

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

2024

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2024 or fiscal plan year beginning 01/01/2024 and ending 12/31/2024

- A This return/report is for: [X] a single-employer plan [] a multiple-employer plan (not multiemployer) (Pension Plan filers checking this box must attach Schedule MEP. Other plans must attach a list of participating employer information in accordance with the form instructions.)
B This return/report is [] the first return/report [] the final return/report [] an amended return/report [] a short plan year return/report (less than 12 months)
C Check box if filing under: [] Form 5558 [] automatic extension [] DFVC program [] special extension (enter description)
D If the plan is a collectively-bargained plan, check here []
E If this is a retroactively adopted plan permitted by SECURE Act section 201, check here []

Part II Basic Plan Information—enter all requested information

1a Name of plan: CAROLINA CRYOGENICS CO., INC. DEFINED BENEFIT PLAN
1b Three-digit plan number (PN): 001
1c Effective date of plan: 01/01/1998
2a Plan sponsor's name (employer, if for a single-employer plan): CAROLINA CRYOGENICS COMPANY, INC.
2b Employer Identification Number (EIN): 57-0909989
2c Sponsor's telephone number: 864-833-4051
2d Business code (see instructions): 621510
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 or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report.
4b EIN
4d PN
5a Total number of participants at the beginning of the plan year: 3
5b Total number of participants at the end of the plan year: 3
5c(1) Number of participants with account balances as of the beginning of the plan year (only defined contribution plans complete this item)
5c(2) Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)
5d(1) Total number of active participants at the beginning of the plan year: 3
5d(2) Total number of active participants at the end of the plan year: 3
5e Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested: 0

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.

Table with 4 columns: SIGN HERE, Signature of plan administrator, Date, Enter name of individual signing as plan administrator. Row 1: Filed with authorized/valid electronic signature, 02/11/2025, J. RUTLEDGE JACKS. Row 2: Signature of employer/plan sponsor, Date, Enter name of individual signing as employer or plan sponsor.

- 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 _____ (See instructions.)

| Part III Financial Information | | | |
|--|--------------|------------------------------|------------------------|
| 7 Plan Assets and Liabilities | | (a) Beginning of Year | (b) End of Year |
| a Total plan assets | 7a | 745524 | 881281 |
| b Total plan liabilities | 7b | 0 | 0 |
| c Net plan assets (subtract line 7b from line 7a) | 7c | 745524 | 881281 |
| 8 Income, Expenses, and Transfers for this Plan Year | | (a) Amount | (b) Total |
| a Contributions received or receivable from: | | | |
| (1) Employers | 8a(1) | 67115 | |
| (2) Participants | 8a(2) | 0 | |
| (3) Others (including rollovers) | 8a(3) | 0 | |
| b Other income (loss) | 8b | 68647 | |
| c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b) | 8c | | 135762 |
| d Benefits paid (including direct rollovers and insurance premiums to provide benefits) | 8d | 0 | |
| e Certain deemed and/or corrective distributions (see instructions) . | 8e | 0 | |
| f Administrative service providers (salaries, fees, commissions) | 8f | 5 | |
| g Other expenses | 8g | 0 | |
| h Total expenses (add lines 8d, 8e, 8f, and 8g) | 8h | | 5 |
| i Net income (loss) (subtract line 8h from line 8c) | 8i | | 135757 |
| j Transfers to (from) the plan (see instructions) | 8j | 0 | |

| Part IV Plan Characteristics | |
|-------------------------------------|--|
| 9a | If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristic Codes in the instructions: 1A 3D |
| b | If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic Codes in the instructions: |

| Part V Compliance Questions | | | | |
|---|------------|------------|-----------|---------------|
| 10 During the plan year: | | Yes | No | Amount |
| a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (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 | | 75000 |
| 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 | | | |

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? (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. Yes 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 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 02 / 28 / 2023 (MM/DD/YYYY) and the Opinion Letter serial number Q705060A.

| | | |
|---|--|--|
| SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small> | Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500 or 5500-SF. | <small>OMB No. 1210-0110</small> 2024 This Form is Open to Public Inspection |
|---|--|--|

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.

