

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 11-K

☒ ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2004

or

☐ TRANSITION REPORT PURSUANT TO SECTION 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number 0-3134

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

INDIVIDUAL ACCOUNT RETIREMENT PLAN OF PARK-OHIO INDUSTRIES, INC. AND ITS
SUBSIDIARIES

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

PARK-OHIO HOLDINGS CORP.
23000 EUCLID AVENUE
CLEVELAND, OHIO 44117

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EXHIBITS

| Exhibit Number | Description |
|-------------------|--|
| 23.1 | Consent of Independent Auditors |
| * | Other supplemental schedules required by Section 2520.103-10 of the Department of Labor Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable |

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Administrator of the Plan has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

Individual Account
Retirement Plan of
Park-Ohio Industries, Inc.
and Its Subsidiaries

Date: June 27, 2005

By /s/ Richard P. Elliott
Richard P. Elliott
Vice President and Chief Financial Officer

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Report of Independent Registered Public Accounting Firm

The Plan Administrative Committee
Individual Account Retirement Plan
of Park-Ohio Industries, Inc. and
its Subsidiaries

We have audited the accompanying statements of net assets available for benefits of Individual Account Retirement Plan of Park-Ohio Industries, Inc. and its Subsidiaries as of December 31, 2004 and 2003, and the related statements of changes in net assets available for benefits for the year ended December 31, 2004. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Plan's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan at December 31, 2004 and 2003, and the changes in its net assets available for benefits for the year ended December 31, 2004, in conformity with U.S. generally accepted accounting principles.

Our audits were performed for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental schedule of assets (held at end of year) as of December 31, 2004, is presented for purposes of additional analysis and is not a required part of the financial statements but are supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in our audits of the financial statements and, in our opinion, are fairly stated in all material respects in relation to the financial statements taken as a whole.

/s/ Ernst & Young LLP

Cleveland, Ohio
June 21, 2005

Individual Account Retirement Plan of Park-Ohio
Industries, Inc. and its Subsidiaries

Statements of Net Assets Available for Benefits

| | December 31 | |
|-----------------------------------|---------------|---------------|
| | 2004 | 2003 |
| Assets | | |
| Investments, at fair value | \$ 62,914,230 | \$ 51,719,311 |
| Receivables: | | |
| Employer contribution | 131,265 | 107,454 |
| Employee contribution | 276,070 | 230,393 |
| Interest receivable | 3,808 | — |
| Total receivables | 411,143 | 337,847 |
| Net assets available for benefits | \$ 63,325,373 | \$ 52,057,158 |

See notes to financial statements.

Individual Account Retirement Plan of Park-Ohio
Industries, Inc. and its Subsidiaries

Statement of Changes in Net Assets Available for Benefits

Year Ended December 31, 2004

| | |
|---|----------------------|
| Additions | |
| Investment income: | |
| Dividends and interest | \$ 1,396,990 |
| Contributions: | |
| Participants | 3,284,151 |
| Employer | 1,442,660 |
| Rollovers | 781,974 |
| | <u>5,508,785</u> |
| Net appreciation in fair value of investments | 8,684,430 |
| Total additions | <u>15,590,205</u> |
| Deductions | |
| Distributions to participants | 4,106,611 |
| Corrective distributions | 51,276 |
| Trustee fees and expenses | 101,419 |
| Other administrative expenses | 62,684 |
| Total deductions | <u>4,321,990</u> |
| Net increase | 11,268,215 |
| Net assets available for benefits: | |
| Beginning of year | <u>52,057,158</u> |
| End of year | <u>\$ 63,325,373</u> |

See notes to financial statements.

Individual Account Retirement Plan of Park-Ohio
Industries, Inc. and its Subsidiaries

Notes to Financial Statements

December 31, 2004 and 2003, and
Year Ended December 31, 2004

1. Significant Accounting Policies

Basis of Accounting

The accounting records of the Individual Account Retirement Plan of Park-Ohio Industries, Inc. and its Subsidiaries (the Plan) are maintained on the accrual basis.

Investment Value and Income Recognition

All investments are under the control and management of The Charles Schwab Trust Company, Plan Trustee. Purchases of investments are recorded at cost and revalued to market value at the close of each day by the Plan Trustee. All investments of the Plan are participant directed.

Investment income and realized and unrealized gains and losses are reported as net income derived from investment activities and are allocated among the individual accounts in proportion to their respective balances immediately preceding the valuation date.

Realized gains and losses are calculated based upon historical cost of securities using the average cost method.

