

Form 5500-SF Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Short Form Annual Return/Report of Small Employee Benefit Plan This form is required to be filed 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). ► Complete all entries in accordance with the instructions to the Form 5500-SF.	OMB Nos. 1210-0110 1210-0089 <div style="border: 1px solid black; text-align: center; padding: 5px; font-weight: bold; font-size: 1.2em;">2012</div> This Form is Open to Public Inspection
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Part I Annual Report Identification Information			
For calendar plan year 2012 or fiscal plan year beginning 01/01/2012 and ending 12/31/2012			
A This return/report is for:	☒ a single-employer plan	☐ a multiple-employer plan (not multiemployer)	☐ a one-participant plan
B This return/report is:	☐ the first return/report	☐ the final return/report	
	☐ an amended return/report	☐ a short plan year return/report (less than 12 months)	
C Check box if filing under:	☒ Form 5558	☐ automatic extension	☐ DFVC program
	☐ special extension (enter description)		

Part II Basic Plan Information —enter all requested information			
1a Name of plan EMERALD PERFORMANCE MATERIALS, LLC WAGE EMPLOYEES PENSION PLAN	1b Three-digit plan number (PN) ►	002	
	1c Effective date of plan	05/01/2006	
2a Plan sponsor's name and address; include room or suite number (employer, if for a single-employer plan) EMERALD PERFORMANCE MATERIALS, LLC 2020 FRONT STREET, SUITE 100 CUYAHOGA FALLS, OH 44221-3215	2b Employer Identification Number (EIN)	20-4419928	
	2c Sponsor's telephone number	330-916-6721	
	2d Business code (see instructions)	325100	
3a Plan administrator's name and address ☐ Same as Plan Sponsor Name ☐ Same as Plan Sponsor Address EMERALD PERFORMANCE MATERIALS, LLC 2020 FRONT STREET, SUITE 100 CUYAHOGA FALLS, OH 44221-3215	3b Administrator's EIN	20-4419928	
	3c Administrator's telephone number	330-916-6721	
4 If the name and/or EIN of the plan sponsor has changed since the last return/report filed for this plan, enter the name, EIN, and the plan number from the last return/report. a Sponsor's name	4b EIN		
	4c PN		
5a Total number of participants at the beginning of the plan year	5a	95	
b Total number of participants at the end of the plan year	5b	94	
c Number of participants with account balances as of the end of the plan year (defined benefit plans do not complete this item)	5c		
6a Were all of the plan's assets during the plan year invested in eligible assets? (See instructions.)	☒ Yes ☐ No		
b Are you claiming a waiver of the annual examination and report of an independent qualified public accountant (IQPA) under 29 CFR 2520.104-46? (See instructions on waiver eligibility and conditions.)	☒ Yes ☐ No		

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, if applicable, a Schedule SB or Schedule MB completed and signed by an enrolled actuary, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.			
SIGN HERE	Filed with authorized/valid electronic signature.	10/01/2013	JONATHAN FEDAK
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
Preparer's name (including firm name, if applicable) and address; include room or suite number (optional)			Preparer's telephone number (optional)

Part III Financial Information			
7	Plan Assets and Liabilities		
		(a) Beginning of Year	(b) End of Year
a	Total plan assets	7a 1107310	1313016
b	Total plan liabilities	7b 0	0
c	Net plan assets (subtract line 7b from line 7a)	7c 1107310	1313016
8	Income, Expenses, and Transfers for this Plan Year		
		(a) Amount	(b) Total
a	Contributions received or receivable from:		
(1)	Employers	8a(1) 100000	
(2)	Participants	8a(2) 0	
(3)	Others (including rollovers)	8a(3) 0	
b	Other income (loss)	8b 130530	
c	Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c	230530
d	Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d 24824	
e	Certain deemed and/or corrective distributions (see instructions)	8e 0	
f	Administrative service providers (salaries, fees, commissions)	8f 0	
g	Other expenses	8g 0	
h	Total expenses (add lines 8d, 8e, 8f, and 8g)	8h	24824
i	Net income (loss) (subtract line 8h from line 8c)	8i	205706
j	Transfers to (from) the plan (see instructions)	8j 0	