| | | |
|---|---|------------|
| A Name of plan <u>CAROLINA CRYOGENICS CO., INC. DEFINED BENEFIT PLAN</u> | B Three-digit plan number (PN) ▶ | <u>001</u> |
| C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF <u>CAROLINA CRYOGENICS COMPANY, INC.</u> | D Employer Identification Number (EIN) <u>57-0909989</u> | |
| E Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B | F Prior year plan size: <input checked="" type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input type="checkbox"/> More than 500 | |

| | | | |
|---|----------------------------|---------------------------|--------------------------|
| Part I Basic Information | | | |
| 1 Enter the valuation date: | Month <u>12</u> | Day <u>31</u> | Year <u>2024</u> |
| 2 Assets: | | | |
| a Market value | 2a | <u>814166</u> | |
| b Actuarial value | 2b | <u>814166</u> | |
| 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 | <u>0</u> | <u>0</u> | <u>0</u> |
| b For terminated vested participants | <u>0</u> | <u>0</u> | <u>0</u> |
| c For active participants | <u>3</u> | <u>826760</u> | <u>826760</u> |
| d Total | <u>3</u> | <u>826760</u> | <u>826760</u> |
| 4 If the plan is in at-risk status, check the box and complete lines (a) and (b)..... <input type="checkbox"/> | | | |
| a Funding target disregarding prescribed at-risk assumptions | 4a | | |
| b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor | 4b | | |
| 5 Effective interest rate | 5 | <u>5.51 %</u> | |
| 6 Target normal cost | | | |
| a Present value of current plan year accruals | 6a | <u>60397</u> | |
| b Expected plan-related expenses | 6b | <u>0</u> | |
| c Target normal cost | 6c | <u>60397</u> | |

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

| | | | |
|---|-------------------------------|---------------------|--|
| SIGN HERE | | <u>02/10/2025</u> | |
| | Signature of actuary | Date | |
| <u>ALLEN L. GREEN</u> | Type or print name of actuary | <u>23-03439</u> | Most recent enrollment number |
| <u>NATIONAL ACTUARIAL SERVICES</u> | Firm name | <u>530-692-3279</u> | Telephone number (including area code) |
| <u>PO BOX 240</u> <u>OREGON HOUSE, CA 95962-0240</u> | Address of the firm | | |

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

| Part II Beginning of Year Carryover and Prefunding Balances | | (a) Carryover balance | (b) Prefunding balance |
|--|--|-----------------------|------------------------|
| 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 <u>19.53</u> % | 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) | | 6590 |
| 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 <u>5.59</u> % | | 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 | | 6590 |
| 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 | 98.47 % |
| 15 | Adjusted funding target attainment percentage | 15 | 99.30 % |
| 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 | 94.15 % |
| 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 | | |
| 01/29/2025 | 67115 | 0 | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | Totals ▶ | 18(b) | 67115 | 18(c) | 0 |

| | | | |
|--|--|---|---------|
| 19 | Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year: | | |
| a | Contributions allocated toward unpaid minimum required contributions from prior years | 19a 0 | |
| b | Contributions made to avoid restrictions adjusted to valuation date | 19b 0 | |
| c | Contributions allocated toward minimum required contribution for current year adjusted to valuation date | 19c 65844 | |
| 20 | Quarterly contributions and liquidity shortfalls: | | |
| a | Did the plan have a "funding shortfall" for the prior year? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| b | If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| c | If line 20a is "Yes," see instructions and complete the following table as applicable: | | |
| Liquidity shortfall as of end of quarter of this plan year | | | |
| (1) 1st | (2) 2nd | (3) 3rd | (4) 4th |
| 0 | 0 | 0 | 0 |

| | | | |
|--|------------------------|------------------------|---|
| Part V Assumptions Used to Determine Funding Target and Target Normal Cost | | | |
| 21 Discount rate: | | | |
| a Segment rates: | 1st segment: 5.01 % | 2nd segment: 5.26 % | <input type="checkbox"/> N/A, full yield curve used |
| b Applicable month (enter code) | | | 21b 0 |
| 22 Weighted average retirement age | | | 22 65 |
| 23 Mortality table(s) (see instructions) <input checked="" type="checkbox"/> Prescribed - combined <input type="checkbox"/> Prescribed - separate <input type="checkbox"/> 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..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | |
| 25 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 | | | |
| 26 Demographic and benefit information | | | |
| a Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | |
| b 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 | | | |
| 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 | 60397 | |
| b Excess assets, if applicable, but not greater than line 31a | 31b | 0 | |
| 32 Amortization installments: | Outstanding Balance | Installment | |
| a Net shortfall amortization installment | 12594 | 1851 | |
| 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 | 62248 | |
| | 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 | 62248 | |
| 37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c) | 37 | 65844 | |
| 38 Present value of excess contributions for current year (see instructions) | | | |
| a Total (excess, if any, of line 37 over line 36) | 38a | 3596 | |
| 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. <input type="checkbox"/> 2019 <input type="checkbox"/> 2020 <input type="checkbox"/> 2021 | | | |

