



- 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
- 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
- If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 550131. (See instructions.)

<b>Part III Financial Information</b>			
<b>7</b> Plan Assets and Liabilities		<b>(a) Beginning of Year</b>	<b>(b) End of Year</b>
<b>a</b> Total plan assets .....	<b>7a</b>	1551284	1711028
<b>b</b> Total plan liabilities .....	<b>7b</b>		
<b>c</b> Net plan assets (subtract line 7b from line 7a) .....	<b>7c</b>	1551284	1711028
<b>8</b> Income, Expenses, and Transfers for this Plan Year		<b>(a) Amount</b>	<b>(b) Total</b>
<b>a</b> Contributions received or receivable from:			
<b>(1)</b> Employers .....	<b>8a(1)</b>	109235	
<b>(2)</b> Participants .....	<b>8a(2)</b>		
<b>(3)</b> Others (including rollovers) .....	<b>8a(3)</b>		
<b>b</b> Other income (loss) .....	<b>8b</b>	137461	
<b>c</b> Total income (add lines 8a(1), 8a(2), 8a(3), and 8b) .....	<b>8c</b>		246696
<b>d</b> Benefits paid (including direct rollovers and insurance premiums to provide benefits) .....	<b>8d</b>	37545	
<b>e</b> Certain deemed and/or corrective distributions (see instructions) .	<b>8e</b>		
<b>f</b> Administrative service providers (salaries, fees, commissions) .....	<b>8f</b>	39516	
<b>g</b> Other expenses .....	<b>8g</b>	9891	
<b>h</b> Total expenses (add lines 8d, 8e, 8f, and 8g) .....	<b>8h</b>		86952
<b>i</b> Net income (loss) (subtract line 8h from line 8c) .....	<b>8i</b>		159744
<b>j</b> Transfers to (from) the plan (see instructions) .....	<b>8j</b>		

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

<b>Part V Compliance Questions</b>				
<b>10</b> During the plan year:		<b>Yes</b>	<b>No</b>	<b>Amount</b>
<b>a</b> Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program) .....	<b>10a</b>		X	
<b>b</b> Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.) .....	<b>10b</b>		X	
<b>c</b> Was the plan covered by a fidelity bond? .....	<b>10c</b>	X		15000000
<b>d</b> Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty? .....	<b>10d</b>		X	
<b>e</b> 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.) .....	<b>10e</b>		X	
<b>f</b> Has the plan failed to provide any benefit when due under the plan? .....	<b>10f</b>		X	
<b>g</b> Did the plan have any participant loans? (If "Yes," enter amount as of year-end.) .....	<b>10g</b>		X	
<b>h</b> If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.) .....	<b>10h</b>			
<b>i</b> 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 .....	<b>10i</b>			

**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 lines 11a and b below.) If this is a defined contribution pension plan, leave line 11 blank and complete line 12 below.  Yes  No

**a** Enter the unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 ..... **11a** 0

**b PBGC missed contribution reporting requirements.** If the plan is covered by PBGC and the amount reported on line 11a is greater than \$0, has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:  
 Yes.  
 No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date.  
 No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date.  
 No. Other. Provide explanation \_\_\_\_\_

**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.) If this is a defined benefit pension plan, leave line 12 blank and complete line 11 above.

**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

**a** 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)	13c(3) PN(s)

**Part VIII IRS Compliance Questions**

**14a** Does the plan satisfy the coverage and nondiscrimination tests of Code sections 410(b) and 401(a)(4) by combining this plan with any other plans under the permissive aggregation rules?  Yes  No

**14b** If this is a Code section 401(k) plan, check all boxes that apply to indicate how the plan is intended to satisfy the nondiscrimination requirements for employee deferrals and employer matching contributions (as applicable) under Code sections 401(k)(3) and 401(m)(2).  
 Design-based safe harbor method  
 "Prior year" ADP test  
 "Current year" ADP test  
 N/A

**15** If the plan sponsor is an adopter of a pre-approved plan that received a favorable IRS Opinion Letter, enter the date of the Opinion Letter \_\_\_/\_\_\_/\_\_\_ (MM/DD/YYYY) and the Opinion Letter serial number \_\_\_\_\_.

