has been determined based on funding target and normal cost recognizing the highest benefit committed to as of January 1, 2017.

\*\* Creighton goes to \$26/\$28/\$30 in 4th year of contract.

## Schedule SB, Part V — Summary of Plan Provisions

The following appendices have Special 30-year retirement minimum guaranteed monthly benefits, payable to age 62 as follows:

| Number | Appendix Name                                                        | Effective Date | Guaranteed Monthly Benefits |          |
|--------|----------------------------------------------------------------------|----------------|-----------------------------|----------|
|        |                                                                      |                | Age < 56                    | Age > 56 |
| 050    | Glass CIO (except Ford City*)                                        | Current        | \$ 1,215                    | \$ 1,515 |
| 060    | Greensburg (Age 56 requirement waived due to plant closure)          | Current        | 1,215                       | 1,515    |
| 073    | Mt. Zion                                                             | Current        | 1,215                       | 1,515    |
| 078    | Glass Clerical (Creighton only)                                      | Current        | 1,215                       | 1,515    |
| 078    | Glass Clerical (Crystal City)(Age 56 waived since Plant shutdown)    | Current        | 1,515                       | 1,515    |
| 081    | Fresno                                                               | Current        | 1,215                       | 1,515    |
| 095    | Crystal City (Age 56 requirement not effective since plant shutdown) | Current        | 1,515                       | 1,515    |

\* For Ford City Age 56 requirement waived due to plant closure.

### Early Retirement Reduction Percentages

Greensburg, Mt. Zion, Glass Clerical, Fresno, Glass CIO, Springdale Hourly and Crystal City

| Age When Pension Commences | Percentage |
|----------------------------|------------|
| 55                         | 57.9%      |
| 56                         | 63.5       |
| 57                         | 69.4       |
| 58                         | 75.2       |
| 59                         | 80.8       |
| 60                         | 86.7       |
| 61                         | 93.3       |
| 62 and over                | 100.0      |

## Schedule SB, Part V — Summary of Plan Provisions

### ***Salaried Plan***

|                                                  |                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | December 24, 1940                                                                                                                                                                                                                                                                                                                              |
| Group Number                                     | 039                                                                                                                                                                                                                                                                                                                                            |
| Status of the plan                               | Effective January 1, 2006, this appendix is frozen to new entrants. Active participants that have less than 60 points (age + service) as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2011. Active participants that have greater than 60 points as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2020. |
| Significant events that occurred during the year | None                                                                                                                                                                                                                                                                                                                                           |
| <b>Definitions</b>                               |                                                                                                                                                                                                                                                                                                                                                |
| • Type of plan                                   | Five Year Average Earnings (FAE)                                                                                                                                                                                                                                                                                                               |
| • Normal form                                    | Life Annuity                                                                                                                                                                                                                                                                                                                                   |
| • Plan eligibility                               | Date of Hire                                                                                                                                                                                                                                                                                                                                   |
| • Credited service                               | From Date of Hire                                                                                                                                                                                                                                                                                                                              |
| • Continuous service                             | From Date of Hire                                                                                                                                                                                                                                                                                                                              |
| • Pension earnings                               | Monthly Base Salary                                                                                                                                                                                                                                                                                                                            |
| • SSNRA                                          | Social Security Normal Retirement Age                                                                                                                                                                                                                                                                                                          |
| • Employee contributions                         | None                                                                                                                                                                                                                                                                                                                                           |
| • Class                                          | Salaried Employees                                                                                                                                                                                                                                                                                                                             |
| • Accrued benefit                                | Greater of:<br><u>Regular Formula</u><br>(.855% FAE (basic benefit) + .585% FAE in excess of Social Security Covered Compensation (excess benefit)) x Credited Service (maximum 35 years)<br>Or<br><u>Alternate Formula</u><br>\$36.00 x Continuous Service<br>Or<br>The Frozen Accrued Benefit as of 12/31/1988                               |

## Schedule SB, Part V — Summary of Plan Provisions

— April 1, 2000 Change in Plan Provisions

The regular formula was changed from  $(.950\% \text{ FAE} + .650\% \text{ FAE in excess of Social Security Covered Compensation}) \times \text{Credited Service (maximum 35 years)}$  to  $(.855\% \text{ FAE} + .585\% \text{ FAE in excess of Social Security Covered Compensation}) \times \text{Credited Service (maximum 35 years)}$

The early retirement reduction factors were changed from the rates described in Exhibit A to:

- Regular formula – 3% per year from 4 years prior to Social Security Normal Retirement Age
- Alternate formula – 5% per year from 4 years prior to Social Security Normal Retirement Age

However at retirement, all participants hired on or before April 1, 2000 will have a minimum benefit equal to (a) + (b) where:

- a) the benefit under the old regular formula  $(.950\%/.650\%)$  using final average earnings at retirement and service at April 1, 2000.
- b) the benefit under the new regular formula  $(.855\%/.585\%)$  using final average earnings at retirement and service since April 1, 2000.

Benefits earned under (a) are reduced from early retirement by the factors in Exhibit A and benefits earned under (b) are reduced from early retirement by 3% for each year retirement occurs prior to four years before Social Security Age.

|                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Social Security Covered Compensation</li> </ul> | <p>Based on Social Security Act in effect at date of computation, the average monthly earnings subject to Social Security taxes assuming that the participant, for each year through and including the year prior to SSNRA, earns an amount at least equal to the Social Security taxable wage base for each year.</p>                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• Special Minimum Death Benefit</li> </ul>        | <p>For any participant who made contributions under the prior plan, a minimum lump sum death benefit equal to contributions plus credited interest (to earlier of date of death or benefit commencement date) less benefits paid to participant and joint annuitant, if any.</p>                                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>• Special Premium for Pilots</li> </ul>           | <p>For any pilot who retires on or after his 60th birthday, benefits will be calculated using "Pilot's Credited Service" (Credited Service plus two years) and "Pilot's Final Average Salary" (Final Average Salary calculated assuming salary at termination date continued for two years). Additionally, a temporary monthly supplement of \$400 will be paid from benefit commencement date to the earlier of date of death or attainment of age 62.</p> |