Schedule SB, Part V

Statement of Actuarial Assumptions/Methods

Carolina Cryogenics Co., Inc. Defined Benefit Plan
57-0909989 / 001

For the plan year 01/01/2024 through 12/31/2024

Valuation Date: 12/31/2024

Funding Method: As prescribed in IRC Section 430
Age - Eligibility age at last birthday and other ages at nearest birthday

Retrospective Compensation - Highest 3 consecutive years of service

Form of Payment - Assumed form of payment for funding is lump sum equivalent of normal form. Funding Target for lump sum is the greater of the present value of accrued benefit computed using funding segment rates and 417(e) Applicable Mortality Table or lump sum at the assumed retirement date of accrued benefit using plan actuarial equivalence discounted using appropriate segment rate. Lump sum on plan actuarial equivalence rates will not exceed 415 maximum allowable distribution, which is the lesser amount computed using a) 5.5% interest and the Applicable Mortality Table or b) the greater of plan actuarial equivalence interest and mortality or 417(e) Minimum

| Interest Rates - | Segment rates for the Valuation Date as permitted under IRC 430(h)(2)(C) | Segment rates as of September 30, 2023 As permitted under IRC 430(h)(2)(C)(iv)(II) - HATFA |
|------------------|--|--|
| | Segment # Year Rate % | Segment # Year Rate % |
| | Segment 1 0 - 5 5.01 | Segment 1 0 - 5 5.01 |
| | Segment 2 6 - 20 5.26 | Segment 2 6 - 20 5.26 |
| | Segment 3 > 20 5.36 | Segment 3 > 20 5.59 |

Pre-Retirement - Mortality Table - None
Improvement Scale - None
Early Retirement Table - None
Turnover Table - None
Disability Table - None
Salary Scale - None
Expense Load - None
Ancillary Ben Load - None

Post-Retirement - Mortality Table - 24C - 2024 Combined
Improvement Scale - None
Cost of Living - None
Lump Sum - G83 - 1983 Group Annuity blended 50.00% male and 50.00% female rates at 6%
or
24E - 2024 Applicable Mortality Table for 417(e) (unisex)

Asset Valuation Method: Fair market value of assets adjusted for contributions under IRC 430(g)(4)

Discrimination Test Assumptions:

HCE Determination - Based on all employees

Otherwise Excludable - Otherwise Excludable HCEs are included with the Not Otherwise Excludable employees

**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

2024

This Form is Open to Public Inspection

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.

| | | |
|---|---|-----|
| A Name of plan Carolina Cryogenics Co., Inc. Defined Benefit Plan | B Three-digit plan number (PN) ▶ | 001 |
| C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF Carolina Cryogenics Co., Inc. | D Employer Identification Number (EIN) 57-0909989 | |
| E Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B | | |
| F Prior year plan size: <input checked="" type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input type="checkbox"/> More than 500 | | |

Part I Basic Information

| | | | |
|----------|---|----------------------------|---------------------------|
| 1 | Enter the valuation date: Month <u>12</u> Day <u>31</u> Year <u>2024</u> | | |
| 2 | Assets: | | |
| | a Market value | 2a | 814,166 |
| | b Actuarial value | 2b | 814,166 |
| 3 | Funding target/participant count breakdown: | (1) Number of participants | (2) Vested Funding Target |
| | a For retired participants and beneficiaries receiving payment | 0 | 0 |
| | b For terminated vested participants | 0 | 0 |
| | c For active participants | 3 | 826,760 |
| | d Total | 3 | 826,760 |
| 4 | If the plan is in at-risk status, check the box and complete lines (a) and (b) | <input type="checkbox"/> | |
| | a Funding target disregarding prescribed at-risk assumptions | 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 | 5.51 % |
| 6 | Target normal cost | | |
| | a Present value of current plan year accruals | 6a | 60,397 |
| | b Expected plan-related expenses | 6b | 0 |
| | c Target normal cost | 6c | 60,397 |

