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

2016

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A This return/report is for:
- [X] a single-employer plan
- [ ] a multiple-employer plan (not multiemployer) (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)
- [ ] a one-participant plan
- [ ] a foreign 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:
- [X] Form 5558
- [ ] automatic extension
- [ ] DFVC program
- [ ] special extension (enter description)

Part II Basic Plan Information—enter all requested information

1a Name of plan
THE ERACHEM COMILOG, INC. BALTIMORE PLANT BARGAINING UNIT EMPLOYEES PENSION PLAN

1b Three-digit plan number (PN) ▶ 003

1c Effective date of plan 07/01/1978

2a Plan sponsor's name (employer, if for a single-employer plan)
Mailing address (include room, apt., suite no. and street, or P.O. Box)
City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions)
ERACHEM COMILOG, INC

610 PITTMAN ROAD
BALTIMORE, MD 21226-1792

610 PITTMAN ROAD
BALTIMORE, MD 21226-1792

2b Employer Identification Number (EIN) 52-1272156

2c Sponsor's telephone number 410-789-8800

2d Business code (see instructions) 325300

3a Plan administrator's name and address [X] Same as Plan Sponsor.

3b Administrator's EIN

3c Administrator's telephone number

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**	87
b Total number of participants at the end of the plan year	**5b**	82
c Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	**5c**	
d(1) Total number of active participants at the beginning of the plan year	**5d(1)**	15
d(2) Total number of active participants at the end of the plan year	**5d(2)**	15
e Number of participants that terminated employment during the plan year with accrued benefits that were less than 100% vested	**5e**	

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.	10/09/2017	FRANCOIS-GUILLAUME LEJARS
	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)

Preparer's telephone number

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 line 6a or line 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.

c If the plan is a defined benefit plan, is it covered under the PBGC insurance program (see ERISA section 4021)? ..... [X] Yes [ ] No [ ] Not determined

Part III Financial Information

7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets	7a	7025518	7196591
b Total plan liabilities	7b		
c Net plan assets (subtract line 7b from line 7a)	7c	7025518	7196591
8 Income, Expenses, and Transfers for this Plan Year		**(a) Amount**	**(b) Total**
a Contributions received or receivable from: (1) Employers	8a(1)		
(2) Participants	8a(2)		
(3) Others (including rollovers)	8a(3)		
b Other income (loss)	8b	637009	
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c		637009
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d	380531	
e Certain deemed and/or corrective distributions (see instructions)	8e		
f Administrative service providers (salaries, fees, commissions)	8f	85405	
g Other expenses	8g		
h Total expenses (add lines 8d, 8e, 8f, and 8g)	8h		465936
i Net income (loss) (subtract line 8h from line 8c)	8i		171073
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 1I 3H

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	N/A	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		X		
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		X		

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)	[X] Yes [ ] No
11a	Enter the unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40	**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? (If "Yes," complete line 12a or lines 12b, 12c, 12d, and 12e below, as applicable.)	[ ] Yes [X] No
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 [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)

Part VIII Trust Information

14a Name of trust	**14b** Trust's EIN
14c Name of trustee or custodian	**14d** Trustee's or custodian's telephone number

Part IX IRS Compliance Questions

15a	Is the plan a 401(k) plan? If "No," skip b.	[ ] Yes [ ] No
15b	How did the plan satisfy the nondiscrimination requirements for employee deferrals under section 401(k)(3) for the plan year? Check all that apply:	[ ] Design-based safe harbor [ ] "Prior year" ADP test [ ] "Current year" ADP test [ ] N/A
16a	What testing method was used to satisfy the coverage requirements under section 410(b) for the plan year? Check all that apply:	[ ] Ratio percentage test [ ] Average benefit test [ ] N/A
16b	Did the plan satisfy the coverage and nondiscrimination requirements of sections 410(b) and 401(a)(4) for the plan year by combining this plan with any other plan under the permissive aggregation rules?	[ ] Yes [ ] No

17a If the plan is a master and prototype plan (M&P) or volume submitter plan that received a favorable IRS opinion letter or advisory letter, enter the date of the letter _____/_____/_____ and the serial number _____.