Part IV Plan Characteristics	
9a	If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristic Codes in the instructions: 1B 1G 1I
b	If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic Codes in the instructions:

Part V Compliance Questions				
10	During the plan year:	Yes	No	Amount
a	Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? (See instructions and DOL's Voluntary Fiduciary Correction Program)	10a	X	
b	Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.)	10b	X	
c	Was the plan covered by a fidelity bond?	10c	X	500000
d	Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	10d	X	
e	Were any fees or commissions paid to any brokers, agents, or other persons by an insurance carrier, insurance service or other organization that provides some or all of the benefits under the plan? (See instructions.)	10e	X	
f	Has the plan failed to provide any benefit when due under the plan?	10f	X	
g	Did the plan have any participant loans? (If "Yes," enter amount as of year end.)	10g	X	
h	If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	10h		
i	If 10h was answered "Yes," check the box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3	10i		

Part VI Pension Funding Compliance			
11	Is this a defined benefit plan subject to minimum funding requirements? (If "Yes," see instructions and complete Schedule SB (Form 5500) and line 11a below)	☒ Yes ☐ No	
11a	Enter the amount from Schedule SB line 39	11a	0
12	Is this a defined contribution plan subject to the minimum funding requirements of section 412 of the Code or section 302 of ERISA? ..	☐ Yes ☒ No	
(If "Yes," complete line 12a or lines 12b, 12c, 12d, and 12e below, as applicable.)			
a	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 letter ruling granting the waiver. Month Day Year		
If you completed line 12a, complete lines 3, 9, and 10 of Schedule MB (Form 5500), and skip to line 13.			
b	Enter the minimum required contribution for this plan year	12b	

c Enter the amount contributed by the employer to the plan for this plan year.....	12c	
d Subtract the amount in line 12c from the amount in line 12b. Enter the result (enter a minus sign to the left of a negative amount)	12d	
e Will the minimum funding amount reported on line 12d be met by the funding deadline?.....	☐ Yes ☐ No ☐ N/A	

Part VII Plan Terminations and Transfers of Assets

13a Has a resolution to terminate the plan been adopted in any plan year?	☐ Yes ☒ No
If "Yes," enter the amount of any plan assets that reverted to the employer this year	13a
b Were all the plan assets distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?.....	☐ Yes ☒ No
c 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.)	
13c(1) Name of plan(s):	13c(2) EIN(s)

Part VIII Trust Information (optional)

14a Name of trust	14b Trust's EIN

SCHEDULE SB (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2012 This Form is Open to Public Inspection
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For calendar plan year 2012 or fiscal plan year beginning 01/01/2012 and ending 12/31/2012

▶ **Round off amounts to nearest dollar.**

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

A Name of plan <u>EMERALD PERFORMANCE MATERIALS, LLC WAGE EMPLOYEES PENSION PLAN</u>	B Three-digit plan number (PN) ▶ <u>002</u>
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF <u>EMERALD PERFORMANCE MATERIALS, LLC</u>	D Employer Identification Number (EIN) <u>20-4419928</u>
E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B	F Prior year plan size: ☒ 100 or fewer ☐ 101-500 ☐ More than 500

Part I	Basic Information
1 Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2012</u>	
2 Assets:	
a Market value	2a <u>1107310</u>
b Actuarial value	2b <u>1107310</u>
3 Funding target/participant count breakdown:	
a For retired participants and beneficiaries receiving payment.....	3a <u>17</u> <u>259036</u>
b For terminated vested participants.....	3b <u>9</u> <u>105382</u>
c For active participants:	
(1) Non-vested benefits.....	3c(1) <u>1227</u>
(2) Vested benefits.....	3c(2) <u>736543</u>
(3) Total active	3c(3) <u>69</u> <u>737770</u>
d Total	3d <u>95</u> <u>1102188</u>
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)	☐
a Funding target disregarding prescribed at-risk assumptions	4a
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b
5 Effective interest rate	5 <u>7.01</u> %
6 Target normal cost.....	6 <u>0</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.