## Schedule SB, Part V — Summary of Plan Provisions

|                                      |                                                                                                                                                                                                                                                                                 |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Auto Glass Divestiture             | In accordance with the terms of the divestiture of the auto glass business, affected salaried employees with 80 points at date of sale receive salary increases of 1.50% per year during continued employment with PGW.                                                         |
| <b>Normal retirement</b>             |                                                                                                                                                                                                                                                                                 |
| • Eligibility                        | SSNRA                                                                                                                                                                                                                                                                           |
| • Benefit                            | Accrued Benefit payable immediately                                                                                                                                                                                                                                             |
| <b>Early retirement</b>              |                                                                                                                                                                                                                                                                                 |
| • Eligibility                        | SSNRA - 10                                                                                                                                                                                                                                                                      |
| • Benefit                            | Benefits under the regular formula are reduced 3% per year from SSNRA-4. Benefits under the alternate formula are reduced 5% per year from SSNRA-4.                                                                                                                             |
| <b>Special early retirement</b>      |                                                                                                                                                                                                                                                                                 |
| • Eligibility                        | Age plus service equals 80.                                                                                                                                                                                                                                                     |
| • Benefit                            | Accrued Benefit reduced each year prior to SSNRA-3 according to Exhibit A (for benefits earned prior to 4/1/2000)                                                                                                                                                               |
| <b>Supplemental early retirement</b> |                                                                                                                                                                                                                                                                                 |
| • Eligibility                        | For terminations prior to April 1, 2000, a participant <ul style="list-style-type: none"> <li>• Who has attained age 48 and whose age and service total 80 or more and</li> <li>• Whose employment is terminated due to facility shutdown or business consolidation.</li> </ul> |
| • Benefit                            | Equal to the social security early retirement age benefit less the early retirement benefit. The participant will also receive \$400 per month until three years before social security normal retirement age.                                                                  |
|                                      | Subject to a cap equal to 1.5 times compensation.                                                                                                                                                                                                                               |
| <b>Late retirement</b>               |                                                                                                                                                                                                                                                                                 |
| • Eligibility                        | Beyond SSNRA                                                                                                                                                                                                                                                                    |
| • Benefit                            | Accrued Benefit at actual retirement date                                                                                                                                                                                                                                       |
| <b>Deferred vested</b>               |                                                                                                                                                                                                                                                                                 |
| • Eligibility                        | 5 years continuous service                                                                                                                                                                                                                                                      |
| • Benefit                            | Accrued Benefit deferred to SSNRA                                                                                                                                                                                                                                               |
| <b>Disability</b>                    | No special provision other than continuation of service accrual                                                                                                                                                                                                                 |

## Schedule SB, Part V — Summary of Plan Provisions

|                                                  |                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pre-retirement death</b>                      |                                                                                                                                                                                                                                                                                                                                                |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                                                                                                                                                                     |
| • Benefit                                        | Surviving spouse receives 50% of Benefit calculated as if the participant retired early at first possible date and elected J&S coverage                                                                                                                                                                                                        |
| <b>Cleveland</b>                                 |                                                                                                                                                                                                                                                                                                                                                |
| Effective date                                   | April 1, 1957                                                                                                                                                                                                                                                                                                                                  |
| Group Number                                     | 031                                                                                                                                                                                                                                                                                                                                            |
| Status of the plan                               | Effective January 1, 2006, this Appendix is frozen to new entrants. Active participants that have less than 60 points (age + service) as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2011. Active participants that have greater than 60 points as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2020. |
| Significant events that occurred during the year | None                                                                                                                                                                                                                                                                                                                                           |
| <b>Definitions</b>                               |                                                                                                                                                                                                                                                                                                                                                |
| • Type of plan                                   | Dollar Per Month                                                                                                                                                                                                                                                                                                                               |
| • Normal form                                    | Life Annuity                                                                                                                                                                                                                                                                                                                                   |
| • Continuous service                             | From Date of Hire                                                                                                                                                                                                                                                                                                                              |
| • Plan eligibility                               | Date of Hire                                                                                                                                                                                                                                                                                                                                   |
| • Pension earnings                               | N/A                                                                                                                                                                                                                                                                                                                                            |
| • Employee contributions                         | None                                                                                                                                                                                                                                                                                                                                           |
| • Class                                          | Hourly Employees                                                                                                                                                                                                                                                                                                                               |
| • Accrued benefit                                | \$49.00 x Continuous Service                                                                                                                                                                                                                                                                                                                   |
| <b>Normal retirement</b>                         |                                                                                                                                                                                                                                                                                                                                                |
| • Eligibility                                    | Age 65                                                                                                                                                                                                                                                                                                                                         |
| • Benefit                                        | Accrued Benefit payable immediately.                                                                                                                                                                                                                                                                                                           |
| <b>Early retirement</b>                          |                                                                                                                                                                                                                                                                                                                                                |
| • Eligibility                                    | Age 55 with 10 years continuous service                                                                                                                                                                                                                                                                                                        |
| • Benefit                                        | Accrued Benefit reduced 6.0% for each year prior to 62.                                                                                                                                                                                                                                                                                        |
| <b>Supplemental early retirement benefits</b>    |                                                                                                                                                                                                                                                                                                                                                |
| • Eligibility                                    | A participant <ul style="list-style-type: none"> <li>• Who has attained age 48 and whose age and service total 80 or more and</li> <li>• Whose employment is terminated due to facility shutdown or business consolidation</li> </ul>                                                                                                          |

## Schedule SB, Part V — Summary of Plan Provisions

|                                           |                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Benefit                                 | <p>A supplemental benefit, equal to the accrued benefit less the early retirement benefit. The participant will also receive \$400 per month until age 62.</p> <p>The supplemental early retirement benefit is subject to a cap equal to 1.5 times annual wages divided by the number of months the participant is under age 62 as of his supplemental early retirement date.</p>   |
| <b>Early Retirement Incentive Program</b> | In March of 2002, active hourly employees at Cleveland were offered an early retirement window. Nine active employees elected to retire under these window provisions which enhanced benefits.                                                                                                                                                                                      |
| <b>New Early Retirement Window</b>        |                                                                                                                                                                                                                                                                                                                                                                                     |
| • Eligibility                             | Effective December 1, 2007, February 1, 2009, and October 1, 2012 a defined list of participants were offered an early retirement window and are entitled to a new early retirement window benefit.                                                                                                                                                                                 |
| • Benefit                                 | <ul style="list-style-type: none"> <li>• No early retirement reduction factor upon retirement, and</li> <li>• Temporary supplement of \$600 per month payable until age 62, but not less than two years for December 1, 2007 window.</li> <li>• Temporary supplement of \$1,200 per month payable until age 62, but not less than two years for February 1, 2009 window.</li> </ul> |
| <b>Deferred vested</b>                    |                                                                                                                                                                                                                                                                                                                                                                                     |
| • Eligibility                             | 5 years continuous service                                                                                                                                                                                                                                                                                                                                                          |
| • Benefit                                 | Accrued Benefit deferred to 65 or reduced 7.2% for each year prior to 65 once eligible for early.                                                                                                                                                                                                                                                                                   |
| <b>Disability</b>                         |                                                                                                                                                                                                                                                                                                                                                                                     |
| • Eligibility                             | 10 years continuous service                                                                                                                                                                                                                                                                                                                                                         |
| • Benefit                                 | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$24.50 x Continuous Service less Disability payments.                                                                                                                                                                                                |
| <b>Pre-retirement death</b>               |                                                                                                                                                                                                                                                                                                                                                                                     |
| • Eligibility                             | 5 years continuous service                                                                                                                                                                                                                                                                                                                                                          |
| • Benefit                                 | Surviving spouse receives 55% of Benefit calculated as if the participant retired early at first possible date and elected J&S coverage.                                                                                                                                                                                                                                            |