The investments in common stock are stated at fair value which equals the quoted market price on the last business day of the plan year. The fair value of the participation units held by the Plan in the mutual funds and common/collective fixed income investments funds are based on quoted redemption values on the last business day of the plan year. The participant loans are valued at their outstanding balances, which approximate fair value. Purchases and sales of securities are recorded on a settlement-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Individual Account Retirement Plan of Park-Ohio
Industries, Inc. and its Subsidiaries

Notes to Financial Statements (continued)

2. Description of Plan

The Plan, adopted by Park-Ohio Industries, Inc. (Company) effective January 1, 1985, is a defined contribution plan. The Plan generally provides that an employee who is in service of a division or group to which the Company has extended eligibility for membership in the Plan (other than a temporary employee or employees covered by a collective bargaining agreement that does not specify coverage under the Plan) will be eligible to participate after completion of the probationary period which generally occurs after 30 days of continuous employment. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

Effective March 10, 2003, trustee and recordkeeper responsibilities for the Plan were transferred from KeyBank National Association to The Charles Schwab Trust Company (trustee) and Schwab Retirement Plan Services, Inc. (recordkeeper).

Individual accounts are maintained for all participants. All amounts are credited or charged to an account in terms of full and fractional investment units at the investment unit values determined as of the transaction date. Each participant designates how his share of the contributions is to be allocated among the investment funds of the Plan. The benefit to which a participant is entitled is the benefit that can be provided from the participant's account.

The Plan provides for contributions to be made to the Plan pursuant to a qualified cash or deferred arrangement under Section 401(k) of the Internal Revenue Code. If a participant elects to have contributions made for them pursuant to such an arrangement, their compensation is reduced by the amount of such contributions elected and the employer makes plan contributions equal to the amount of the reduction.

The Company may terminate the Plan at any time by resolution of its Board of Directors, subject to the provisions of ERISA. In the event of the termination of the Plan, the beneficial interests of all participants under the Plan shall become fully vested.

Information about the Plan is contained in the Plan document, which is available from the Company's Plan Administrative Committee.

Individual Account Retirement Plan of Park-Ohio
Industries, Inc. and its Subsidiaries

Notes to Financial Statements (continued)

3. Contributions

Contributions by employees to the Plan are made via payroll deductions. Employees may contribute up to 100% of their compensation on a pretax basis. Excluding catch-up contributions for eligible participants, contributions by employees may not exceed \$13,000, the Internal Revenue Service maximum contribution for 2004. Employee contributions are fully vested and nonforfeitable at all times.

The Plan provides for uniform rates of employer contributions for eligible employees, which generally include nonbargaining unit employees of the Company, so that each participant is entitled to basic contributions equal to 2% of credited compensation paid by the employer. The basic contribution is allocated among the investment options based on individual participant's investment allocation designation.

Corrective distributions to participants represent current year contributions and earnings on such deposits that must be returned to employees to ensure Plan compliance with additional limitations in the Internal Revenue Code (the Code) on contributions by highly compensated individuals.

Participants of the Plan can make changes to their account via the telephone or internet access, through Schwab Retirement Plan Services, Inc. The current provision of the system permits a participant to change investment allocation percentages daily and change payroll deferral percentages on the first day of every month.

4. Participant Loans

A participant may borrow from employee 401(k) contributions and earnings a minimum of \$1,000 and a maximum of the lesser of 50% of the participant's eligible account or \$50,000. Loan repayments are made via payroll deductions on after-tax dollars, which commence thirty to sixty days after receipt and acceptance of the loan check. Terms of the participant loan are five years for a personal loan and fifteen years for a mortgage loan, with interest payable at prime plus one percent.

Individual Account Retirement Plan of Park-Ohio
Industries, Inc. and its Subsidiaries

Notes to Financial Statements (continued)

5. Investments

Investments that represent 5% or more of fair value of the Plan's net assets are as follows:

| | December 31 | |
|-----------------------------|---------------|---------------|
| | 2004 | 2003 |
| Victory Value Fund | \$ 12,456,718 | \$ 11,788,085 |
| Schwab Value Advantage Fund | 9,716,183 | 9,702,395 |
| Growth Fund of America | 7,478,251 | 6,896,540 |
| Oakmark Equity Income | 6,673,235 | 5,340,503 |
| One Group Bond I | | 4,849,772 |
| Templeton World Fund | 3,749,664 | 2,942,413 |
| Park-Ohio Stock Fund | 6,064,768 | 2,495,759 |
| Calamos Growth | 3,264,145 | 1,838,659 |
| JP Morgan Core Bond Fund | 4,971,652 | |

During 2004, the Plan's investments (including investments purchased, sold, as well as held during the year) appreciated in fair value as determined by quoted market prices as follows:

| | Net Appreciation in Fair Value of Investments |
|------------------------------|--|
| Common stock | \$ 4,959,899 |
| Mutual funds | 3,724,432 |
| Common/collective trust fund | 99 |
| Total | \$ 8,684,430 |

Individual Account Retirement Plan of Park-Ohio
Industries, Inc. and its Subsidiaries

Notes to Financial Statements (continued)

6. Benefits

A participant is entitled to receive the full value of his account upon (1) normal retirement at age 65; (2) attainment of at least age 55 and 10 years of service; (3) death, or total and permanent disability as determined by the plan administrator upon the basis of competent medical opinion, or (4) termination of employment after seven years of credited service. Such benefits may be paid in a lump sum cash payment or through the purchase of a single premium annuity contract.

