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 section 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

2010

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2010 or fiscal plan year beginning 01/01/2010 and ending 12/31/2010

A This return/report is for: [X] single-employer plan [ ] multiple-employer plan (not multiemployer) [ ] one-participant plan

B This return/report is for: [ ] first return/report [ ] final return/report
[ ] an amended return/report [ ] short plan year return/report (less than 12 months)

C Check box if filing under: [X] 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 (employer, if for 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 Plan sponsor's telephone number 330-916-6721

2d Business code (see instructions) 325100

3a Plan administrator's name and address (if same as Plan sponsor, enter "Same")
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. Sponsor's name

4b EIN

4c PN

5a Total number of participants at the beginning of the plan year	**5a**	85
b Total number of participants at the end of the plan year	**5b**	97
c Total 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.) [X] 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.) [X] Yes [ ] No

If you answered "No" to either 6a or 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.

Part III Financial Information

7 Plan Assets and Liabilities		**(a) Beginning of Year**	**(b) End of Year**
a Total plan assets	**7a**	834202	1040145
b Total plan liabilities	**7b**	0	
c Net plan assets (subtract line 7b from line 7a)	**7c**	834202	1040145

8 Income, Expenses, and Transfers for this Plan Year		**(a) Amount**	**(b) Total**
a Contributions received or receivable from: **(1)** Employers	**8a(1)**	163500	
(2) Participants	**8a(2)**		
(3) Others (including rollovers)	**8a(3)**		
b Other income (loss)	**8b**	92651	
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	**8c**		256151
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	**8d**	50208	
e Certain deemed and/or corrective distributions (see instructions)	**8e**		
f Administrative service providers (salaries, fees, commissions)	**8f**		
g Other expenses	**8g**		
h Total expenses (add lines 8d, 8e, 8f, and 8g)	**8h**		50208
i Net income (loss) (subtract line 8h from line 8c)	**8i**		205943
j Transfers to (from) the plan (see instructions)	**8j**		

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)) [X] Yes [ ] No

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 [X] No

(If "Yes," complete 12a or 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 during the plan year or any prior year? [ ] Yes [X] 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 [X] 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)	**13c(3)** PN(s)

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.	10/11/2011	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

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

2010

This Form is Open to Public Inspection

For calendar plan year 2010 or fiscal plan year beginning 01/01/2010 and ending 12/31/2010

▶ **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: [X] Single [ ] Multiple-A [ ] Multiple-B

F Prior year plan size: [X] 100 or fewer [ ] 101-500 [ ] More than 500

Part I Basic Information

1 Enter the valuation date: Month 01 Day 01 Year 2010

2 Assets:

a	Market value	**2a**	834202
b	Actuarial value	**2b**	834202

3 Funding target/participant count breakdown

			(1) Number of participants	**(2)** Funding Target
a	For retired participants and beneficiaries receiving payment	**3a**	4	41771
b	For terminated vested participants	**3b**	1	6360
c	For active participants:			
	(1) Non-vested benefits	**3c(1)**		8342
	(2) Vested benefits	**3c(2)**		857359
	(3) Total active	**3c(3)**	96	865701
d	Total	**3d**	101	913832

4 If the plan is at-risk, check the box and complete items (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 at-risk for fewer than five consecutive years and disregarding loading factor	**4b**	
5	Effective interest rate	**5**	6.72 %
6	Target normal cost	**6**	135142

Statement by Enrolled Actuary

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

SIGN HERE

Signature of actuary	Date: 10/10/2011
SETH H. PITASKY, EA, MAAA	11-07321
Type or print name of actuary	Most recent enrollment number
SUMMIT RETIREMENT PLAN SERVICES INC	330-644-2044
Firm name	Telephone number (including area code)
13680 CLEVELAND AVENUE NW UNIONTOWN, OH 44685	
Address of the firm	

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

Part II Beginning of year carryover and prefunding balances

		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (Item 13 from prior year)	0	0
8	Portion used to offset prior year's funding requirement (Item 35 from prior year)	0	0
9	Amount remaining (Item 7 minus item 8)	0	0
10	Interest on item 9 using prior year's actual return of 16.86 %	0	0
11	Prior year's excess contributions to be added to prefunding balance:		
	a Excess contributions (Item 38 from prior year)		2781
	b Interest on (a) using prior year's effective rate of 8.22 %		230
	c Total available at beginning of current plan year to add to prefunding balance		3011
	d Portion of (c) to be added to prefunding balance		3011
12	Reduction in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (item 9 + item 10 + item 11d – item 12)	0	3011

Part III Funding percentages

14	Funding target attainment percentage	14	90.95 %
15	Adjusted funding target attainment percentage	15	90.95 %
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	103.14 %
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
09/15/2011	163500	0			
			Totals ► 18(b)	163500	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 contribution 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	146356

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☒ No

b If 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☐ No

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

Liquidity shortfall as of end of Quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions used to determine funding target and target normal cost

21 Discount rate:

a Segment rates:

1st segment:	2nd segment:	3rd segment:	
5.03 %	6.73 %	6.82 %	☐ 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 eligible for (and is using) 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 contribution for all prior years **28** 0

29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (item 19a) **29** 0

30 Remaining amount of unpaid minimum required contributions (item 28 minus item 29) **30** 0

Part VIII Minimum required contribution for current year

31 Target normal cost, adjusted, if applicable (see instructions) **31** 135142

32 Amortization installments:	Outstanding Balance	Installment
a Net shortfall amortization installment	46088	7756
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 (item 31 + item 32a + item 32b – item 33) **34** 142898

	Carryover balance	Prefunding balance	Total balance
35 Balances used to offset funding requirement	0	0	0

36 Additional cash requirement (item 34 minus item 35) **36** 142898

37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (Item 19c) **37** 146356

38 Interest-adjusted excess contributions for current year (see instructions) **38** 3458

39 Unpaid minimum required contribution for current year (excess, if any, of item 36 over item 37) **39** 0

40 Unpaid minimum required contribution for all years **40** 0

Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan
EIN: 20-4419928
Plan Number: 002

Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan
EIN: 20-4419928

Schedule SB, Line 26--Schedule of Active Participant Data																				
YEARS OF CREDITED SERVICE																				
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 & up	
Attained Age	No.	Average Comp.	No	Average Comp.	No	Average Comp.	No	Average Comp.	No	Average Comp.	No.	Average Comp.	No.	Average Comp.	No.	Average Comp.	No.	Average Comp.	No.	Average Comp.
Under 25	1		0		0		0		0		0		0		0		0		0	
25 to 29	0		0		1		0		0		0		0		0		0		0	
30 to 34	1		0		0		0		0		0		0		0		0		0	
35 to 39	2		0		0		0		0		0		0		0		0		0	
40 to 44	1		0		0		0		0		0		0		0		0		0	
45 to 49	1		0		0		0		0		0		0		1		0		0	
50 to 54	0		0		0		0		0		0		0		15		2		0	
55 to 59	0		0		0		0		0		0		0		11		10		4	
60 to 64	0		0		0		0		0		0		0		2		8		16	
65 to 69	0		0		0		0		0		0		0		0		0		4	
70 & up	0		0		0		0		0		0		0		0		0		0	

Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan
EIN: 20-4419928
Plan Number: 002

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

ACTUARIAL METHOD AND ASSUMPTIONS

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

Valuation Assets - Market value.

Mandated Discount Rates

1. PPA funding - segment 1	5.030%
2. PPA funding - segment 2	6.730%
3. PPA funding - segment 3	6.820%

Plan's Effective Interest Rate: 6.716%

Financial Accounting Standards Board No. 35 Rates:

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 and/or service requirements determined by an actuarial algorithm.

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

Age	Males	Females
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

Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan
EIN: 20-4419928
Plan Number: 002

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

Pre-retirement Mortality - IRS 2010 P.V. M Optional Combined Table and IRS 2010 P.V. F Optional Combined Table - Pre-retirement mortality was assumed in the valuation. Sample rates are as follows:

Age	Males	Females
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	0.0008
50	0.0015	0.0011
55	0.0024	0.0023
60	0.0049	0.0046

Post-retirement Mortality - IRS 2010 P.V. M Optional Combined Table and IRS 2010 P.V. F Optional Combined Table - Post-retirement mortality was assumed in the valuation. Sample rates are as follows:

Age	Males	Females
65	0.0099	0.0089
70	0.0169	0.0151
75	0.0296	0.0244
80	0.0543	0.0407
85	0.0983	0.0699
90	0.1713	0.1251
95	0.2585	0.1880
100	0.3387	0.2335
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)

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

2010

This Form is Open to Public Inspection

For calendar plan year 2010 or fiscal plan year beginning 01/01/2010 and ending 12/31/2010

▶ **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: [X] Single [ ] Multiple-A [ ] Multiple-B

F Prior year plan size: [X] 100 or fewer [ ] 101-500 [ ] More than 500

Part I Basic Information

1 Enter the valuation date: Month 01 Day 01 Year 2010

2 Assets:

a	Market value	2a	834202
b	Actuarial value	2b	834202

3 Funding target/participant count breakdown

			(1) Number of participants	(2) Funding Target
a	For retired participants and beneficiaries receiving payment	3a	4	41771
b	For terminated vested participants	3b	1	6360
c	For active participants:			
	(1) Non-vested benefits	3c(1)		8342
	(2) Vested benefits	3c(2)		857359
	(3) Total active	3c(3)	96	865701
d	Total	3d	101	913832

4 If the plan is at-risk, check the box and complete items (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 at-risk for fewer than five consecutive years and disregarding loading factor	4b	
5	Effective interest rate	5	6.72%
6	Target normal cost	6	135142

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

10/10/2011 — Date

SETH H. PITASKY, EA, MAAA — Type or print name of actuary

1107321 — Most recent enrollment number

SUMMIT RETIREMENT PLAN SERVICES INC — Firm name

330-644-2044 — Telephone number (including area code)