## Schedule SB, Part V — Summary of Plan Provisions

### ***Shelby/Lexington/Chester***

|                                                  |                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | May 1, 1967                                                                                                                                                                                                                                                                                                                                     |
| Group Number                                     | 032                                                                                                                                                                                                                                                                                                                                             |
| Status of the plan                               | Effective February 1, 2006, this Appendix is frozen to new entrants. Active participants that have less than 60 points (age + service) as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2011. Active participants that have greater than 60 points as of 12/31/2011 will not have ongoing benefit accruals after 12/31/2020. |
| Significant events that occurred during the year | None                                                                                                                                                                                                                                                                                                                                            |
| <b>Definitions</b>                               |                                                                                                                                                                                                                                                                                                                                                 |
| • Type of plan                                   | Dollar Per Month                                                                                                                                                                                                                                                                                                                                |
| • Normal form                                    | Life Annuity                                                                                                                                                                                                                                                                                                                                    |
| • Continuous service                             | From Date of Hire                                                                                                                                                                                                                                                                                                                               |
| • Plan eligibility                               | Date of Hire                                                                                                                                                                                                                                                                                                                                    |
| • Pension earnings                               | N/A                                                                                                                                                                                                                                                                                                                                             |
| • Employee contributions                         | None                                                                                                                                                                                                                                                                                                                                            |
| • Class                                          | Hourly Employees                                                                                                                                                                                                                                                                                                                                |
| • Accrued benefit                                | \$36.00 x Continuous Service                                                                                                                                                                                                                                                                                                                    |
| <b>Normal retirement</b>                         |                                                                                                                                                                                                                                                                                                                                                 |
| • Eligibility                                    | Age 65                                                                                                                                                                                                                                                                                                                                          |
| • Benefit                                        | Accrued Benefit payable immediately.                                                                                                                                                                                                                                                                                                            |
| <b>Early retirement</b>                          |                                                                                                                                                                                                                                                                                                                                                 |
| • Eligibility                                    | Age 55 with 10 years continuous service                                                                                                                                                                                                                                                                                                         |
| • Benefit                                        | Accrued Benefit reduced 5.0% for each year prior to Social Security Normal Retirement Age - 4.                                                                                                                                                                                                                                                  |
| <b>Deferred vested</b>                           |                                                                                                                                                                                                                                                                                                                                                 |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                                                                                                                                                                      |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 7.2% for each year prior to 65 once eligible for early.                                                                                                                                                                                                                                               |
| <b>Disability</b>                                |                                                                                                                                                                                                                                                                                                                                                 |
| • Eligibility                                    | 10 years continuous service                                                                                                                                                                                                                                                                                                                     |
| • Benefit                                        | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$14.00 x Continuous Service less Disability payments.                                                                                                                                                            |

## Schedule SB, Part V — Summary of Plan Provisions

|                                                  |                                                                                                                                                                                                                                                                            |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pre-retirement death</b>                      |                                                                                                                                                                                                                                                                            |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                                                                                                 |
| • Benefit                                        | Surviving spouse receives 50% of Benefit calculated as if the participant retired early at first possible date and elected J&S coverage.                                                                                                                                   |
| <b>Optional form conversion factors</b>          | Joint & Survivor conversion tables were changed from the 90% $\pm$ 5 to the 95% $\pm$ 5 table for retirements on and after July 1, 1998.                                                                                                                                   |
| <b>Crestline</b>                                 |                                                                                                                                                                                                                                                                            |
| Effective date                                   | April 1, 1966                                                                                                                                                                                                                                                              |
| Group Number                                     | 033                                                                                                                                                                                                                                                                        |
| Status of the plan                               | This Appendix is frozen to new entrants and no longer has ongoing benefit accruals.                                                                                                                                                                                        |
| Significant events that occurred during the year | None                                                                                                                                                                                                                                                                       |
| <b>Definitions</b>                               |                                                                                                                                                                                                                                                                            |
| • Type of plan                                   | Dollar Per Month                                                                                                                                                                                                                                                           |
| • Normal form                                    | Life Annuity                                                                                                                                                                                                                                                               |
| • Continuous service                             | From Date of Hire                                                                                                                                                                                                                                                          |
| • Plan eligibility                               | Date of Hire                                                                                                                                                                                                                                                               |
| • Pension earnings                               | N/A                                                                                                                                                                                                                                                                        |
| • Employee contributions                         | None                                                                                                                                                                                                                                                                       |
| • Class                                          | Hourly Employees covered by Bargaining Agreement                                                                                                                                                                                                                           |
| • Accrued benefit                                | A + B where:<br>A = \$28.00 x continuous service (maximum 29 years)<br>B = \$31.00 x continuous service (over 29 years)                                                                                                                                                    |
| • Auto Glass Divestiture                         | As part of the auto glass divestiture, continuous service was frozen as of the sale date of 9/30/2008. Participants continue to earn eligibility service during continued employment with PGW. Special 30-year early retirement benefits are prorated between PPG and PGW. |
| <b>Normal retirement</b>                         |                                                                                                                                                                                                                                                                            |
| • Eligibility                                    | Age 65                                                                                                                                                                                                                                                                     |
| • Benefit                                        | Accrued Benefit payable immediately.                                                                                                                                                                                                                                       |

## Schedule SB, Part V — Summary of Plan Provisions

|                                   |                                                                                                                                                                                                         |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Early retirement</b>           |                                                                                                                                                                                                         |
| • Eligibility                     | Age 60 with 10 years continuous service<br>Age 55 or Age + Service = 85                                                                                                                                 |
| • Benefit                         | Accrued Benefit reduced for each year prior to 62. See Early Retirement Reduction Percentages Exhibit.                                                                                                  |
| <b>Special early retirement</b>   |                                                                                                                                                                                                         |
| • Eligibility                     | Age 62 with 15 years continuous service                                                                                                                                                                 |
| • Benefit                         | Accrued Benefit payable immediately plus temporary supplement payable to 65 that provides a total benefit of twice the accrued benefit as if \$22.00/\$25.00 benefit levels were used.                  |
| <b>Special 30 year retirement</b> |                                                                                                                                                                                                         |
| • Eligibility                     | Age 58 with 30 years continuous service                                                                                                                                                                 |
| • Benefit                         | Accrued Benefit x early retirement factor payable immediately, subject to minimum guaranteed Benefit of \$825.00 prior to 62 and minimum guaranteed Benefit of \$415.00 after 62 and prior to 65.       |
| <b>Deferred vested</b>            |                                                                                                                                                                                                         |
| • Eligibility                     | 5 years continuous service                                                                                                                                                                              |
| • Benefit                         | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                                     |
| <b>Disability<sup>14</sup></b>    |                                                                                                                                                                                                         |
| • Eligibility                     | 10 years continuous service                                                                                                                                                                             |
| • Benefit                         | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$14.00 x Continuous Service (maximum \$350.00) less Disability payments. |
| <b>Pre-retirement death</b>       |                                                                                                                                                                                                         |
| • Eligibility                     | 5 years continuous service                                                                                                                                                                              |
| • Benefit                         | Surviving spouse receives 60% of Benefit calculated as if the participant retired early at first possible date and elected J&S coverage.                                                                |
| <b>Post retirement death</b>      | Reduction in Benefit required for J&S Coverage is removed in event of spouse's death after commencement date of pension with waiting period.                                                            |

<sup>14</sup> Also includes the Special 30-Year Benefit.