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 | 02/10/2025 |
| | Allen L. Green | Date |
| | Type or print name of actuary | 23-03439 |
| | National Actuarial Services | Most recent enrollment number |
| | Firm name | (530) 692-3279 |
| | PO Box 240 | Telephone number (including area code) |
| | US Oregon House | |
| | CA 95962-0240 | |
| | 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 <u>19.53</u> % | 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) | | 6,590 |
| 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 <u>5.59</u> % ... | | 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 | | 6,590 |
| 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 | 98.47 % |
| 15 | Adjusted funding target attainment percentage | 15 | 99.30 % |
| 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 | 94.15 % |
| 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 |
| 01/29/2025 | 67,115 | 0 | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Totals ▶ | | | 18(b) | 67,115 | 18(c) |
| | | | | | 0 |

| | | | |
|-----------|---|---|--|
| 19 | Discounted employer contributions -- see instructions for small plan with a valuation date after the beginning of the year: | | |
| a | Contributions allocated toward unpaid minimum required contributions from prior years | 19a | 0 |
| b | Contributions made to avoid restrictions adjusted to valuation date | 19b | 0 |
| c | Contributions allocated toward minimum required contribution for current year adjusted to valuation date | 19c | 65,844 |
| 20 | Quarterly contributions and liquidity shortfalls: | | |
| a | Did the plan have a "funding shortfall" for the prior year? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| b | If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> 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: 5.01 % | 2nd segment: 5.26 % | 3rd segment: 5.59 % | <input type="checkbox"/> N/A, full yield curve used |
| b Applicable month (enter code) | | | | 21b 0 |
| 22 Weighted average retirement age | | | | 22 65 |
| 23 Mortality table(s) (see instructions) | <input checked="" type="checkbox"/> Prescribed - combined <input type="checkbox"/> Prescribed - separate <input type="checkbox"/> 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 <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | |
| 25 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 | | | | |
| 26 Demographic and benefit information | | | | |
| a Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | |
| b 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 | | | | |
| 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 60,397 |
| b Excess assets, if applicable, but not greater than line 31a | | | | 31b 0 |
| 32 Amortization installments: | Outstanding Balance | | Installment | |
| a Net shortfall amortization installment | 12,594 | | 1,851 | |
| 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 62,248 |
| | 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 62,248 |
| 37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c) | | | | 37 65,844 |
| 38 Present value of excess contributions for current year (see instructions) | | | | |
| a Total (excess, if any, of line 37 over line 36) | | | | 38a 3,596 |
| 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. <input type="checkbox"/> 2019 <input type="checkbox"/> 2020 <input type="checkbox"/> 2021 | | | | |

**Schedule SB, line 19 -
Discounted Employer Contributions
Carolina Cryogenics Co., Inc. Defined Benefit Plan
57-0909989 / 001
For the plan year 01/01/2024 through 12/31/2024
Valuation Date: 12/31/2024**

| | Date | Amount | Adjusted Contribution | Adjusted Prior Year Contribution | Adjusted Quarterly | Effective Rate | Penalty Rate |
|--|-------------------|-----------------|--------------------------|--|-----------------------|-------------------|-----------------|
| Deposited Contribution | 01/29/2025 | \$67,115 | | | | | |
| Applied to Quarterly Contribution | 04/15/2024 | 13,084 | 12,561 | 0 | 13,084 | 5.51 | 10.51 |
| Applied to Quarterly Contribution | 07/15/2024 | 13,084 | 12,706 | 0 | 13,084 | 5.51 | 10.51 |
| Applied to Quarterly Contribution | 10/15/2024 | 13,084 | 12,855 | 0 | 13,084 | 5.51 | 10.51 |
| Applied to Additional Contribution | 12/31/2024 | 3,611 | 3,596 | 0 | 0 | 5.51 | 0.00 |
| Applied to MRC | 12/31/2024 | 11,168 | 11,121 | 0 | 0 | 5.51 | 0.00 |
| Applied to Quarterly Contribution | 01/15/2025 | 13,084 | 13,005 | 0 | 13,084 | 5.51 | 10.51 |
| Totals for Deposited Contribution | | \$67,115 | \$65,844 | \$0 | \$52,336 | | |

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

Carolina Cryogenics Co., Inc. Defined Benefit Plan

57-0909989 / 001

For the plan year 01/01/2024 through 12/31/2024

The age reported is the weighted average of the assumed retirement ages for all active participants as of the valuation date based on their funding target or target normal cost should the funding target of the plan be zero rounded to the nearest whole age. For an active late retiree, the assumed retirement age may be later than the Plan's normal retirement age. Each participant's rate of retirement is assumed to be 100% of his/her assumed retirement age.