SIGN HERE		<u>09/19/2013</u>
Signature of actuary		Date
<u>SETH H. PITASKY, EA, MAAA</u>		<u>11-07321</u>
Type or print name of actuary		Most recent enrollment number
<u>TEGRIT GROUP</u>		<u>330-644-2044</u>
Firm name		Telephone number (including area code)
<u>13680 CLEVELAND AVENUE NW</u> <u>UNIONTOWN, OH 44685</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 Prefunding Balances		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	7046
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	0	7046
10	Interest on line 9 using prior year's actual return of <u>-1.93</u> %	0	-136
11	Prior year's excess contributions to be added to prefunding balance:		
a	Present value of excess contributions (line 38a from prior year)		88188
b	Interest on (a) using prior year's effective interest rate of <u>6.33</u> % except as otherwise provided (see instructions)		5582
c	Total available at beginning of current plan year to add to prefunding balance		93770
d	Portion of (c) to be added to prefunding balance		93770
12	Other reductions in balances due to elections or deemed elections	0	48300
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	52380

Part III Funding Percentages			
14	Funding target attainment percentage	14	95.71 %
15	Adjusted funding target attainment percentage	15	100.46 %
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	91.91 %
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage	17	%

Part IV Contributions and Liquidity Shortfalls					
18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
04/16/2012	25000	0			
07/17/2012	25000	0			
10/22/2012	25000	0			
12/17/2012	2500	0			
12/26/2012	22500	0			
			Totals ►	18(b)	100000
				18(c)	0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:		
a Contributions allocated toward unpaid minimum required contributions from prior years.	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	95673
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
0	0	0	0

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

21 Discount rate:				
a Segment rates:	1st segment: 5.54%	2nd segment: 6.85%	3rd segment: 7.52 %	☐ N/A, full yield curve used
b Applicable month (enter code).....				21b 4
22 Weighted average retirement age				22 65
23 Mortality table(s) (see instructions) ☒ Prescribed - combined ☐ Prescribed - separate ☐ Substitute				

Part VI Miscellaneous Items

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

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

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

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6)	31a	0	
b Excess assets, if applicable, but not greater than line 31a	31b	0	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment	47258	10760	
b Waiver amortization installment	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)...	34	10760	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement.....	0	10760	10760
36 Additional cash requirement (line 34 minus line 35)	36	0	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	95673	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	95673	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	10760	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0	
40 Unpaid minimum required contributions for all years.....	40	0	

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

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

SCHEDULE SB ATTACHMENT

Line 26 - Schedule of Active Participant Data

Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan

EIN/PN: 20-4419928/002

Valuation Date: January 1, 2012

Counts and Compensation. Cells with under 20 participants will not show compensation.

Att. Age:	Years of Credited Service													Total
	Under 1	1 1	2 2	3 3	4 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25 to 29	-	-	1	-	-	1	-	-	-	-	-	-	-	2
30 to 34	-	-	-	-	-	1	-	-	-	-	-	-	-	1
35 to 39	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40 to 44	-	-	2	-	-	-	-	-	1	-	-	-	-	3
45 to 49	-	-	-	-	-	-	-	-	2	-	-	-	-	2
50 to 54	-	-	-	-	-	-	-	-	5	-	5	3	-	13
55 to 59	-	-	-	-	-	-	-	-	1	-	8	11	1	21
60 to 64	-	-	-	-	-	1	-	-	1	-	1	6	15	24
65 to 69	-	-	-	-	-	-	-	-	-	-	-	1	1	2
70 & Up	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Total	-	-	3	-	-	3	-	-	10	-	14	21	18	69

Contributions al

Section X

SUMMARY of ASSUMPTIONS

ACTUARIAL COST METHODS

Traditional Unit Credit

The actuarial cost method used in the development of the minimum contribution was the unit credit cost method.