13680 CLEVELAND AVENUE NW
UNIONTOWN OH 44685 — Address of the firm

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

Part II Beginning of year carryover and prefunding balances

		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (item 13 from prior year)	0	0
8	Portion used to offset prior year's funding requirement (item 35 from prior year)	0	0
9	Amount remaining (item 7 minus item 8)	0	0
10	Interest on item 9 using prior year's actual return of 16.86%	0	0
11	Prior year's excess contributions to be added to prefunding balance:		
	a Excess contributions (item 38 from prior year)		2781
	b Interest on (a) using prior year's effective rate of 8.22%		230
	c Total available at beginning of current plan year to add to prefunding balance		3011
	d Portion of (c) to be added to prefunding balance		3011
12	Reduction in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (item 9 + item 10 + item 11d – item 12)	0	3011

Part III Funding percentages

14	Funding target attainment percentage	14	90.95%
15	Adjusted funding target attainment percentage	15	90.95%
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	103.14%
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
09/15/2011	163500	0			
		Totals ▶ 18(b)		163500	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 contribution 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	146356

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☒ No

b If 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☐ No

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

Liquidity shortfall as of end of Quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions used to determine funding target and target normal cost

21 Discount rate:

	1st segment:	2nd segment:	3rd segment:	
a Segment rates:	5.03%	6.73%	6.82%	☐ 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 eligible for (and is using) 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 contribution for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (item 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (item 28 minus item 29)	30	0

Part VIII Minimum required contribution for current year

31 Target normal cost, adjusted, if applicable (see instructions)	31	135142

32 Amortization installments:	Outstanding Balance	Installment
a Net shortfall amortization installment	46088	7756
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 (item 31 + item 32a + item 32b – item 33)	34	142898

	Carryover balance	Prefunding balance	Total balance
35 Balances used to offset funding requirement	0	0	0

36 Additional cash requirement (item 34 minus item 35)	36	142898
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (Item 19c)	37	146356
38 Interest-adjusted excess contributions for current year (see instructions)	38	3458
39 Unpaid minimum required contribution for current year (excess, if any, of item 36 over item 37)	39	0
40 Unpaid minimum required contribution for all years	40	0

Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan
EIN: 20-4419928
Plan Number: 002

Schedule SB, Part V - Summary of Plan Provisions

SUMMARY OF PLAN PROVISIONS

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

Plan effective date: May 1, 2006.

Latest plan amendment: December 31, 2009.

Eligibility requirements: Participation frozen 6/14/2010.

Accrued benefit: The accrued benefit is determined as follows:

Monthly benefit determined as follows: Akron: $37 per year of service; Accrue d benefits fr ozen 12/31/2009. 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; Accrued benefits frozen 07/31/2010.

Normal retirement eligibility: Upon the attainment of age 65.

Normal retirement benefit: Unreduced accrued benefit payable immediately.

Normal form of benefit:

Married members - A pension payable for life. Upon the death of the member, the surviving spouse will receive a 50.00% lifetime continuance of the pension.

Single members - A pension payable for life with the first 0 years guaranteed.

Early retirement eligibility: Upon the attainment of age 55 and completion of 10 years of service.

Early retirement benefit: The accr ued benefit is reduced 4.80% for each year that comme ncement precedes age 62.

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

Death benefit: 5 0.000% of the accrued benefit reduced for early commence ment and for form o f payment. Said pension shall commence at normal retirement age.

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.

Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan
EIN: 20-4419928
Plan Number: 002

Schedule SB, line 32 - Schedule of Amortization Bases

AMORTIZATION BASES UNDER SECTION 430 OF THE IRS CODE

Type of base	Present Value of Remaining Installment	Valuation Date Established	Years Remaining in Amortization Period	Amortization Installment
Shortfall	$46,088	01/01/2010	7	$7,756
Total	**$46,088**			**$7,756**

Line 19- Discounted Employer Contributions
Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan
Plan EIN: 20-4419928
Plan Number: 002
Valuation Date: 1/1/2010

Total Contributed: **$ 163,500.00**

Total Discounted to Valuation Date: **$ 146,356.00**

Date	Amount	Plan Year	Effective Rate of Interest	Discounted Amount	Penalty Rate of Interest	Additional Discounted Amount	Value As of Valuation Date
09/15/2011	$ 163,500.00	$ 2,010.00	6.72%	$146,356.00	11.72%	$ -	$ 146,356.00

Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan
EIN: 20-4419928
Plan Number: 002

Schedule SB, line 24 - Change in Actuarial Assumptions

The discount rates were changed from using Full Yield Curve – October 2008 to PPA funding segmented rates with the applicable month four months prior to the valuation date.

This change has been elelcted by the plan sponsor. Under final funding regulations issued October 15, 2009, the change is automatically approved by the IRS.

Plan Name: Emerald Performance Materials, LLC Wage Employees' Pension Plan
EIN: 20-4419928
Plan Number: 002

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

Employees were assumed to retire at age 65.