## Schedule SB, Part V — Summary of Plan Provisions

### ***Crestline***

|                                                  |                                                                                                                                                                                                                                                                            |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | April 1, 1966                                                                                                                                                                                                                                                              |
| Group Number                                     | 033                                                                                                                                                                                                                                                                        |
| Status of the plan                               | This Appendix is frozen to new entrants and no longer has ongoing benefit accruals.                                                                                                                                                                                        |
| Significant events that occurred during the year | None                                                                                                                                                                                                                                                                       |
| <b>Definitions</b>                               |                                                                                                                                                                                                                                                                            |
| • Type of plan                                   | Dollar Per Month                                                                                                                                                                                                                                                           |
| • Normal form                                    | Life Annuity                                                                                                                                                                                                                                                               |
| • Continuous service                             | From Date of Hire                                                                                                                                                                                                                                                          |
| • Plan eligibility                               | Date of Hire                                                                                                                                                                                                                                                               |
| • Pension earnings                               | N/A                                                                                                                                                                                                                                                                        |
| • Employee contributions                         | None                                                                                                                                                                                                                                                                       |
| • Class                                          | Hourly Employees covered by Bargaining Agreement                                                                                                                                                                                                                           |
| • Accrued benefit                                | A + B where:<br>A = \$28.00 x continuous service (maximum 29 years)<br>B = \$31.00 x continuous service (over 29 years)                                                                                                                                                    |
| • Auto Glass Divestiture                         | As part of the auto glass divestiture, continuous service was frozen as of the sale date of 9/30/2008. Participants continue to earn eligibility service during continued employment with PGW. Special 30-year early retirement benefits are prorated between PPG and PGW. |
| <b>Normal retirement</b>                         |                                                                                                                                                                                                                                                                            |
| • Eligibility                                    | Age 65                                                                                                                                                                                                                                                                     |
| • Benefit                                        | Accrued Benefit payable immediately.                                                                                                                                                                                                                                       |
| <b>Early retirement</b>                          |                                                                                                                                                                                                                                                                            |
| • Eligibility                                    | Age 60 with 10 years continuous service<br>Age 55 or Age + Service = 85                                                                                                                                                                                                    |
| • Benefit                                        | Accrued Benefit reduced for each year prior to 62. See Early Reduction Factor Percentages. Exhibit                                                                                                                                                                         |
| <b>Special early retirement</b>                  |                                                                                                                                                                                                                                                                            |
| • Eligibility                                    | Age 62 with 15 years continuous service                                                                                                                                                                                                                                    |
| • Benefit                                        | Accrued Benefit payable immediately plus temporary supplement payable to 65 that provides a total benefit of twice the accrued benefit as if \$22.00/\$25.00 benefit levels were used.                                                                                     |

## Schedule SB, Part V — Summary of Plan Provisions

|                                                  |                                                                                                                                                                                                         |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Special 30 year retirement</b>                |                                                                                                                                                                                                         |
| • Eligibility                                    | Age 58 with 30 years continuous service                                                                                                                                                                 |
| • Benefit                                        | Accrued Benefit x early retirement factor payable immediately, subject to minimum guaranteed Benefit of \$825.00 prior to 62 and minimum guaranteed Benefit of \$415.00 after 62 and prior to 65.       |
| <b>Deferred vested</b>                           |                                                                                                                                                                                                         |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                              |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                                     |
| <b>Disability<sup>15</sup></b>                   |                                                                                                                                                                                                         |
| • Eligibility                                    | 10 years continuous service                                                                                                                                                                             |
| • Benefit                                        | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$14.00 x Continuous Service (maximum \$350.00) less Disability payments. |
| <b>Pre-retirement death</b>                      |                                                                                                                                                                                                         |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                              |
| • Benefit                                        | Surviving spouse receives 60% of Benefit calculated as if the participant retired early at first possible date and elected J&S coverage.                                                                |
| <b>Post retirement death</b>                     | Reduction in Benefit required for J&S Coverage is removed in event of spouse's death after commencement date of pension with waiting period.                                                            |
| <b><i>Tipton</i></b>                             |                                                                                                                                                                                                         |
| Effective date                                   | April 1, 1966                                                                                                                                                                                           |
| Group Number                                     | 034                                                                                                                                                                                                     |
| Status of the plan                               | This Appendix is frozen to new entrants and no longer has ongoing benefit accruals.                                                                                                                     |
| Significant events that occurred during the year | None                                                                                                                                                                                                    |
| <b>Definitions</b>                               |                                                                                                                                                                                                         |
| • Type of plan                                   | Dollar Per Month                                                                                                                                                                                        |
| • Normal form                                    | Life Annuity                                                                                                                                                                                            |
| • Continuous service                             | From Date of Hire                                                                                                                                                                                       |
| • Plan eligibility                               | Date of Hire                                                                                                                                                                                            |
| • Pension earnings                               | N/A                                                                                                                                                                                                     |

<sup>15</sup> Also includes the Special 30-Year Benefit.

## Schedule SB, Part V — Summary of Plan Provisions

|                                 |                                                                                                                                                                                                                                                                            |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Employee contributions        | None                                                                                                                                                                                                                                                                       |
| • Class                         | Hourly Employees covered by Bargaining Agreement                                                                                                                                                                                                                           |
| • Accrued benefit               | A + B where:<br>A = \$28.00 x continuous service (maximum 29 years)<br>B = \$31.00 x continuous service (over 29 years)                                                                                                                                                    |
| • Auto Glass Divestiture        | As part of the auto glass divestiture, continuous service was frozen as of the sale date of 9/30/2008. Participants continue to earn eligibility service during continued employment with PGW. Special 30-year early retirement benefits are prorated between PPG and PGW. |
| <b>Normal retirement</b>        |                                                                                                                                                                                                                                                                            |
| • Eligibility                   | Age 65                                                                                                                                                                                                                                                                     |
| • Benefit                       | Accrued Benefit payable immediately.                                                                                                                                                                                                                                       |
| <b>Early retirement</b>         |                                                                                                                                                                                                                                                                            |
| • Eligibility                   | Age 60 with 10 years continuous service<br>Age 55 or Age + Service = 85                                                                                                                                                                                                    |
| • Benefit                       | Accrued Benefit reduced for each year prior to 62. See Early Retirement Reduction Percentages Exhibit.                                                                                                                                                                     |
| <b>Special early retirement</b> |                                                                                                                                                                                                                                                                            |
| • Eligibility                   | Age 62 with 15 years continuous service                                                                                                                                                                                                                                    |
| • Benefit                       | Accrued Benefit payable immediately plus temporary supplement payable to 65 that provides a total benefit of twice the accrued benefit as if \$22.00/\$25.00 benefit levels were used.                                                                                     |

## Schedule SB, Part V — Summary of Plan Provisions

|                                   |                                                                                                                                                                                                         |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Special 30 year retirement</b> |                                                                                                                                                                                                         |
| • Eligibility                     | Age 58 with 30 years continuous service                                                                                                                                                                 |
| • Benefit                         | Accrued Benefit x early retirement factor payable immediately, subject to minimum guaranteed Benefit of \$825.00 prior to 62 and minimum guaranteed Benefit of \$415.00 after 62 and prior to 65.       |
| <b>Deferred vested</b>            |                                                                                                                                                                                                         |
| • Eligibility                     | 5 years continuous service                                                                                                                                                                              |
| • Benefit                         | Accrued Benefit deferred to 65 or reduced 6.667% for each year prior to 65 once eligible for early.                                                                                                     |
| <b>Disability<sup>16</sup></b>    |                                                                                                                                                                                                         |
| • Eligibility                     | 10 years continuous service                                                                                                                                                                             |
| • Benefit                         | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$14.00 x Continuous Service (maximum \$350.00) less Disability payments. |
| <b>Pre-retirement death</b>       |                                                                                                                                                                                                         |
| • Eligibility                     | 5 years continuous service                                                                                                                                                                              |
| • Benefit                         | Surviving spouse receives 60% of Benefit calculated as if the participant retired early at first possible date and elected J&S coverage.                                                                |
| <b>Post retirement death</b>      | Reduction in Benefit required for J&S Coverage is removed in event of spouse's death after commencement date of pension with waiting period.                                                            |