<b>SCHEDULE SB</b> <b>(Form 5500)</b>  <small>Department of the Treasury Internal Revenue Service</small>  <small>Department of Labor Employee Benefits Security Administration</small>  <small>Pension Benefit Guaranty Corporation</small>	<b>Single-Employer Defined Benefit Plan</b> <b>Actuarial Information</b>  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).  <b>▶ File as an attachment to Form 5500 or 5500-SF.</b>	<small>OMB No. 1210-0110</small>  <b>2024</b>  <b>This Form is Open to Public Inspection</b>
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For calendar plan year 2024 or fiscal plan year beginning 01/01/2024 and ending 12/31/2024

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

<b>A</b> Name of plan <u>THE PENSION PLAN FOR CERTAIN UNIONIZED EMPLOYEES OF MINTEQ INT.</u>	<b>B</b> Three-digit plan number (PN) ▶	<u>003</u>
<b>C</b> Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF <u>MINTEQ INTERNATIONAL INC.</u>	<b>D</b> Employer Identification Number (EIN) <u>13-3678718</u>	
<b>E</b> Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	<b>F</b> Prior year plan size: <input type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input checked="" type="checkbox"/> More than 500	

**Part I Basic Information**

<b>1</b>	Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2024</u>		
<b>2</b>	Assets:		
	<b>a</b> Market value .....	<b>2a</b>	<u>1546370</u>
	<b>b</b> Actuarial value .....	<b>2b</b>	<u>1590733</u>
<b>3</b>	Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target
	<b>a</b> For retired participants and beneficiaries receiving payment .....	<u>8</u>	<u>414682</u>
	<b>b</b> For terminated vested participants .....	<u>46</u>	<u>496694</u>
	<b>c</b> For active participants .....	<u>23</u>	<u>831859</u>
	<b>d</b> Total .....	<u>77</u>	<u>1743235</u>
<b>4</b>	If the plan is in at-risk status, check the box and complete lines (a) and (b)..... <input type="checkbox"/>		
	<b>a</b> Funding target disregarding prescribed at-risk assumptions .....	<b>4a</b>	
	<b>b</b> Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor .....	<b>4b</b>	
<b>5</b>	Effective interest rate .....	<b>5</b>	<u>5.29 %</u>
<b>6</b>	Target normal cost		
	<b>a</b> Present value of current plan year accruals .....	<b>6a</b>	<u>44770</u>
	<b>b</b> Expected plan-related expenses .....	<b>6b</b>	<u>40766</u>
	<b>c</b> Target normal cost .....	<b>6c</b>	<u>85536</u>

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

<b>SIGN HERE</b>		
	Signature of actuary	<u>08/28/2025</u>
	<u>NORMAN E. YAMAMOTO</u>	Date
	Type or print name of actuary	<u>23-04754</u>
	<u>USI CONSULTING GROUP</u>	Most recent enrollment number
	Firm name	<u>860-856-2067</u>
	<u>95 GLASTONBURY BOULEVARD</u> <u>SUITE 102</u> <u>GLASTONBURY, CT 06033</u>	Telephone number (including area code)
	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

<b>Part II Beginning of Year Carryover and Prefunding Balances</b>		(a) Carryover balance	(b) Prefunding balance
<b>7</b>	Balance at beginning of prior year after applicable adjustments (line 13 from prior year) .....	0	258
<b>8</b>	Portion elected for use to offset prior year's funding requirement (line 35 from prior year) .....	0	0
<b>9</b>	Amount remaining (line 7 minus line 8) .....	0	258
<b>10</b>	Interest on line 9 using prior year's actual return of <u>11.20</u> % .....	0	29
<b>11</b>	Prior year's excess contributions to be added to prefunding balance:		
	<b>a</b> Present value of excess contributions (line 38a from prior year) .....		114054
	<b>b(1)</b> Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>5.44</u> % .....		6205
	<b>b(2)</b> Interest on line 38b from prior year Schedule SB, using prior year's actual return .....		0
	<b>c</b> Total available at beginning of current plan year to add to prefunding balance .....		120259
	<b>d</b> Portion of (c) to be added to prefunding balance .....		0
<b>12</b>	Other reductions in balances due to elections or deemed elections .....	0	0
<b>13</b>	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12) .....	0	287