The normal cost is the sum of all the individual normal costs for each participant. For active participants, the individual normal cost is the present value of the benefit earned during the year being valued. For active participants whose credited service equals or exceeds the plan maximum, if any, and for non-active participants, the normal cost is zero.

The actuarial accrued liability is the sum of the individual accrued liabilities for all participants. The individual accrued liability for an active participant is the present value of the accrued benefit as of the valuation date. The unfunded liability is the actuarial accrued liability less the valuation assets.

The total annual cost of the plan is the normal cost plus an amount to amortize the shortfall amount.

Projected Unit Credit

The actuarial cost method used in the development of the maximum contribution was the projected unit credit cost method.

Under this method, the normal cost is the sum of the individual normal costs for all participants. For an active participant, the individual normal cost is the present value at the current age of the projected benefit at the assumed retirement age, based on the actuarial assumptions, divided by the participant's expected years of credited service at that age. For a non-active participant, the normal cost is zero.

The actuarial accrued liability is the sum of the individual accrued liabilities for all plan participants. For an active participant, the individual accrued liability is the product of the normal cost and the total years of credited service at the current age. For non-active participants, the individual accrued liability is the present value at the current age of future benefits. The unfunded actuarial accrued liability equals the actuarial accrued liability less the valuation assets.

Section X

SUMMARY of ASSUMPTIONS

A summary of the actuarial assumptions used in the valuation is presented below:

Valuation Assets - Market value.

Mandated Discount Rates

25-year average segment rates that are applied to adjust the otherwise applicable 24-month average segment rates for the fourth month that precedes the valuation date (September).

	24-Month Average Segment Rates, not Adjusted	Adjusted Segment Rates, Using Average Segment Rate Corridors
Segment 1:	2.06%	5.54%
Segment 2:	5.25%	6.85%
Segment 3:	6.32%	7.52%

Plan's Effective Interest Rate: 7.01%

Salary Scale - Salary increases were not assumed in the valuation.

Taxable Wage Base Increase Assumption - Increases to the taxable wage base were not assumed.

Retirement Rates - Employees were assumed to retire at age 65.

Termination - T-1 LESS GA51M - Termination rates were assumed in the valuation. Employees were assumed to terminate in accordance with the rates shown below:

<u>Age</u>	<u>Males</u>	<u>Females</u>
20	0.0544	0.0544
25	0.0489	0.0489
30	0.0370	0.0370
35	0.0235	0.0235
40	0.0113	0.0113
45	0.0027	0.0027
50	0.0000	0.0000
55	0.0000	0.0000
60	0.0000	0.0000

Section X

SUMMARY of ASSUMPTIONS

Pre-retirement Mortality - IRS 2012 P.V. M Optional Combined Table and IRS 2012 P.V. F Optional Combined Table - Pre-retirement mortality was assumed in the valuation. Sample rates are as follows:

<u>Age</u>	<u>Males</u>	<u>Females</u>
20	0.0002	0.0001
25	0.0003	0.0001
30	0.0004	0.0002
35	0.0007	0.0004
40	0.0009	0.0005
45	0.0011	0.0007
50	0.0014	0.0011
55	0.0023	0.0022
60	0.0048	0.0045

Post-retirement Mortality - IRS 2012 P.V. M Optional Combined Table and IRS 2012 P.V. F Optional Combined Table - Post-retirement mortality was assumed in the valuation. Sample rates are as follows:

<u>Age</u>	<u>Males</u>	<u>Females</u>
65	0.0097	0.0088
70	0.0164	0.0149
75	0.0288	0.0240
80	0.0532	0.0401
85	0.0969	0.0691
90	0.1700	0.1244
95	0.2575	0.1872
100	0.3381	0.2330
105	0.3979	0.2931

Rates of Disablement - Rates of disablement were not assumed.

Post-Disablement Mortality - Post-disablement mortality was not assumed in the valuation.

Administrative Expenses - None assumed.