In early 1998, employees at Tipton were offered a voluntary limited program of severance. Any employee who applied for the limited program of severance who was eligible for a retirement benefit under the pension plan on the date of severance, was eligible for a monthly special pension benefit. The monthly special pension benefit was an amount equal to the accrued pension benefit the employee has earned under the pension plan provisions at the date of severance. The monthly special pension benefit is payable through the end of the month the employee becomes 62 years of age. The special pension benefit payable to an employee under this program is capped at one and one-half times (1-1/2) the severance benefit.

Employees who elected to participate in the voluntary limited program of severance and who were eligible to receive the special pension benefit shall be eligible to receive the special early retirement benefit upon attainment of age 62. The special early retirement benefit is payable from age 62 to age 65 under the provisions of the pension plan. At age 65, the pension benefit will be adjusted to normal rates.

<sup>16</sup> Also includes the Special 30-Year Benefit.

## Schedule SB, Part V — Summary of Plan Provisions

### ***Glass Voluntary***

|                                                  |                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effective date                                   | January 1, 1969                                                                                                                                                                                                                                                                                                               |
| Group Number                                     | 036                                                                                                                                                                                                                                                                                                                           |
| Status of the plan                               | Spun off to PPG Auto Glass effective October 1, 2000.                                                                                                                                                                                                                                                                         |
| Significant events that occurred during the year | None                                                                                                                                                                                                                                                                                                                          |
| <b>Definitions</b>                               |                                                                                                                                                                                                                                                                                                                               |
| • Type of plan                                   | Dollar Per Month                                                                                                                                                                                                                                                                                                              |
| • Normal form                                    | Life Annuity                                                                                                                                                                                                                                                                                                                  |
| • Plan eligibility                               | Date of Hire                                                                                                                                                                                                                                                                                                                  |
| • Pension earnings                               | N/A                                                                                                                                                                                                                                                                                                                           |
| • Employee contributions                         | None                                                                                                                                                                                                                                                                                                                          |
| • Class                                          | Hourly Employees                                                                                                                                                                                                                                                                                                              |
| • Accrued benefit                                | \$20.00 x continuous service (maximum 35 years)                                                                                                                                                                                                                                                                               |
| <b>Normal retirement</b>                         |                                                                                                                                                                                                                                                                                                                               |
| • Eligibility                                    | Age 65                                                                                                                                                                                                                                                                                                                        |
| • Benefit                                        | Accrued Benefit but not less than \$150.00 per month payable immediately.                                                                                                                                                                                                                                                     |
| <b>Early retirement</b>                          |                                                                                                                                                                                                                                                                                                                               |
| • Eligibility                                    | Age 60 with 10 years continuous service, or<br>Age 55 or Age + Service = 85                                                                                                                                                                                                                                                   |
| • Benefit                                        | Accrued Benefit reduced 7.2% for each year prior to 65 for Age 60 and 10 eligibility.<br><br>For Age 55 or Age + Service = 85, unreduced accrued benefit for retirements within 3 years of SSNRA. For retirements more than 3 years prior to SSNRA, accrued benefit reduced 6.0% for each year prior to 3 years before SSNRA. |
| <b>Deferred vested</b>                           |                                                                                                                                                                                                                                                                                                                               |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                                                                                                                                                                    |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 7.2% for each year prior to 65 once eligible for early.                                                                                                                                                                                                                             |
| <b>Disability</b>                                |                                                                                                                                                                                                                                                                                                                               |
| • Eligibility                                    | 10 years continuous service                                                                                                                                                                                                                                                                                                   |
| • Benefit                                        | Accrued Benefit payable immediately less Disability payments.                                                                                                                                                                                                                                                                 |

## Schedule SB, Part V — Summary of Plan Provisions

|                                                  |                                                                                                                                          |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pre-retirement death</b>                      |                                                                                                                                          |
| • Eligibility                                    | 5 years continuous service                                                                                                               |
| • Benefit                                        | Surviving spouse receives 50% of Benefit calculated as if the participant retired early at first possible date and elected J&S coverage. |
| <b>Optional form conversion factors</b>          | Joint & Survivor conversion tables were changed from the 90% to the 95% table for retirements on and after January 1, 1999.              |
| <b>Baltimore</b>                                 |                                                                                                                                          |
| Effective date                                   | October 22, 1954                                                                                                                         |
| Group Number                                     | 056                                                                                                                                      |
| Status of the plan                               | Closed to new entrants and no active employees remain.                                                                                   |
| Significant events that occurred during the year | None                                                                                                                                     |
| <b>Definitions</b>                               |                                                                                                                                          |
| • Type of plan                                   | Dollar Per Month                                                                                                                         |
| • Normal form                                    | Life Annuity                                                                                                                             |
| • Continuous service                             | From Date of Hire                                                                                                                        |
| • Plan eligibility                               | Date of Hire                                                                                                                             |
| • Pension earnings                               | N/A                                                                                                                                      |
| • Employee contributions                         | None                                                                                                                                     |
| • Class                                          | Hourly Employees covered by Bargaining Agreement                                                                                         |
| • Accrued benefit                                | \$12.50 x continuous service                                                                                                             |
| <b>Normal retirement</b>                         |                                                                                                                                          |
| • Eligibility                                    | Age 65                                                                                                                                   |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                      |
| <b>Early retirement</b>                          |                                                                                                                                          |
| • Eligibility                                    | Age 62 with 10 years continuous service                                                                                                  |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                      |
| <b>Deferred vested</b>                           |                                                                                                                                          |
| • Eligibility                                    | 5 years continuous service                                                                                                               |
| • Benefit                                        | Accrued Benefit deferred to 65 or reduced 7.2% for each year prior to 65 once eligible for early                                         |