17b If the plan is an individually-designed plan that received a favorable determination letter from the IRS, enter the date of the most recent determination letter _____/_____/_____.

18	Defined Benefit Plan or Money Purchase Pension Plan Only: Were any distributions made during the plan year to an employee who attained age 62 and had not separated from service?	[ ] Yes [ ] No
19	Was any plan participant a 5% owner who had attained at least age 70 ½ during the prior plan year?	[ ] Yes [ ] No

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

2016

This Form is Open to Public Inspection

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

▶ **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
THE ERACHEM COMILOG, INC. BALTIMORE PLANT BARGAINING UNIT EMPLOYEES PENSION PLAN

B Three-digit plan number (PN) ▶ 003

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF
ERACHEM COMILOG, INC

D Employer Identification Number (EIN)
52-1272156

E Type of plan: [X] Single [ ] Multiple-A [ ] Multiple-B

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

Part I Basic Information

1 Enter the valuation date: Month 01 Day 01 Year 2016

2 Assets:

a Market value	**2a**	7057101
b Actuarial value	**2b**	7364584

3 Funding target/participant count breakdown

	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	51	4121626	4121626
b For terminated vested participants	21	804909	804909
c For active participants	15	1364159	1421987
d Total	87	6290694	6348522

4 If the plan is in at-risk status, check the box and complete lines (a) and (b) [ ]

a Funding target disregarding prescribed at-risk assumptions	**4a**	
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	**4b**	
5 Effective interest rate	**5**	5.99 %
6 Target normal cost	**6**	107001

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

09/26/2017
Date

EMILY S. ADKINS
Type or print name of actuary

17-07401
Most recent enrollment number

TOWERS WATSON DELAWARE, INC.
Firm name

216-937-4000
Telephone number (including area code)

1001 LAKESIDE AVENUE, SUITE 1500
CLEVELAND, OH 44114
Address of the firm

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

Part II Beginning of Year Carryover and Prefunding Balances

		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)		
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)		
9	Amount remaining (line 7 minus line 8)		
10	Interest on line 9 using prior year's actual return of -3.30%		
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of 6.19 %		0
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		
	c Total available at beginning of current plan year to add to prefunding balance		0
	d Portion of (c) to be added to prefunding balance		
12	Other reductions in balances due to elections or deemed elections		
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	0

Part III Funding Percentages

14	Funding target attainment percentage	14	116.00%
15	Adjusted funding target attainment percentage	15	116.00%
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	117.82%
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:

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

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	
	b Contributions made to avoid restrictions adjusted to valuation date	19b	
	c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	

20 Quarterly contributions and liquidity shortfalls:

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

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

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

Liquidity shortfall as of end of quarter of this plan year

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

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

21 Discount rate:

a Segment rates:

1st segment:	2nd segment:	3rd segment:	
4.43%	5.91%	6.65%	☐ N/A, full yield curve used

b Applicable month (enter code) **21b** 4

22 Weighted average retirement age **22** 62

23 Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment. ..... ☐ Yes ☒ No

25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment. ..... ☐ Yes ☒ No

26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment. ..... ☒ Yes ☐ No

27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	**27**	

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	**28**	
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	**29**	
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**	107001
b Excess assets, if applicable, but not greater than line 31a	**31b**	107001

32 Amortization installments:

	Outstanding Balance	Installment
a Net shortfall amortization installment		
b Waiver amortization installment		

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**	

	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement			

36 Additional cash requirement (line 34 minus line 35)	**36**	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	

38 Present value of excess contributions for current year (see instructions)

a Total (excess, if any, of line 37 over line 36)	**38a**	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	**38b**	
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**	

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 ATTACHMENTS

Schedule SB, Part V
Summary of Plan Provisions

The following pages **from the 2016 actuarial valuation report** provide information on plan provisions for Part V of Schedule SB.

Plan Name:	The Erachem Comilog, Inc. Baltimore Plant Bargaining Unit Employees Pension Plan
EIN / PN:	52-1272156 / 003
Plan Sponsor:	Erachem Comilog, Inc.
Valuation Date:	January 1, 2016

Appendix B – Summary of plan provisions

Plan Provisions

Amended and restated effective January 1, 2011.