<b>Part III Funding Percentages</b>			
<b>14</b>	Funding target attainment percentage .....	<b>14</b>	90.25 %
<b>15</b>	Adjusted funding target attainment percentage .....	<b>15</b>	90.25 %
<b>16</b>	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement .....	<b>16</b>	88.28 %
<b>17</b>	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage .....	<b>17</b>	%

<b>Part IV Contributions and Liquidity Shortfalls</b>		<b>18 Contributions made to the plan for the plan year by employer(s) and employees:</b>					
(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		
04/02/2024	27510	0					
07/02/2024	23575	0					
09/30/2024	23575	0					
01/03/2025	23575	0					
08/07/2025	11000	0					
			<b>Totals ▶</b>	<b>18(b)</b>	109235	<b>18(c)</b>	0

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

<b>a</b> Contributions allocated toward unpaid minimum required contributions from prior years .....	<b>19a</b>	0
<b>b</b> Contributions made to avoid restrictions adjusted to valuation date .....	<b>19b</b>	0
<b>c</b> Contributions allocated toward minimum required contribution for current year adjusted to valuation date .....	<b>19c</b>	105332

**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

<b>Part V Assumptions Used to Determine Funding Target and Target Normal Cost</b>			
<b>21</b> Discount rate:			
<b>a</b> Segment rates:	1st segment: 4.75 %	2nd segment: 4.87 %	<input type="checkbox"/> N/A, full yield curve used
<b>b</b> Applicable month (enter code) .....			<b>21b</b> 4
<b>22</b> Weighted average retirement age .....			<b>22</b> 65
<b>23</b> Mortality table(s) (see instructions)	<input checked="" type="checkbox"/> Prescribed - combined <input type="checkbox"/> Prescribed - separate <input type="checkbox"/> Substitute		

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

<b>Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years</b>			
<b>28</b> Unpaid minimum required contributions for all prior years .....	<b>28</b>	0	
<b>29</b> Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a).....	<b>29</b>	0	
<b>30</b> Remaining amount of unpaid minimum required contributions (line 28 minus line 29).....	<b>30</b>	0	

<b>Part VIII Minimum Required Contribution For Current Year</b>			
<b>31</b> Target normal cost and excess assets (see instructions):			
<b>a</b> Target normal cost (line 6c) .....	<b>31a</b>	85536	
<b>b</b> Excess assets, if applicable, but not greater than line 31a .....	<b>31b</b>	0	
<b>32</b> Amortization installments:	Outstanding Balance	Installment	
<b>a</b> Net shortfall amortization installment .....	171711	19221	
<b>b</b> Waiver amortization installment.....	0	0	
<b>33</b> If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount .....	<b>33</b>		
<b>34</b> Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33).....	<b>34</b>	104757	
	Carryover balance	Prefunding balance	Total balance
<b>35</b> Balances elected for use to offset funding requirement .....			0
<b>36</b> Additional cash requirement (line 34 minus line 35) .....	<b>36</b>	104757	
<b>37</b> Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c) .....	<b>37</b>	105332	
<b>38</b> Present value of excess contributions for current year (see instructions)			
<b>a</b> Total (excess, if any, of line 37 over line 36)	<b>38a</b>	575	
<b>b</b> Portion included in line 38a attributable to use of prefunding and funding standard carryover balances.....	<b>38b</b>	0	
<b>39</b> Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37) .....	<b>39</b>	0	
<b>40</b> Unpaid minimum required contributions for all years .....	<b>40</b>	0	

<b>Part IX Pension Funding Relief Under the American Rescue Plan Act of 2021 (See Instructions)</b>			
<b>41</b> If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies. <input checked="" type="checkbox"/> 2019 <input type="checkbox"/> 2020 <input type="checkbox"/> 2021			

**Attachment to Schedule SB (2024 Form 5500)  
Line 26 - Schedule of Active Participant Data**

**The Pension Plan for Certain Unionized Employees of Minteq Int.**  
EIN: 13-3678718    PN: 003

Attained Age	Completed 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 and 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																				
25 to 29																				
30 to 34							3													
35 to 39							3		1											
40 to 44									1											
45 to 49							1				1									
50 to 54							1		1											
55 to 59							1		2		2									
60 to 64							1		1		3									
65 to 69							1													
70 & over																				