## Schedule SB, Part V — Summary of Plan Provisions

|                                                  |                                                                                                                                                                                    |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disability</b>                                |                                                                                                                                                                                    |
| • Eligibility                                    | 10 years continuous service                                                                                                                                                        |
| • Benefit                                        | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$6.25 x Continuous Service less Disability payments |
| <b>Pre-retirement death</b>                      |                                                                                                                                                                                    |
| • Eligibility                                    | 5 years continuous service                                                                                                                                                         |
| • Benefit                                        | Surviving spouse receives 50% of Benefit calculated as if the participant retired early at first possible date and elected J&S coverage                                            |
| <b>Lincoln</b>                                   |                                                                                                                                                                                    |
| Effective date                                   | November 15, 1958                                                                                                                                                                  |
| Group Number                                     | 071                                                                                                                                                                                |
| Status of the plan                               | Closed to new entrants and no active employees remain.                                                                                                                             |
| Significant events that occurred during the year | None                                                                                                                                                                               |
| <b>Definitions</b>                               |                                                                                                                                                                                    |
| • Type of plan                                   | Dollar Per Month                                                                                                                                                                   |
| • Normal form                                    | Life Annuity                                                                                                                                                                       |
| • Continuous service                             | From Date of Hire                                                                                                                                                                  |
| • Plan eligibility                               | Date of Hire                                                                                                                                                                       |
| • Pension earnings                               | N/A                                                                                                                                                                                |
| • Employee contributions                         | None                                                                                                                                                                               |
| • Class                                          | Hourly Employees covered by Bargaining Agreement                                                                                                                                   |
| • Accrued benefit                                | \$19.75 x continuous service                                                                                                                                                       |
| <b>Normal retirement</b>                         |                                                                                                                                                                                    |
| • Eligibility                                    | Age 65                                                                                                                                                                             |
| • Benefit                                        | Accrued Benefit payable immediately                                                                                                                                                |
| <b>Early retirement</b>                          |                                                                                                                                                                                    |
| • Eligibility                                    | Age 60 with 10 years continuous service                                                                                                                                            |
| • Benefit                                        | Accrued Benefit reduced 6.667% for each year prior to 62.                                                                                                                          |
| <b>Special early retirement</b>                  |                                                                                                                                                                                    |
| • Eligibility                                    | Age 55 or Age + Service = 85                                                                                                                                                       |
| • Benefit                                        | Accrued Benefit reduced 6.667% for each year prior to 62 plus temporary supplement equal to \$300.00 payable to 62                                                                 |

## Schedule SB, Part V — Summary of Plan Provisions

|                             |                                                                                                                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Deferred vested</b>      |                                                                                                                                                                                   |
| • Eligibility               | 5 years continuous service                                                                                                                                                        |
| • Benefit                   | Accrued Benefit deferred to 65 or reduced 6.667% each year prior to 65 once eligible for early.                                                                                   |
| <b>Disability</b>           |                                                                                                                                                                                   |
| • Eligibility               | 10 years continuous service                                                                                                                                                       |
| • Benefit                   | Accrued Benefit payable immediately, plus, if not eligible for Social Security, a temporary supplement payable to 65 equal to \$.50x Continuous Service less Disability payments. |
| <b>Pre-retirement death</b> |                                                                                                                                                                                   |
| • Eligibility               | 5 years continuous service                                                                                                                                                        |
| • Benefit                   | Surviving spouse receives 50% of Benefit calculated as if the participant retired early at first possible date and elected J&S coverage.                                          |

## Hourly Pension Plans Benefit Level Summary

| Number | Appendix Name            | Date of Most Recent Contract | Benefit Level on 1/1/2016 | Benefit Level in Year of Contract* |       |       |
|--------|--------------------------|------------------------------|---------------------------|------------------------------------|-------|-------|
|        |                          |                              |                           | 1                                  | 2     | 3     |
| 031    | Cleveland                | 01/01/2008                   | 49.00                     | 49.00                              | 49.00 | 49.00 |
| 032    | Shelby/Lexington/Chester | 02/01/2006                   | 36.00                     | 36.00                              | 36.00 | 36.00 |
| 036    | Glass Voluntary          | 09/01/1999                   | 20.00                     | 20.00                              | 20.00 | 20.00 |
| 056    | Baltimore                | 05/06/1988                   | 12.50                     | 12.00                              | 12.50 | 12.50 |
| 071    | Lincoln                  | 08/03/1989                   | 19.75                     | 17.75                              | 18.75 | 19.75 |

### Benefit Level Depends on Service

#### Same Benefit Level for Following Two Appendices

|     |           |            |       |       |       |       |
|-----|-----------|------------|-------|-------|-------|-------|
| 033 | Crestline | 03/01/2005 | 28.00 | 28.00 | 28.00 | 28.00 |
|     |           |            | 31.00 | 31.00 | 31.00 | 31.00 |
| 034 | Tipton    | 03/01/2005 | 28.00 | 28.00 | 28.00 | 28.00 |
|     |           |            | 31.00 | 31.00 | 31.00 | 31.00 |

Funding target liability for all plans has been determined recognizing the highest benefit levels in effect as of January 1, 2017.

## Schedule SB, Part V — Summary of Plan Provisions

### Early Retirement Reduction Percentages

#### *Retirement Income Plan - Appendix 039*

| Years Prior to<br>SSNRA When<br>Pension Commences | Percentage for Retirement<br>Without 80 Points | Percentage for<br>Retirements With 80<br>Points Applied To Basic<br>Benefit | Percentage for<br>Retirements With 80<br>Points Applied To Excess<br>Benefit |
|---------------------------------------------------|------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 10                                                | 44.2%                                          | 58.0%                                                                       | 50.0%                                                                        |
| 9                                                 | 47.5                                           | 64.0                                                                        | 53.3                                                                         |
| 8                                                 | 51.2                                           | 70.0                                                                        | 56.7                                                                         |
| 7                                                 | 55.3                                           | 76.0                                                                        | 60.0                                                                         |
| 6                                                 | 59.8                                           | 82.0                                                                        | 63.3                                                                         |
| 5                                                 | 64.8                                           | 88.0                                                                        | 66.7                                                                         |
| 4                                                 | 70.4                                           | 94.0                                                                        | 73.3                                                                         |
| 3                                                 | 76.6                                           | 100.0                                                                       | 80.0                                                                         |
| 2                                                 | 83.5                                           | 100.0                                                                       | 86.7                                                                         |
| 1                                                 | 91.2                                           | 100.0                                                                       | 93.3                                                                         |
| 0                                                 | 100.0                                          | 100.0                                                                       | 100.0                                                                        |

## Schedule SB, Part V — Summary of Plan Provisions

### *To Be Used on Frozen Accrued Benefit*

| Age When<br>Pension<br>Commences | Percentage for<br>Retirement Without 80<br>Points | Percentage for<br>Retirements With<br>80 Points |
|----------------------------------|---------------------------------------------------|-------------------------------------------------|
| 55                               | 44.2%                                             | 58.0%                                           |
| 56                               | 47.5                                              | 64.0                                            |
| 57                               | 51.2                                              | 70.0                                            |
| 58                               | 55.3                                              | 76.0                                            |
| 59                               | 59.8                                              | 82.0                                            |
| 60                               | 64.8                                              | 88.0                                            |
| 61                               | 70.4                                              | 94.0                                            |
| 62                               | 76.6                                              | 100.0                                           |
| 63                               | 83.5                                              | 100.0                                           |
| 64                               | 91.2                                              | 100.0                                           |
| 65 and over                      | 100.0                                             | 100.0                                           |

### *Crestline and Tipton*

| Age When<br>Pension Commences | Percentage |
|-------------------------------|------------|
| 55                            | 57.9%      |
| 56                            | 63.5       |
| 57                            | 69.4       |
| 58                            | 75.2       |
| 59                            | 80.8       |
| 60                            | 86.7       |
| 61                            | 93.3       |
| 62 and over                   | 100.0      |

### **Maximum annual compensation**

Compensation for any 12-month period used to determine accrued benefits may not exceed the limits in IRC Section 401(a)(17) for the calendar year in which the 12-month period begins. This limit is indexed annually. For 2017 the limit is \$270,000.