Coverage and participation	Each employee at the location actively employed within the Bargaining Unit participates immediately upon the earlier of attainment of full-time status or age 21. The plan is closed to new participants January 1, 2008.
Plan year	The twelve-month period ending December 31.

Definitions

Continuous service	One year is credited for each Plan Year as governed by the terms of the basic collective bargaining agreement between the company and the Union for the purposes of determining seniority.
Credited service	One year is credited for each Plan Year computed on an elapsed-time basis.
Benefit service	One year is credited for each Plan Year computed on an elapsed-time basis, rounded to the nearest 1/12.
Normal retirement date (NRD)	The later of age 65 and the fifth anniversary of plan participation.

SCHEDULE SB ATTACHMENTS

Accrued normal retirement benefit A monthly pension, if paid on a straight-life basis, equal to years of Benefit Service multiplied by the appropriate benefit unit:

Date of Retirement	Benefit Unit
Prior to 12/01/1989	$16.00
12/01/1989 through 11/30/1990	17.00
12/01/1990 through 11/22/1992	18.00
11/23/1992 through 11/22/1993	19.00
11/23/1993 through 11/22/1994	20.00
11/23/1994 through 12/15/1995	21.00
12/16/1995 through 11/22/1996	22.00
11/23/1996 through 11/22/1997	23.00
11/23/1997 through 12/31/1999	25.00
1/1/2000 through 12/31/2000	27.00
1/1/2001 through 12/31/2001	28.00
1/1/2002 through 12/31/2002	29.00
1/1/2003 through 12/31/2003	30.00
1/1/2004 through 12/31/2007	33.00
After 1/1/2008	36.00

The benefit determined above is offset by $8.00 times years of Benefit Service to June 9, 1978, for former vested employees of Diamond Shamrock Corporation.

Eligibility for Benefits

Normal retirement Retirement on NRD.

Early retirement Retirement before NRD and on or after both attaining age 55 with 10 years of Continuous Service.

Vested termination Termination for reasons other than death or retirement after completing 5 years of Credited Service.

Disability Upon total and permanent disability after 15 years of Continuous Service.

Preretirement death benefit An employee may elect to receive a reduced benefit so that a benefit will be paid to his spouse if he should die prior to retirement but after completion of 5 years of Credited Service, provided that the employee has been married to his current spouse for at least one year.

SCHEDULE SB ATTACHMENTS

Benefits Paid Upon the Following Events

Normal retirement	The accrued normal retirement benefit paid at NRD.
Early retirement	The accrued normal retirement benefit is payable at age 62 or, alternatively, payable immediately in an actuarially reduced amount.
Vested termination	The accrued normal retirement benefit is payable at age 62 or, if the employee has at least 10 years of Continuous Service, payable as early as age 55 in an actuarially reduced amount.
Disablement	The accrued normal retirement benefit is payable immediately. The benefit is recalculated annually to reflect additional benefit service granted during the term of disability.
Preretirement death	If the employee dies while eligible for early retirement, the surviving spouse will receive 50% of the benefit that would have been paid if the employee had retired on the day prior to his death and elected an immediate straight-life benefit. If death occurs prior to eligibility for early retirement, the surviving spouse will receive the benefit that would have been paid had the employee terminated on the day of his death, survived to the earliest age for retirement, retired under the 50% Joint & Survivor option, and then died.

Other Plan Provisions

Forms of payment	An employee may elect to receive his benefit on a straight-life basis or on an actuarially equivalent 50%, 75% or 100% Joint and Survivor basis. Unless otherwise elected, any benefit payable under the Plan shall be paid on a 50% Joint and Survivor basis, if the employee is then married or on a straight-life basis otherwise. If the present value of the participant's retirement benefit does not exceed $15,000, it may be paid in a lump sum. Actuarial equivalence is based on the RP 2000 Blended Table and 6.0% interest except for lump sums which are based on 417(e) applicable interest rates and mortality.
Maximum on benefits and pay	All benefits and pay for any calendar year may not exceed the maximum limitations for that year as defined in the Internal Revenue Code. The plan provides for increasing the dollar limits automatically as such changes become effective. Increases in the dollar limits are not assumed for determining contributions.