## Description of Actuarial Methods

### Asset Valuation Method

The Actuarial Value of assets used in the development of plan contributions phases in recognition of the difference between the actual return on Market Value and the expected return on Market Value over a three-year period at 33.33% per year. The Actuarial Value is adjusted, if necessary, to comply with the IRC Sec. 430 requirement that the Actuarial Value of assets be within the range of 90% to 110% of the Market Value of assets. This method is equivalent to the smoothed market value method without phase-in described in Approval 3.16 of Revenue Procedure 2000-40. This was first used for the 2009 valuation.

### Actuarial Cost Method

Funding Target Liability: Unit Credit Actuarial Cost Method.

Maximum Liability: Projected Unit Credit Actuarial Cost Method. The allocation of projected benefits between past years and future years is in proportion to the applicable rates of benefit accrual under the Plan.

## Description of Actuarial Assumptions

### Changes in Actuarial Assumptions as of January 1, 2024

The valuation reflects changes in the actuarial assumptions listed below. (The assumptions used before and after these changes are more fully described in the next section.)

- Mortality

With the exception of the valuation interest rate, the assumptions indicated were changed to represent the Enrolled Actuary's current best estimate of anticipated experience of the Plan.

### Interest Rates

The American Rescue Plan Act of 2021 (ARPA) was signed into law on March 11, 2021. ARPA continues to use a 24-month bond averaging period methodology for determining the segmented interest rates used in the calculation of the Plan's target liability and a corridor based on a 25-year bond averaging period. However, now the corridor based on 25-year average segment rates and the applicable minimum and maximum percentages used for purposes of calculating the Plan's target liability to adjust the 24-month average segment rates has been extended. In addition, any 25-year average segment rate that is less than 5% is deemed to be 5%.

The Infrastructure Investment and Jobs Act was signed into law on November 15, 2021 that further extended funding stabilization. The corridors under the new laws are as follows:

<u>Corridor After ARPA</u>		<u>Corridor after Infrastructure Investment and Jobs Act</u>	
<u>Years</u>	<u>Corridor</u>	<u>Years</u>	<u>Corridor</u>
2020-2021	95% to 105% if not deferred	2020-2021	95% to 105% if not deferred
2022-2025	95%-105%	2022-2030	95%-105%
2026	90%-110%	2031	90%-110%
2027	85%-115%	2032	85%-115%
2028	80%-120%	2033	80%-120%
2029	75%-125%	2034	75%-125%
2030+	70%-130%	2035+	70%-130%

The corridor rates are used for purposes of the calculation of the Plan's minimum required contribution and the determination of the Plan's AFTAP certification, but cannot be reflected in the calculation of the Plan's maximum tax deductible contribution or the PBGC variable premium liability. This report reflects the rates under ARPA as allowed under current legislation.

Valuation: Segment rates for the 4<sup>th</sup> month preceding the Valuation Date (i.e., September). The rates are shown below.

Segment	2024		2023	
	Before Adjustment	After Adjustment	Before Adjustment	After Adjustment
1st	3.62%	4.75%	1.41%	4.75%
2nd	4.46%	4.87%	3.09%	5.00%
3rd	4.52%	5.59%	3.58%	5.74%

The rates before adjustment are the standard 24-month segment rates determined under any prior interest rate relief laws. They are used in the determination of the Plan's maximum tax deductible contribution.

**Interest Rates (cont.)**

The rates after adjustment reflect the application of the applicable corridor around the 25-year average rates. They are used in the determination of the Plan’s minimum required contribution and AFTAP for benefit restriction purposes.

PBGC premium: PBGC spot segment rates for the month preceding the premium payment year. This method was last elected for the 2023 plan year. The rates are shown below.

	2024	2023
1 <sup>st</sup> segment	5.01%	4.84%
2 <sup>nd</sup> segment	5.13%	5.15%
3 <sup>rd</sup> segment	5.15%	4.85%

Prior to the 2023 plan year, the PBGC premium method used the 24-month segment rates before adjustment.