### **Maximum annual 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 — Statement of Actuarial Assumptions/Methods

### Actuarial assumptions

|                                     |                                                                                                                                                                                                                                                                                                                         |               |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 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 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.                                                                      |               |
| • Pre-1995 disabilities             | Revenue Ruling 96-7 table for participants who became disabled before 1995                                                                                                                                                                                                                                              |               |
| • Post-1994 disabilities            | Revenue Ruling 96-7 table for participants who became disabled after 1994 and are eligible for Social Security disability benefits                                                                                                                                                                                      |               |
| 417(e) lump sums                    | Not applicable                                                                                                                                                                                                                                                                                                          |               |
| Other economic assumptions          |                                                                                                                                                                                                                                                                                                                         |               |
| • Salary increases                  | See table of sample rates for next four years and based on experience study in 2014.<br><br>In accordance with the terms of the divestiture of the auto glass business, affected salaried employees with 80 points at the date of sale receive salary increases of 1.50% per year during continued employment with PGW. |               |
| • Flat-dollar benefit increases     | None assumed                                                                                                                                                                                                                                                                                                            |               |
| • Social Security wage base         | 3.00% per year when applicable                                                                                                                                                                                                                                                                                          |               |
| • Inflation                         | 2.25% per year                                                                                                                                                                                                                                                                                                          |               |
| • Expected investment return        | 6.25% for 2016<br><br>Return is capped at the third segment rate                                                                                                                                                                                                                                                        |               |

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

- Expenses

Last year expenses rounded to nearest \$10,000

— Plan F

\$3,300,000 added to current year normal cost

### Demographic assumptions

Withdrawal

See table of sample rates.

Disability incidence

1985 Pension Disability Study, class 1 for Salaried employees and class 3 for hourly and non-union employees. 100% of participants becoming disabled are assumed to be eligible for Social Security disability benefits.

Retirement age

Annual Rate per 1,000 Participants

| Age <sup>1</sup>       | Salaried Employees | Hourly Employees | Hourly with Special Early |
|------------------------|--------------------|------------------|---------------------------|
| 51                     | 0                  | 0                | 100                       |
| 52                     | 0                  | 0                | 100                       |
| 53                     | 0                  | 0                | 100                       |
| 54                     | 0                  | 0                | 100                       |
| 55                     | 70                 | 100              | 100                       |
| 56                     | 70                 | 100              | 150                       |
| 57                     | 70                 | 100              | 150                       |
| 58                     | 100                | 100              | 150                       |
| 59                     | 120                | 100              | 150                       |
| 60                     | 200                | 100              | 150                       |
| 61                     | 200                | 100              | 150                       |
| 62                     | 200                | 400              | 500                       |
| 63                     | 200                | 100              | 300                       |
| 64                     | 300                | 500              | 300                       |
| 65                     | 300                | 500              | 300                       |
| 66                     | 300                | 500              | 300                       |
| 67                     | 300                | 500              | 300                       |
| 68                     | 1,000              | 500              | 300                       |
| 69                     | 1,000              | 500              | 300                       |
| 70                     | 1,000              | 1,000            | 1,000                     |
| Average Retirement Age | 60.9               | 60.5             | 57.1                      |

<sup>1</sup> Salaried rates start 10 years before Social Security normal retirement age. Salaried rates shown above are for Social Security retirement age 65.

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

Benefit commencement age for

- Future vested deferred 62
- Current vested deferred 62

Spouse assumptions

|                         | <u>Male participants</u> | <u>Female participants</u> |
|-------------------------|--------------------------|----------------------------|
| • Percentage married    | 75%                      | 60%                        |
| • Spouse age difference | 3 years younger          | 2 years older              |

Form of payment

|                           | <u>Single life</u> | <u>Qualified J&amp;S</u> |
|---------------------------|--------------------|--------------------------|
| • Active retirements      | 50%                | 50%                      |
| • Future vested deferred  | 50%                | 50%                      |
| • Future disabilities     | 50%                | 50%                      |
| • Future deaths           | 0%                 | 100%                     |
| • Current vested deferred | 50%                | 50%                      |

Unpredictable contingent event assumptions Not applicable

### Table of Sample Rates

| Age | <u>Salary Scale</u>  | Ratio of Final Salary at Age 65 to Current Salary |
|-----|----------------------|---------------------------------------------------|
|     | Increase In the Year |                                                   |
| 20  | 3.00%                | 2.66                                              |
| 25  | 3.00                 | 2.30                                              |
| 30  | 3.00                 | 1.98                                              |
| 35  | 2.50                 | 1.74                                              |
| 40  | 2.50                 | 1.54                                              |
| 45  | 2.00                 | 1.39                                              |
| 50  | 2.00                 | 1.26                                              |
| 55  | 1.50                 | 1.16                                              |
| 60  | 1.50                 | 1.08                                              |

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

### Table of Sample Rates<sup>2</sup> (continued)

| Age | <u>Termination</u> | <u>Disability</u> |        |        |        |
|-----|--------------------|-------------------|--------|--------|--------|
|     |                    | Salaried          |        | Hourly |        |
|     |                    | Male              | Female | Male   | Female |
| 20  | 260.0              | 0.29              | 0.30   | 1.51   | 0.89   |
| 25  | 180.0              | 0.38              | 0.47   | 2.19   | 1.50   |
| 30  | 122.0              | 0.48              | 0.80   | 3.09   | 2.52   |
| 35  | 87.0               | 0.69              | 1.36   | 4.31   | 3.88   |
| 40  | 69.0               | 1.17              | 2.11   | 5.97   | 5.47   |
| 45  | 61.0               | 2.02              | 3.23   | 8.29   | 7.77   |
| 50  | 56.0               | 3.58              | 5.33   | 12.24  | 12.01  |
| 55  | 44.0               | 7.22              | 9.52   | 21.18  | 19.62  |
| 60  | 34.0               | 12.56             | 11.59  | 32.40  | 23.26  |

<sup>2</sup> Annual rate per 1,000 participants.

**Schedule SB, Part V — Statement of Actuarial Assumptions/Methods***Actuarial Methods for Funding***Asset Methods**

The asset valuation method is an average of the adjusted market value for the last year 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 percent and no less than 90 percent of the fair market value, as defined in IRC Section 430.

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:** The plan sponsor provides us with data on all employees as of the valuation date, but only those employees who have completed the plan's eligibility requirements are included in the valuation of liabilities.
- **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.

**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 benefits that are not a function of a 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.

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

- This plan provides disability/death benefits that are only partially based on a participant's accrued benefit or years of service. This benefit is allocated to funding target based on the accrued benefit on the valuation date plus a portion of the excess of the benefit over the accrued benefit multiplied by the ratio of the participant's service at the beginning of the plan year to their service at each decrement age. This benefit 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.



TAX EXEMPT AND  
GOVERNMENT ENTITIES  
DIVISION

DEPARTMENT OF THE TREASURY  
INTERNAL REVENUE SERVICE  
WASHINGTON, D.C. 20224

JUN 22 2018

Ms. Jessica Kachur  
Mercer  
Six PPG Place, Suite 400  
Pittsburgh, PA 15222

Re: Changes in Funding Method Requests

Dear Ms. Kachur:

The enclosed documents are sent to you under the provisions of a power of attorney currently on file with the Internal Revenue Service.