SCHEDULE SB ATTACHMENTS

Future Plan Changes

No future plan changes were recognized in determining minimum and maximum contributions.

Changes in Benefits Valued Since Prior Year

None.

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 26
Schedule of Active Participant Data as of January 1, 2016

Attained Age	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 & Over	
	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25	0		0		0		0		0		0		0		0		0		0	
25 - 29	0		0		0		0		0		0		0		0		0		0	
30 - 34	0		0		0		0		0		0		0		0		0		0	
35 - 39	0		0		0		0		0		0		0		0		0		0	
40 - 44	0		0		0		0		0		0		0		0		0		0	
45 - 49	0		0		0		0		0		0		2		0		0		0	
50 - 54	0		0		0		0		0		2		0		0		0		0	
55 - 59	0		0		0		0		0		3		3		0		0		0	
60 - 64	0		0		0		0		0		1		2		0		0		0	
65 - 69	0		0		0		0		1		0		0		0		0		1	
70 & Over	0		0		0		0		0		0		0		0		0		0	

Plan Name: The Erachem Comilog, Inc. Baltimore Plant Bargaining Unit Employees Pension Plan
EIN / PN: 52-1272156 / 003
Plan Sponsor: Erachem Comilog, Inc.
Valuation Date: January 1, 2016

SCHEDULE SB ATTACHMENTS

Schedule SB, Part V
Statement of Actuarial Assumptions/Methods

The following pages **from the 2016 actuarial valuation report** provide information on actuarial assumptions and methods for Part V of Schedule SB.

Plan Name:	The Erachem Comilog, Inc. Baltimore Plant Bargaining Unit Employees Pension Plan
EIN / PN:	52-1272156 / 003
Plan Sponsor:	Erachem Comilog, Inc.
Valuation Date:	January 1, 2016

Appendix A– Statement of actuarial assumptions and methods

Economic Assumptions

Interest rate basis:

■ Applicable month	September
■ Interest rate basis	3-Segment Rates

Interest rates:

	Reflecting Corridors	Not Reflecting Corridors
■ First segment rate	4.43%	1.34%
■ Second segment rate	5.91%	4.03%
■ Third segment rate	6.65%	5.06%
■ Effective interest rate	5.99%	4.17%

Annual rates of increase

■ Compensation	Not applicable
■ Future Social Security wage bases	Not applicable
■ Statutory limits on compensation	None

Plan-related expenses

The amount included for plan-related expenses is $65,080. Plan-related expenses are assumed to equal non-PBGC administrative expenses from the prior year plus an estimate of the PBGC premiums for the current year that are paid from the trust.

SCHEDULE SB ATTACHMENTS

Demographic Assumptions

Inclusion date

The valuation date coincident with or next following the date on which the employee becomes a participant.

New or rehired employees

It was assumed there will be no new or rehired employees.

Mortality for funding

The prescribed mortality assumption under IRC §430(h)(3)(A) using static tables with separate mortality rates for annuitants and non-annuitants.

Termination

Rates varying by age and gender.

Annual Rate of Withdrawal		
Attained Age	**Males**	**Females**
30	.034	.049
35	.024	.034
40	.013	.024
45	.007	.013
50	Nil	.007
55	Nil	Nil
60 & over	Nil	Nil

Disability

The rates at the following ages illustrate the incidence of disability assumed:

Annual Rate of Disability (per 1,000 lives)		
Attained Age	**Males**	**Females**
25	.93	.96
35	1.99	2.52
45	5.05	5.22
55	15.02	14.90

SCHEDULE SB ATTACHMENTS

Retirement

The following rates have been utilized as the assumed incidence of retirement:

Attained Age	Rate
55	2%
56	2
57	3
58	5
59	5
60	10
61	10
62	45
63	45
64	45
65 & Older	100

Benefit commencement date:

- **Preretirement death benefit** — The later of the death of the active participant or the participant's early retirement date.
- **Deferred vested benefit** — The later of age 62 or termination of employment.
- **Disability benefit** — Upon disablement.
- **Retirement benefit** — Upon termination of employment.