**Expected Return for Asset Smoothing**

Year	Assumption	Not to Exceed
2024	6.50%	5.59%
2023	6.50%	5.74%
2022	6.75%	5.92%
2021	6.75%	6.11%

The expected long-term rate of return on assets is estimated using the Plan Sponsor’s long-term target asset allocation and the long-term capital market assumption for each asset class in that allocation.

**Mortality**

Pri-2012 Mortality Table projected to valuation date with an adjusted version of Scale MP-2021. Separate tables for annuitants and non-annuitants.

Prior: RP-2014 Adjusted to 2006 Total Dataset Mortality Table projected to valuation date with Scale MP-2021. Combined tables for annuitants and non-annuitants.

**Mortality Improvement**

Projected to date of decrement using an adjusted version of Scale MP-2021 (generational).

Prior: RP-2014 Adjusted to 2006 Total Dataset Mortality Table projected to valuation date with Scale MP-2021. Combined tables for annuitants and non-annuitants.

The mortality assumption above was updated to the latest approved table. The change in assumption decreased liabilities by about 1.0%.

**Inflation**

2.40%.

This assumption is consistent with the Social Security Administration's current best estimate of the ultimate long-term (75-year horizon) annual percentage increase in CPI, as published in the 2023 OASDI Trustees Report.

**Salary Scale (including inflation)**

N/A.

**Increases in IRC Sec. 401(a)(17) compensation limit**

As required by law, no increases are assumed.

**Increases in IRC Sec. 415(b) limit on benefits**

As required by law, no increases are assumed.

**Retirement**

100% at greatest of age 65, age at fifth anniversary of date of participation, and age on valuation date.

**Termination prior to retirement**

Sample rates:

Age	Rate
20	10.97%
25	8.31
30	6.22
35	4.66
40	3.62
45	2.81
50	2.11
55	1.68
60	1.74

The actuarial assumption in regards to rates of termination shown above is based on a Buck Withdrawal Table used by the prior actuary.

**Disability**

Sample rates:

Age	Rate
20	.07%
25	.08
30	.10
35	.13
40	.17
45	.25
50	.42
55	.76
60	1.50

The actuarial assumption in regards to disability rates shown above is based on a Buck Disability Table used by the prior actuary.

**Administrative expenses**

As prescribed by the IRS, estimated administrative expenses have been added to the target normal cost.

Administrative expenses are estimated to be 103% of prior year fees, excluding those for non-recurring events, plus estimated PBGC premiums.

**Percent of active employees married**

100%.

**Spouse's age**

Husbands are assumed to be 4 years older than wives.

<b>SCHEDULE SB</b> <b>(Form 5500)</b>  <small>Department of the Treasury Internal Revenue Service</small>  <small>Department of Labor Employee Benefits Security Administration</small>  <small>Pension Benefit Guaranty Corporation</small>	<b>Single-Employer Defined Benefit Plan</b> <b>Actuarial Information</b>  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).  <b>▶ File as an attachment to Form 5500 or 5500-SF.</b>	OMB No. 1210-0110  <b>2024</b>  <b>This Form is Open to Public Inspection</b>
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For calendar plan year 2024 or fiscal plan year beginning 01/01/2024 and ending 12/31/2024


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

<b>A</b> Name of plan THE PENSION PLAN FOR CERTAIN UNIONIZED EMPLOYEES OF MINTEQ INT.	<b>B</b> Three-digit plan number (PN) ▶	003
<b>C</b> Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF MINTEQ INTERNATIONAL INC.	<b>D</b> Employer Identification Number (EIN) 13-3678718	
<b>E</b> Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	<b>F</b> Prior year plan size: <input type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input checked="" type="checkbox"/> More than 500	

**Part I Basic Information**

<b>1</b>	Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2024</u>		
<b>2</b>	Assets:		
	<b>a</b> Market value .....	<b>2a</b>	1,546,370
	<b>b</b> Actuarial value .....	<b>2b</b>	1,590,733
<b>3</b>	Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target
	<b>a</b> For retired participants and beneficiaries receiving payment .....	8	414,682
	<b>b</b> For terminated vested participants .....	46	496,694
	<b>c</b> For active participants .....	23	831,859
	<b>d</b> Total .....	77	1,743,235
<b>4</b>	If the plan is in at-risk status, check the box and complete lines (a) and (b)..... <input type="checkbox"/>		
	<b>a</b> Funding target disregarding prescribed at-risk assumptions .....	<b>4a</b>	
	<b>b</b> Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor .....	<b>4b</b>	
<b>5</b>	Effective interest rate .....	<b>5</b>	5.29%
<b>6</b>	Target normal cost		
	<b>a</b> Present value of current plan year accruals .....	<b>6a</b>	44,770
	<b>b</b> Expected plan-related expenses .....	<b>6b</b>	40,766
	<b>c</b> Target normal cost .....	<b>6c</b>	85,536