If you require further assistance in this matter, please contact Christine Farley ID# 1001771248) at (617) 316-3183.

Sincerely yours,

A handwritten signature in black ink, appearing to read "D. Ziegler", is written over a faint circular stamp that says "RECEIVED".

David Ziegler  
Manager, EP Actuarial Group 2

Attachment  
Copy of ruling letter



TAX EXEMPT AND  
GOVERNMENT ENTITIES  
DIVISION

DEPARTMENT OF THE TREASURY  
INTERNAL REVENUE SERVICE  
WASHINGTON, D.C. 20224

JUN 22 2018

Ms. Karen Rathburn  
Global Director, Compensation and Benefits  
PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

Re: Changes in Funding Method Requests

Taxpayer = PPG Industries, Inc. (EIN: 25-0730780)

Plan 1 = PPG Industries, Inc. Retirement Plan F (EIN: 25-0730780 / PN: 096)

Plan 2 = PPG Industries, Inc. Retirement Plan E (EIN: 25-0730780 / PN: 097)

Dear Ms. Rathburn:

This letter constitutes notice that approvals have been granted for the changes in funding methods described below. The approvals apply for Plan 1 for the plan year beginning January 1, 2016. The approvals have been granted in accordance with section 412(d)(1) of the Internal Revenue Code (Code) and section 302(d)(1) of the Employee Retirement Income Security Act of 1974 as amended by the Pension Protection Act of 2006 (PPA).

This request was made in conjunction with the merger of Plan 2 into Plan 1, effective July 31, 2016. This ruling is based on the ruling request received on June 15, 2017 and supplemental information submitted by your authorized representative dated February 28, 2018 and March 30, 2018. The request is made because Rev. Proc. 2000-40 does not apply to plans subject to section 430 of the Code after the effective date of the PPA.

Prior to the merger, the plan year for Plan 1 and Plan 2 is the calendar year. After the merger, the plan year for the merged Plan 1 will continue to be the calendar year.

Prior to the merger, the funding method for Plan 1 and Plan 2 was the unit credit method described in section 1.430(d)-1 of the Income Tax Regulations ("Regulations"). After the merger, the funding method for the merged Plan 1 will continue to be the unit credit funding method. Plan liabilities are and will continue to be determined in accordance with section 430 of the Code.

Prior to the merger, the interest rate elected for Plan 1 and Plan 2 is the three segment

interest rates with four-month lookback. After the merger, the interest rate elected for the merged Plan 1 will continue to be the three segment interest rates with four-month lookback.

Specifically, you requested us to approve the following funding method changes:

1. The method used to determine the 2016 minimum required contributions for Plan 1 after the July 31, 2016 plan merger.

Under the proposed method, Plan 1's 2016 target normal cost (prior to adjusting for excess assets) will be increased with administrative expenses expected to be paid for Plan 2 for the period from the merger date to December 31, 2016.

Based on the information presented, Plan 2 consists of only inactive participants. Plan 2's target normal cost only includes administrative expenses expected to be paid during the 2016 plan year. The expected administrative expenses for Plan 2 will be allocated between the short plan year ended July 31, 2016, and the remainder of the plan year. The expected administrative expenses allocated to the interim period will be added to the expected administrative expenses determined (prior to reflecting the merger) for Plan 1 for the full 2016 plan year.

There are no shortfall amortization installments for either plan.

Approval for this change in funding method has been granted.

2. The method to determine the average value of assets as of January 1, 2017.

Prior to the merger, the actuarial value of assets for Plan 1 and Plan 2 was determined as the average of the fair market value as of the current valuation date and the adjusted fair market value of assets for the preceding valuation date, as allowed under Treasury Regulation §1.430(g)-(1)(c)(2) and described in Notice 2009-22. The resulting amount was adjusted to be no greater than 110% and no less than 90% of the fair market value, as required under section 430 of the Code.

The adjusted fair market value of assets as of a determination date is the fair market value at that date adjusted to the valuation date based on actual cash flows and expected earnings determined for the plan year preceding the valuation date. The amount of expected earnings during a given plan year is based on the cash flow during that plan year and the lesser of the assumed rate of return on plan assets for that plan year and the third segment interest rate used for the plan for purposes of determining the minimum funding requirements under Code section 430 for that plan year.

After the merger, the asset valuation method for the merged Plan 1 will be the same as the asset valuation method used by Plan 1 and Plan 2 prior to the merger.

Accordingly, beginning with the January 1, 2017 valuation for the merged Plan 1, the asset valuation method will be the average of the combined fair market value of assets on the valuation date and the combined adjusted fair market value of assets determined for the immediately preceding January 1 determination date. The resulting combined adjusted fair market value of assets is adjusted to be no greater than 110% and no less than 90% of the combined fair market value, as required under section 430 of the Code. For the determination date that precedes the July 1, 2016 merger date, the information necessary to calculate the adjusted fair market value of assets will be separately determined for Plan 1 and Plan 2, and then totaled to determine the adjusted fair market value of assets at that date for the merged Plan 1. The resulting total adjusted fair market value of assets is adjusted to be no greater than 110% and no less than 90% of the fair market value, as required under section 430 of the Code.

For example, for purposes of determining the actuarial value of assets for the merged Plan 1 for the plan year beginning January 1, 2017, the adjusted fair market value of assets will be determined for the immediately preceding January 1 determination date as follows:

The adjusted fair market value of assets for the January 1, 2016 determination date will be based on the sum of the market value of assets for Plan 1 and Plan 2 as of January 1, 2016, increased by the contributions, reduced by the benefit payments and expenses for each plan for the period from January 1, 2016 to December 31, 2016, and further increased with the expected earnings for each plan to the January 1, 2017 valuation date.

The expected earnings for the period from January 1, 2016 through December 31, 2016 will be based on the fair market value of assets as of January 1, 2016, cash flow (including expenses) from January 1, 2016 to December 31, 2016, and the assumed rate of return on assets for each plan for that period (limited to the 3<sup>rd</sup> segment interest rate for 2016 valuations under section 430(h)(2)(C)(iv) of the Code).

Approval for this change in asset valuation funding method has been granted.

In granting these approvals, we have considered only the acceptability of the new funding method and, as necessary, the method by which the transition is to be made between the prior and the new methods. Accordingly, we are not expressing any opinion as to the accuracy or acceptability of any calculations or other material submitted with your request. Specifically, we are not expressing any opinion regarding the calculations of the minimum required contribution before and after the merger.

There are no other changes in actuarial assumptions or methods because of the merger.

This ruling is directed only to the taxpayer that requested it. Section 6110(k)(3) of the Code provides that it may not be used or cited by others as precedent.

We have sent a copy of this letter to your authorized representatives pursuant to a power of attorney (Form 2848) on file in this office.

An amended Schedule SB for the plan year beginning January 1, 2016 should be filed for Plan 1, and the change should be noted on line 25 of the Schedule SB (Actuarial Information).

If you have any questions regarding this matter, please contact Ms. Christine Farley (ID# 1001771248) at (617) 316-3183.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'D. M. Ziegler', with a stylized flourish at the end.

David M. Ziegler, Manager  
Employee Plans Actuarial Group 2

cc: Ms. Jessica Kachur