Form of payment

Participants are assumed to elect the normal form.

Marriage

85% of the population are assumed to be married. Male participants are assumed to be three years older than their spouses and female participants are assumed to be three years younger than their spouses.

Plan compensation

Not applicable.

Timing of benefit payments

Annuity payments are payable monthly at the beginning of the month.

SCHEDULE SB ATTACHMENTS

Maximum benefits and plan compensation increases	Accrued benefits projected to be paid in future years are limited to the maximum presently allowed under IRC §415. Plan compensation is limited to the maximum presently allowed under IRC §401(a)(17). No provision is made for future increases in the maximum annual benefit or compensation limit.

Methods

Valuation date	First day of plan year.
Funding target	Present value of accrued benefits as required by regulations under IRC §430.
Target normal cost	Present value of benefits expected to accrue during the plan year plus plan-related expenses expected to be paid from plan assets during the plan year as required by regulations under IRC §430.
Actuarial value of assets	Average of the fair market value of assets on the valuation date and the two immediately preceding valuation dates, adjusted for contributions, benefits, administrative expenses and expected earnings (with such expected earnings limited as described in IRS Notice 2009-22). The average asset value must be within 10% of market value, including discounted contributions receivable (discounted using the effective interest rate for the 2015 plan year). The method of computing the actuarial value of assets complies with rules governing the calculation of such values under the Pension Protection Act of 2006 (PPA). These rules produce smoothed values that reflect the underlying market value of plan assets but fluctuate less than the market value. As a result, the actuarial value of assets will be lower than the market value in some years and greater in other years. However, over the long term under PPA's smoothing rules, the method has a significant bias to produce an actuarial value of assets that is below the market value of assets.
Benefits not valued	All benefits described in the Plan Provisions section of this report were valued.

SCHEDULE SB ATTACHMENTS

Assumptions Rationale - Significant Economic Assumptions

Discount rate	The basis chosen was selected by the plan sponsor from among choices prescribed by law, all of which are based on observed market data over certain periods of time.

Assumptions Rationale - Significant Demographic Assumptions

Healthy Mortality	Assumptions used for funding purposes are as prescribed by IRC §430(h).
Disabled Mortality	Assumptions used for funding purposes are as prescribed by IRC §430(h).
Termination	Termination rates were based on a published table for pension participants believed to have similar characteristics to the plan population. Gains and losses caused by termination patterns different than assumed are observed and monitored. Assumed termination rates differ by age and gender because of observed and expected differences in termination rates by gender. Termination rates for at-risk funding calculations are as required by IRC 430.
Disability	Disability rates were based on a published table for pension participants believed to have reasonably similar characteristics participating in pension plans with similar disability provisions. Gains and losses caused by disability patterns different than assumed are observed and monitored. Assumed disability rates differ by gender because of observed and expected differences in disability rates by gender.
Retirement	Retirement rates are based on plan sponsor expectations for the future with periodic monitoring of observed gains and losses caused by retirement patterns different than assumed. Retirement rates for at-risk funding calculations are as required by IRC §430.

SCHEDULE SB ATTACHMENTS

Benefit commencement date for deferred benefits:

■ Deferred vested benefit	Deferred vested participants are assumed to begin benefits at age 62 (or current age if later) because the plan's experience is not considered to be credible, but it has been observed and it is expected that many participants will retire and begin benefits when Social Security benefits are first available.

Source of Prescribed Methods

Funding methods

The methods used for funding purposes as described in Appendix A, including the method of determining plan assets, are "prescribed methods set by law", as defined in the actuarial standards of practice (ASOPs). These methods are required by IRC §430, or were selected by the plan sponsor from a range of methods permitted by IRC §430.