In the event of termination of employment, a participant has a vested right in their share of the Company's contributions determined as follows:

| Credited Vesting Service | Vested Percentage |
|--|----------------------|
| Less than 3 years | 0% |
| At least 3 years but less than 4 years | 20% |
| At least 4 years but less than 5 years | 40% |
| At least 5 years but less than 6 years | 60% |
| At least 6 years but less than 7 years | 80% |
| 7 years or more | 100% |

The portion of the Company's contributions that are not vested in such terminated participants will generally be forfeited and may be used to reduce the Company's future contributions to the Plan. The total of forfeited contributions by participants was \$146,874, and contributions required by the employer were reduced by \$14,390 in 2004. The balance of forfeited amounts available to the Company to reduce future contributions was \$202,956 and \$56,203 at December 31, 2004 and 2003, respectively.

A participant may withdraw in cash a portion of their contributions subject to certain limitations and restrictions. The hardship withdrawal may be used to purchase a principal residence, avoid foreclosure on a mortgage, or pay bona fide medical or education expenditures.

Individual Account Retirement Plan of Park-Ohio
Industries, Inc. and its Subsidiaries

Notes to Financial Statements (continued)

7. Related-Party Transactions

Certain plan investments are mutual funds or common collective trust funds managed by The Charles Schwab Trust Company, the Trustee of the Plan. Therefore, these transactions qualify as party-in-interest. Fees paid by the Plan for the investment management and trustee services amounted to \$101,419 and \$61,092 for the years ended December 31, 2004 and 2003.

At December 31, 2004 and 2003, the Plan held 367,339 and 489,364 shares of Park-Ohio Holdings Corp. common stock with a fair value of \$6,064,768 and \$2,495,759, respectively.

8. Income Tax Status

The Plan has received a determination letter from the Internal Revenue Service dated August 5, 2002, stating that the Plan is qualified under Section 401(a) of the Code, and, therefore, the related trust is exempt from taxation. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualification. The Plan Administrator believes the Plan is being operated in compliance with the applicable requirements of the Code and, therefore, believes the Plan is qualified and the related trust is tax exempt.

9. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

Individual Account Retirement Plan of Park-Ohio
Industries, Inc. and its Subsidiaries

EIN #34-6520107 Plan #011

Schedule H, Line 4i — Schedule of Assets
(Held at End of Year)

December 31, 2004

| Identity of Issue, Borrower, Lessor, or Similar Party | Description of Investment | Current Value |
|--|---|----------------------|
| Common Stock | | |
| Park-Ohio Holdings Corp.* | 367,339 shares of common stock | \$ 6,064,768 |
| Mutual Funds | | |
| Schwab Value Advantage Fund* | 9,716,183 shares | 9,716,183 |
| Armada Small Cap Value CLI | 51,242 shares | 1,131,931 |
| Calamos Growth | 61,611 shares | 3,264,145 |
| Growth Fund of America | 275,950 shares | 7,478,251 |
| Jensen | 29,475 shares | 717,720 |
| Lord Abbett Mid Cap Value A | 90,988 shares | 2,059,061 |
| Oakmark Equity Income | 283,967 shares | 6,673,235 |
| JP Morgan Core Bond Fund | 455,279 shares | 4,971,652 |
| Schwab S&P500 — Investor Shares* | 52,533 shares | 978,698 |
| Neuberger Berman Genesis Asset | 85,588 shares | 2,139,707 |
| Templeton World Fund | 211,249 shares | 3,749,664 |
| Victory Value Fund | 924,089 shares | 12,456,718 |
| Washington Mutual R3 | 19,028 shares | 583,391 |
| Other | | |
| Participant loans* | Interest rates ranging from 5% to 10.50% with maturities of varying dates | 929,106 |
| | | <u>\$ 62,914,230</u> |

* Indicates party in interest to the Plan.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 33-01047) pertaining to the Individual Account Retirement Plan of Park-Ohio Industries, Inc. and its Subsidiaries of our report dated June 21, 2005, with respect to the financial statements and schedule of the Individual Account Retirement Plan of Park-Ohio Industries, Inc. and its Subsidiaries included in this Annual Report (Form 11-K) for the year ended December 31, 2004.

/s/ Ernst & Young LLP

Cleveland, Ohio
June 21, 2005