Percent Married - 0% of males and 0% of females were assumed to be married.

Age of Spouse - The female spouse is assumed to be 3 years younger than the male spouse.

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500 or 5500-SF.	<small>OMB No. 1210-0110</small> 2012 This Form is Open to Public Inspection
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For calendar plan year 2012 or fiscal plan year beginning 01/01/2012 and ending 12/31/2012

► **Round off amounts to nearest dollar.**

► **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan EMERALD PERFORMANCE MATERIALS, LLC WAGE EMPLOYEES PENSION PLAN	B Three-digit plan number (PN) ►	002
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF EMERALD PERFORMANCE MATERIALS, LLC	D Employer Identification Number (EIN) 20-4419928	
E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B		
F Prior year plan size: ☒ 100 or fewer ☐ 101-500 ☐ More than 500		

Part I Basic Information			
1 Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2012</u>			
2 Assets:			
a Market value	2a	1107310	
b Actuarial value	2b	1107310	
3 Funding target/participant count breakdown:		(1) Number of participants	(2) Funding Target
a For retired participants and beneficiaries receiving payment.....	3a	17	259036
b For terminated vested participants.....	3b	9	105382
c For active participants:			
(1) Non-vested benefits	3c(1)		1227
(2) Vested benefits	3c(2)		736543
(3) Total active.....	3c(3)	69	737770
d Total.....	3d	95	1102188
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)..... ☐			
a Funding target disregarding prescribed at-risk assumptions	4a		
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor.....	4b		
5 Effective interest rate	5	7.01%	
6 Target normal cost.....	6	0	

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

SIGN HERE	Seth H. Pitasky, EA, MAAA  _____ Signature of actuary SETH H. PITASKY, EA, MAAA _____ Type or print name of actuary TEGRIT GROUP _____ Firm name 13680 CLEVELAND AVENUE NW UNIONTOWN OH 44685 _____ Address of the firm	09/19/2013 _____ Date 1107321 _____ Most recent enrollment number 330-644-2044 _____ Telephone number (including area code)
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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

21 Discount rate:				
a Segment rates:	1st segment: 5.54%	2nd segment: 6.85%	3rd segment: 7.52%	☐ N/A, full yield curve used
b Applicable month (enter code).....				21b 4
22 Weighted average retirement age				22 65
23 Mortality table(s) (see instructions) ☒ Prescribed - combined ☐ Prescribed - separate ☐ Substitute				

Part VI Miscellaneous Items

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

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

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

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6).....	31a	0	
b Excess assets, if applicable, but not greater than line 31a	31b	0	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment.....	47258	10760	
b Waiver amortization installment	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33) ..	34	10760	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement.....	0	10760	10760
36 Additional cash requirement (line 34 minus line 35).....	36	0	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....	37	95673	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	95673	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	10760	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0	
40 Unpaid minimum required contributions for all years	40	0	

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

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

SCHEDULE SB ATTACHMENT
Line 19 - Discounted Employer Contributions

Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan

EIN/PN: 20-4419928/002

Valuation Date: January 1, 2012

Total Contributed: \$ 100,000.00

Total Discounted to Valuation Date: \$ 95,673.00

Date	Amount	Plan Year	Effective Rate of Interest	Amount Discounted	Penalty Rate of Interest	Additional Amount Discounted	Present Value on Date of Valuation
04/16/2012	25,000	2012	7.01%	486	0.00%	-	24,514
07/18/2012	25,000	2012	7.01%	904	0.00%	-	24,096
10/22/2012	25,000	2012	7.01%	1,329	0.00%	-	23,671
12/17/2012	2,500	2012	7.01%	157	0.00%	-	2,343
12/26/2012	22,500	2012	7.01%	1,451	0.00%	-	21,049

SCHEDULE SB ATTACHMENT

Line 22 - Weighted Average Retirement Age

Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan

EIN/PN: 20-4419928/002

Valuation Date: January 1, 2012

Each participant is assumed to retire at his/her normal retirement age of 65.