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

<b>SIGN HERE</b>	 Signature of actuary	<u>08/28/2025</u> Date
	<u>Norman E. Yamamoto</u> Type or print name of actuary	<u>2304754</u> Most recent enrollment number
	<u>USI Consulting Group</u> Firm name	<u>860-856-2067</u> Telephone number (including area code)
	<u>95 Glastonbury Boulevard Suite 102 Glastonbury CT 06033</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 V Assumptions Used to Determine Funding Target and Target Normal Cost**

**21** Discount rate:

**a** Segment rates:

1st segment: 4.75 %	2nd segment: 4.87 %	3rd segment: 5.59 %	<input type="checkbox"/> N/A, full yield curve used
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**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** Demographic and benefit information

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

**b** Is the plan required to provide a projection of expected benefit payments? 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 6c)..... **31a** 85,536

**b** Excess assets, if applicable, but not greater than line 31a ..... **31b** 0

**32** Amortization installments:

	Outstanding Balance	Installment
<b>a</b> Net shortfall amortization installment .....	171,711	19,221
<b>b</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** 104,757

	Carryover balance	Prefunding balance	Total balance
<b>35</b> Balances elected for use to offset funding requirement .....			0
<b>36</b> Additional cash requirement (line 34 minus line 35).....			104,757
<b>37</b> Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....			105,332

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

**a** Total (excess, if any, of line 37 over line 36) ..... **38a** 575

**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 the American Rescue Plan Act of 2021 (See Instructions)**

**41** If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies.  2019  2020  2021

## Summary of Plan Provisions

*This exhibit summarizes the major provisions of the Plan. It is not intended to be, nor should it be interpreted as a complete statement of all plan provisions. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.*

### Effective date

Original - January 1, 2002.

Latest Restatement - January 1, 2013.

Latest Amendment – June 13, 2014.

Per the Collective Bargaining Agreement for the Minteq Employees at Arcelor Mittel Cleveland effective 10/1/2019 – Monthly amount per year of Creditable Service has been increased to \$28.00 for the life of the contract.

Per the Collective Bargaining Agreement with the International Union of Operating Engineers Local 150 AFL-CIO (Northwest Indiana Union) effective May 1, 2019 – Monthly amount per year of Creditable Service has been increased to \$31.00 for the life of the contract.

### Plan year

The calendar year.

### Participation

An employee becomes a plan participant the later of the effective date of this plan or date of employment, provided they are members of:

- United Steel Workers of America, Local #2659-169 at the River Rouge Michigan Plant, (closed 4/30/2004),
- International Union of Operating Engineers, Local 150, AFL-CIO with the former Martin Marietta Magnesia Specialties, Inc. (closed to new participants and rehires 9/6/2013),
- Northwest Indiana Unionized Employees (closed to new participants and rehires 1/1/2011), or
- The United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers' International Union Local 979.4 at Mittel Cleveland (hired after 10/1/2005 and closed to new participants and rehires 10/1/2010).

### Vesting service (for vesting)

Each calendar year and portion thereof, beginning for Martin Marietta Specialty at date of hire; for all others beginning at later of date of hire or May 1, 2001, based on the following table:

<u>Hours of Service during a calendar year</u>	<u>Vesting Service for such calendar year</u>
1000 or more	1 year
850 but not 1000	5/10 year
680 but not 850	4/10 year
450 but not 680	3/10 year
less than 450	none

**Credited service (for benefit accrual)**

Calendar years from later of date of employment or May 1, 2001 to date of termination, and parts thereof, based on the following table:

<u>Hours of Service during a calendar year</u>	<u>Credited Service for such calendar year</u>
1700 or more	1 year
1530 but not 1700	9/10 year
1360 but not 1530	8/10 year
1190 but not 1360	7/10 year
1020 but not 1190	6/10 year
850 but not 1020	5/10 year
680 but not 850	4/10 year
450 but not 680	3/10 year
less than 450	none

**Accrued benefit**

Based on the following table:

	<u>Effective Date</u>	<u>Monthly Amount per Year of Creditable Service</u>
River Rouge:	9/1/2001	\$20.50
	9/1/2002	\$21.00
Martin Marietta Specialties:	5/1/2002	\$23.00
	5/4/2003	\$24.00
	5/4/2006	\$25.00
	5/4/2007	\$26.00
	5/4/2008	\$27.00
	5/4/2009	\$28.00
	5/4/2010	\$29.00
	5/4/2011	\$30.00
	5/4/2012	\$31.00
Northwest Indiana Union:	10/1/2001	\$23.00
	6/1/2006	\$24.00
	1/1/2008	\$25.00
	1/1/2010	\$26.00
	5/1/2019	\$31.00
Mittal Cleveland	10/1/2005	\$23.00
	10/1/2010	\$23.50
	10/1/2011	\$24.00
	10/1/2012	\$24.50
	10/1/2013	\$25.00
	10/1/2014	\$25.50
	10/1/2015	\$26.00
	10/1/2016	\$26.50
	10/1/2017	\$27.00
	10/1/2018	\$27.50
	10/1/2019	\$28.00

### **Normal retirement**

Eligibility - The first day of the month following the later of age 65, or fifth anniversary of participation in the plan.

Benefit - Accrued benefit as of normal retirement date.

### **Early retirement**

Eligibility - The first day of the month following the later of age 55 and 10 years of credited service.

Benefit - Accrued benefit as of early retirement date.

Reduction factors -  $\frac{1}{2}$  of 1% for each month the annuity starting date precedes Normal Retirement Date.

### **Late retirement benefit**

Greater of: Accrued benefit as of late retirement date, or the actuarial equivalent of the normal retirement benefit.

### **Termination prior to retirement**

Vesting schedule - 100% after completion of 5 years of vesting service.

Benefit - Vested portion of accrued benefit as of date of termination, first payable upon normal retirement eligibility. Earlier benefit commencement may be elected, subject to early retirement eligibility and reduction factors.

### **Death prior to retirement**

Eligibility - Completion of 5 years of vesting service. Must be married.

Benefit - Surviving spouse's benefit is 50% of the benefit that would have been payable to the participant if the participant had: (1) terminated immediately before death, (2) elected to retire at earliest retirement eligibility, or date of death if later, and (3) elected a 50% joint and survivor annuity. The surviving spouse's benefit is first payable on the date that would have been the participant's earliest retirement date. If the participant had already satisfied early retirement eligibility, the surviving spouse's benefit is payable immediately.

### **Disability retirement**

Eligibility - Completion of 15 years of creditable service and become totally and permanently disabled.

Benefit - The monthly disability benefit payable is the accrued benefit as of date of disability retirement reduced by disability benefits from other plans.

### **Form of benefit**

Normal form - Life annuity. For married participants, payable as an actuarially equivalent 50% joint and survivor annuity.

Optional forms - Life annuity, 75%, 66  $\frac{2}{3}$  % or 50% joint and survivor annuity.

Automatic lump sum - Payable immediately, without participant or spousal consent, if the present value is \$1,000 or less.

### **Actuarial equivalence for optional forms and early retirement**

Interest - 5.5% per year.

<b>Schedule SB, line 32 – Schedule of Amortizations Bases</b>				
<b>Date Established</b>	<b>Type of Base</b>	<b>Amortization Installment</b>	<b>Years Remaining</b>	<b>Present Value of Remaining Installments as of 1/1/2024</b>
1/1/2019	Shortfall	15,147	10	123,586
1/1/2020	Shortfall	(2,142)	11	(18,808)
1/1/2021	Shortfall	1,929	12	18,081
1/1/2022	Shortfall	(7,364)	13	(73,187)
1/1/2023	Shortfall	11,720	14	122,796
1/1/2024	Shortfall	(69)	15	(757)
<b>Total</b>		19,221		171,711