SCHEDULE SB ATTACHMENTS

Schedule SB – Statement by Enrolled Actuary

Plan Sponsor	Erachem Comilog, Inc.
EIN/PN	52-1272156/003
Plan Name	The Erachem Comilog, Inc. Baltimore Plant Bargaining Unit Employees Pension Plan
Valuation Date	January 1, 2016
Enrolled Actuary	Emily S. Adkins
Enrollment Number	17-07401

The actuarial assumptions that are not mandated by IRC § 430 and regulations, represent the enrolled actuary's best estimate of anticipated experience under the plan, subject to the following conditions:

The actuarial valuation, on which the information in this Schedule SB is based, has been prepared in reliance upon the employee and financial data furnished by the plan administrator and the trustee. The enrolled actuary has not made a rigorous check of the accuracy of this information but has accepted it after reviewing it and concluding it is reasonable in relation to similar information furnished in previous years. The amounts of contributions and dates paid shown in Item 18 of Schedule SB were listed in reliance on information provided by the plan administrator and/or trustee.

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 22
Description of Weighted Average Retirement Age
as of January 1, 2016

See Schedule SB Part V, Statement of Actuarial Assumptions and Methods for retirement rates. The average retirement age for Line 22 was calculated by determining the average age at retirement for those current active participants expected to reach retirement, based on all current decrements assumed.

x	q_x^r	l_x	${}_{x-55}p_{55}=l_x/l_{55}$	$q_x^r*l_x/l_{55}$	$x*q_x*l_x/l_{55}$
55	0.02	1,000,000	1.000000	0.020000	1.100000
56	0.02	980,000	0.980000	0.019600	1.097600
57	0.03	960,400	0.960400	0.028812	1.642284
58	0.05	931,588	0.931588	0.046579	2.701582
59	0.05	885,009	0.885009	0.044250	2.610750
60	0.10	840,758	0.840758	0.084076	5.044560
61	0.10	756,682	0.756682	0.075668	4.615748
62	0.45	681,014	0.681014	0.306456	19.000272
63	0.45	374,558	0.374558	0.168551	10.618713
64	0.45	206,007	0.206007	0.092703	5.932992
65	1.00	113,304	0.113304	0.113304	7.364760

Average age at retirement	61.729261
Rounded for Schedule SB Line 22	62

Plan Name:	The Erachem Comilog, Inc. Baltimore Plant Bargaining Unit Employees Pension Plan
EIN / PN:	52-1272156 / 003
Plan Sponsor:	Erachem Comilog, Inc.
Valuation Date:	January 1, 2016

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

2016

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A This return/report is for: [X] a single-employer plan [ ] a multiple-employer plan (not multiemployer) (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)

B This return/report is [ ] a one-participant plan [ ] a foreign plan
[ ] 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: [X] Form 5558 [ ] automatic extension [ ] DFVC program
[ ] special extension (enter description)

Part II Basic Plan Information - enter all requested information

1a Name of plan
THE ERACHEM COMILOG, INC. BALTIMORE PLANT BARGAINING UNIT EMPLOYEES PENSION PLAN

1b Three-digit plan number (PN) ▶ 003

1c Effective date of plan 07/01/1978

2a Plan sponsor's name (employer, if for a single-employer plan)
Mailing address (include room, apt., suite no. and street, or P.O. Box)
City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instr.)
ERACHEM COMILOG, INC
610 PITTMAN ROAD

BALTIMORE MD 21226-1792

2b Employer Identification Number (EIN) 52-1272156

2c Sponsor's telephone number 410-789-8800

2d Business code (see instructions) 325300

3a Plan administrator's name and address [X] Same as Plan Sponsor.

3b Administrator's EIN

3c Administrator's telephone number

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	87
b	Total number of participants at the end of the plan year	5b	83
c	Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	5c	
d (1)	Total number of active participants at the beginning of the plan year	5d(1)	15
d (2)	Total number of active participants at the end of the plan year	5d(2)	15
e	Number of participants that terminated employment during the plan year with accrued benefits that were less than 100% vested	5e	

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	[signature]	2017.6.09	FRANCOIS-GUILLAUME LEJARS
	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)

Preparer's telephone number

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 line 6a or line 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.

c If the plan is a defined benefit plan, is it covered under the PBGC insurance program (see ERISA section 4021)? [ ] Yes [ ] No [ ] Not determined