Schedule SB, Part V
Summary of Plan Provisions
Carolina Cryogenics Co., Inc. Defined Benefit Plan
57-0909989 / 001
For the plan year 01/01/2024 through 12/31/2024

Employer: Carolina Cryogenics Co., Inc.
Type of Entity - C Corporation
EIN: 57-0909989 TIN: Plan #: 001 Plan Type: Defined Benefit

Dates: Effective - 01/01/1998 Valuation - 12/31/2024
Top Heavy Years - 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015

Eligibility: All employees excluding non-resident aliens, members of an excluded class and union
Minimum age - 21 Months of service - 12
Hours Required for - Eligibility - 1000 Benefit accrual - 500 Vesting - 1000
Plan Entry - First day of 1st or 7th month of plan year on or next following eligibility satisfaction

Retirement: Normal - First of month coincident with or next following attainment of age 65 and completion of 5 years of participation
Early - Not provided

Average Compensation: Highest 3 consecutive years of service
Top Heavy Minimum Benefit - Highest 3 consecutive top heavy years of participation

Plan Benefits: Retirement - Derived from the unit credit benefit formula below:
3.804% of average monthly compensation per year of service beginning year 1 limited to 23 year(s)
Accrued Benefit - Unit credit based on service
Minimum Benefit - None
Maximum Benefit - None
Maximum allowable distribution is lump sum equivalent of normal form not to exceed 415 maximum allowable distribution, which is the lesser amount computed using a) 5.5% interest and the Applicable Mortality Table or b) the greater of plan actuarial equivalence interest and mortality or 417(e) Minimum
Early Retirement - None
Death Benefit - Present Value of Accrued Benefit
Disability Benefit - None

Top Heavy Minimum: None

IRS Limitations: 415 Limits - Percent: 100 Dollar: \$275,000
Maximum 401(a)(17) compensation - \$345,000

Normal Form: Life Annuity

Optional Forms: Lump Sum
Life Annuity Guaranteed for 5 Years
Joint with 50%, 75% or 100% Survivor Benefit

Vesting Schedule:

| Years | Percent |
|-------|---------|
| 0-1 | 0% |
| 2 | 20% |
| 3 | 40% |
| 4 | 60% |
| 5 | 80% |
| 6 | 100% |

Service is calculated using all years of service

Schedule SB, Part V
Summary of Plan Provisions
Carolina Cryogenics Co., Inc. Defined Benefit Plan
57-0909989 / 001
For the plan year 01/01/2024 through 12/31/2024

Present Value of Accrued Benefit: Based on the greater of 417(e) or Actuarial Equivalence

417(e):

| Interest Rates - | First Month Prior to Plan Yr Beg | | |
|------------------|----------------------------------|--------|--------|
| | Segment # | Years | Rate % |
| | Segment 1 | 0 - 5 | 4.65 |
| | Segment 2 | 6 - 20 | 5.28 |
| | Segment 3 | > 20 | 4.63 |

Mortality Table - 24E - 2024 Applicable Mortality Table for 417(e) (unisex)

Actuarial Equivalence:

Pre-Retirement - Interest - 6%
Mortality Table - None

Post-Retirement - Interest - 6%
Mortality Table - G83 - 1983 Group Annuity blended 50.00% male and 50.00% female rates

**Schedule SB, line 32 -
Schedule of Amortization Bases
Carolina Cryogenics Co., Inc. Defined Benefit Plan
57-0909989 / 001
For the plan year 01/01/2024 through 12/31/2024**

| Date Base Established | Original Base Amount | Type of Base | Present Value of Remaining Installments | Years Remaining Amortization Period | Amortization Installment |
|--------------------------|-------------------------|--------------|--|--|-----------------------------|
| 12/31/2022 | 109,367 | Shortfall | 98,596 | 13 | 10,107 |
| 12/31/2023 | -62,693 | Shortfall | -58,953 | 14 | -5,741 |
| 12/31/2024 | -27,049 | Shortfall | -27,049 | 15 | -2,515 |
| Totals: | | | \$12,594 | | \$1,851 |