Section XI

SUMMARY of PLAN PROVISIONS

A summary of the major plan provisions used in the valuation is presented below:

Plan effective date: May 1, 2006.

Eligibility requirements:

An Eligible Employee will enter the Plan as a Participant upon completing 1 Hour of Service. All Employees are eligible to participate in the Plan upon satisfying the eligibility requirements except for the following ineligible class of Employees: Employees other than those represented by International Chemical Workers Union Local No. 342-C at the Employer's Cincinnati, OH facility, or those who were represented by United Steelworkers of America, Local No. 5L on August 2, 1987 at the Employer's Akron, OH facility. No Employee hired on or after June 14, 2010 shall be eligible to participate in the Plan.

Accrued benefit:

Monthly benefit determined as follows: Akron: \$37 per year of service. No additional benefits will accrue after December 31, 2009. Cincinnati: \$34 per year of service earned between May 1, 2006 and April 1, 2007. \$35 per year of service earned after April 1, 2007. No additional benefits will accrue after July 31, 2010, as reflected in the last amendment to the plan.

Normal retirement eligibility: Upon the attainment of age 65.

Normal retirement benefit: Unreduced accrued benefit payable immediately.

Normal form of benefit:

The term Normal Form of Retirement Benefit means a monthly straight life annuity payable in equal installments for the life of the Participant that terminates upon the Participant's death. However, for Participants represented by United Rubber, Cork, Linoleum and Plastic Workers of America Local No.5, the term Normal Form of Retirement Benefit means a monthly annuity payable in equal installments for the life of the Participant that terminates upon the Participant's death except the minimum number of payments is 60.

Married members are required by law to receive a reduced qualified joint and survivor benefit unless formally elected otherwise.

Early retirement eligibility:

Upon the attainment of age 55 and completion of 10 years of service. For Participants represented by United Rubber, Cork, Linoleum and Plastic Workers of America Local 5, Early Retirement may also occur after attainment of any age with completion of 30 Year Periods of Service

Section XI

SUMMARY of PLAN PROVISIONS

Early retirement benefit:

- (a) Cincinnati Facility: Accrued Benefit reduced by .167% for each month by which Early Retirement precedes the Normal Retirement Date if retirement occurs after age 62 or .25% for each month by which Early Retirement precedes the Normal Retirement Date if retirement occurs between age 55 and age 62.
- (b) Akron Facility: For Participants represented by United Rubber, Cork, Linoleum and Plastic Workers of America Local 5, the reduction is .4% per month before age 62, but there is no reduction if Early Retirement occurs after age 62 or after at least 30 1-Year Periods of Service.

Death benefit eligibility: Upon death after completion of vesting eligibility criteria.

Death benefit: 50.000% of the accrued benefit reduced for early commencement and for form of payment. Said pension shall commence at normal retirement age.

Akron, OH Lump Sum Benefit: A payment in the amount of \$2,250 in addition to any other payments or benefits provided for under the Plan.

Vesting eligibility: Accrued benefit is 100% vested upon completion of 5 years of service.

Vested benefit: The vested benefit is payable upon attainment of normal retirement age.

SCHEDULE SB ATTACHMENT

Line 32 - Amortization Bases Used in the Valuation

Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan

EIN/PN: 20-4419928/002

Valuation Date: January 1, 2012

<u>Original Valuation</u>	<u>Remaining Years</u>	<u>Amortization Type</u>	<u>Outstanding Balance</u>	<u>Current Year Amortization</u>
1/1/2012	7	7 year	(29,267)	(4,967)
1/1/2011	6	7 year	41,608	7,971
1/1/2010	5	7 year	34,917	7,756

SCHEDULE SB ATTACHMENT
Line 25 - Change in Funding Method

Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan

EIN/PN: 20-4419928/002

Valuation Date: January 1, 2012

The Valuation Software used to value the Plan for the current year has been changed, causing a change in the funding method. The changes meet the criteria for automatic approval specified in Announcement 2010-3.