Part III Financial Information

7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets	7a	7,025,518	
b Total plan liabilities	7b		
c Net plan assets (subtract line 7b from line 7a)	7c	7,025,518	
8 Income, Expenses, and Transfers for this Plan Year		**(a) Amount**	**(b) Total**
a Contributions received or receivable from: (1) Employers	8a(1)		
(2) Participants	8a(2)		
(3) Others (including rollovers)	8a(3)		
b Other income (loss)	8b		
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c		
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d		
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		
i Net income (loss) (subtract line 8h from line 8c)	8i		
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 1I 3H

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	N/A	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			500,000
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		X		
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		X		

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

2016

This Form is Open to Public Inspection

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

▶ **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
The Erachem Comilog, Inc. Baltimore Plant Barg. Unit Ees' Pension Plan

B Three-digit plan number (PN) ▶ 003

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF
Erachem Comilog, Inc.

D Employer Identification Number (EIN)
52-1272156

E Type of plan: [X] Single [ ] Multiple-A [ ] Multiple-B

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

Part I Basic Information

1 Enter the valuation date: Month 01 Day 01 Year 2016

2 Assets:

a Market value	**2a**	7,057,101
b Actuarial value	**2b**	7,364,584

3 Funding target/participant count breakdown

	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	51	4,121,626	4,121,626
b For terminated vested participants	21	804,909	804,909
c For active participants	15	1,364,159	1,421,987
d Total	87	6,290,694	6,348,522

4 If the plan is in at-risk status, check the box and complete lines (a) and (b) [ ]

a Funding target disregarding prescribed at-risk assumptions	**4a**	
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	**4b**	
5 Effective interest rate	**5**	5.99%
6 Target normal cost	**6**	107,001

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

Emily S. Adkins ESA
Signature of actuary

9/26/17
Date

Emily S. Adkins
Type or print name of actuary

1707401
Most recent enrollment number

Towers Watson Delaware Inc.
Firm name

216-937-4000
Telephone number (including area code)

1001 Lakeside Avenue, Suite 1500
Cleveland OH 44114
Address of the firm

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

Part II Beginning of Year Carryover and Prefunding Balances

		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	0
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	0
10	Interest on line 9 using prior year's actual return of -3.30%	0	0
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		0
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of 6.19%		0
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
	c Total available at beginning of current plan year to add to prefunding balance		0
	d Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	0

Part III Funding Percentages

14	Funding target attainment percentage	14	116.00%
15	Adjusted funding target attainment percentage	15	116.00%
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	117.82%
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:

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

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

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

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? [ ] Yes [X] No

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

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

Liquidity shortfall as of end of quarter of this plan year

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

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

21 Discount rate:

a Segment rates:

1st segment:	2nd segment:	3rd segment:	
4.43 %	5.91 %	6.65%	☐ N/A, full yield curve used

b Applicable month (enter code)	**21b**	4
22 Weighted average retirement age	**22**	62

23 Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment ☐ Yes ☒ No

25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment ☐ Yes ☒ No

26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment ☒ Yes ☐ No

27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	**27**	

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	**28**	
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	**29**	
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**	107,001
b Excess assets, if applicable, but not greater than line 31a	**31b**	107,001

32 Amortization installments:	Outstanding Balance	Installment
a Net shortfall amortization installment	0	0
b Waiver amortization installment	0	0

33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	**33**	
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	**34**	0

	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	0	0

36 Additional cash requirement (line 34 minus line 35)	**36**	0
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	0
38 Present value of excess contributions for current year (see instructions)		
a Total (excess, if any, of line 37 over line 36)	**38a**	0
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	**38b**	0
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	**39**	0
40 Unpaid minimum required contributions for all years	**40**	0

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

41 If an election was made to use PRA 2010 funding relief for this plan:

a Schedule elected ☐ 2 plus 7 years ☐ 15 years

b Eligible plan year(s) for which the election in line 41a was made ☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011

42 Amount of acceleration adjustment	**42**	0
43 Excess installment acceleration amount to be carried over to future plan years	**43**	0