

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 10-K/A  
AMENDMENT NO. 1

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE  
ACT OF 1934 - For the fiscal year ended December 31, 2003

Commission file number 1-640

NL INDUSTRIES, INC.

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(Exact name of Registrant as specified in its charter)

New Jersey (State or other jurisdiction of incorporation or organization)	13-5267260 (IRS Employer Identification No.)
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5430 LBJ Freeway, Suite 1700, Dallas, Texas (Address of principal executive offices)	75240-2697 (Zip Code)
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Registrant's telephone number, including area code: (972) 233-1700

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common stock (\$.125 par value)	New York Stock Exchange Pacific Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:

None.

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months and (2) has been subject to such filing requirements for the past 90 days. Yes X No

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Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the Registrant is an accelerated filer (as defined in Rule 12b-2 of the Securities Exchange Act). Yes X No

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The aggregate market value of the 7.2 million shares of voting stock held by nonaffiliates of NL Industries, Inc. as of June 30, 2003 (the last business day of the Registrant's most recently-completed second fiscal quarter) approximated \$122.5 million.

As of February 27, 2004, 48,262,284 shares of the Registrant's common stock were outstanding.

Documents incorporated by reference

The information required by Part III is incorporated by reference from the Registrant's definitive proxy statement to be filed with the Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this report.

The undersigned Registrant hereby amends the following items, financial

statements, exhibits or other portions of its Annual Report on Form 10-K for the year ended December 31, 2003 as set forth below and in the pages attached hereto:

Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K.

Item No.	Exhibit Index
31.1	Certification
31.2	Certification
99.1	Annual Report of the NL Industries, Inc. Retirement Savings Plan on Form 11-K for the year ended December 31, 2003.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this amendment to be signed on its behalf by the undersigned, thereunto duly authorized.

NL INDUSTRIES, INC.  
(Registrant)

Dated: June 29, 2004

By: /s/Gregory M. Swalwell  
-----  
Gregory M. Swalwell  
Vice President, Finance and  
Chief Financial Officer

CERTIFICATION

I, Gregory M. Swalwell the Vice President and Chief Financial Officer of NL Industries, Inc., certify that:

- 1) I have reviewed this annual report on Form 10-K/A (Amendment No. 1) of NL Industries, Inc.; and
- 2) Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report.

Date: June 29, 2004

/s/ Gregory M. Swalwell

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Vice President and  
Chief Financial Officer

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, 2003

Commission file number 1-640

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

NL INDUSTRIES, INC.  
RETIREMENT SAVINGS PLAN

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

NL INDUSTRIES, INC.  
5430 LBJ Freeway, Suite 1700  
Dallas, TX 75240

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the  
Administrator has duly caused this Annual Report to be signed by the undersigned  
thereunto duly authorized.

NL INDUSTRIES, INC.  
RETIREMENT SAVINGS PLAN

By: NL INDUSTRIES, INC.  
PENSION AND EMPLOYEE  
BENEFITS COMMITTEE,  
Administrator of  
NL Industries, Inc.  
Retirement Savings Plan

By: /s/ Gregory M. Swalwell  
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Gregory M. Swalwell,  
Chairman, Pension and  
Employee Benefits Committee

June 29, 2004

NL INDUSTRIES, INC.  
RETIREMENT SAVINGS PLAN

FINANCIAL STATEMENTS AND SUPPLEMENTAL SCHEDULE  
WITH REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

December 31, 2003

NL INDUSTRIES, INC. RETIREMENT SAVINGS PLAN

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Management Development and Compensation Committee of NL Industries, Inc.:

In our opinion, the accompanying statements of net assets available for benefits and the related statement of changes in net assets available for benefits present fairly, in all material respects, the net assets available for benefits of NL Industries, Inc. Retirement Savings Plan (the "Plan") at December 31, 2002 and 2003, and the changes in net assets available for benefits for the year ended December 31, 2003 in conformity with accounting principles generally accepted in the United States of America. 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 of these statements in accordance with 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. An audit 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.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental Schedule of Assets (Held at End of Year) is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is 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 the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Dallas, Texas  
June 24, 2004

NL INDUSTRIES, INC. RETIREMENT SAVINGS PLAN  
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS  
December 31, 2002 and 2003

	2002	2003
Assets:		
Investments at fair value	\$21,199,959	\$24,065,119
Employer contributions receivable	643,247	638,032
Cash	18,077	656
Loans to participants	69,612	78,308
	-----	-----
Net assets available for benefits	\$21,930,895	\$24,782,115
	=====	=====

See accompanying notes to financial statements.

NL INDUSTRIES, INC. RETIREMENT SAVINGS PLAN  
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS  
Year ended December 31, 2003

Additions:	
Net appreciation in the fair value of investments	\$ 2,863,660
Investment income:	
Dividend income	151,236
Interest income	486,974
	-----
Total investment income	3,501,870
	-----
Contributions:	
Participants	649,129
Employer	597,019
	-----
Total contributions	1,243,148
	-----
Total additions	4,745,018
Deductions - benefits to participants	1,893,798
	-----
Net increase in net assets available for benefits	2,851,220
Net assets available for benefits:	
Beginning of year	21,930,895
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See accompanying notes to financial statements.

NL INDUSTRIES, INC. RETIREMENT SAVINGS PLAN

NOTES TO FINANCIAL STATEMENTS

Note 1 - Description of Plan and summary of significant accounting policies:

General. The financial statements of the NL Industries, Inc. Retirement Savings Plan (the "Plan") have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The following description of the Plan provides only general information. Participants should refer to the Plan agreement for a more complete description of the Plan's provisions.

The Plan is a defined contribution plan which covers eligible salaried and hourly U.S. employees of NL Industries, Inc. and certain U.S. subsidiaries (collectively, the "Employer"). Employees are eligible to participate in the Plan as of the first entry date, as defined, concurrent with or next following the completion of six months of eligible service and attaining 20 years of age. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA").

At December 31, 2003, the Employer conducts its titanium dioxide pigments operations through its approximately 51%-owned subsidiary, Kronos Worldwide, Inc. (NYSE: KRO), formerly known as Kronos, Inc. ("Kronos"). At December 31, 2003, Valhi, Inc. and a wholly-owned subsidiary of Valhi held approximately 84% of NL's outstanding common stock, and Contran Corporation and its subsidiaries held approximately 90% of Valhi's outstanding common stock. At December 31, 2003, Valhi and a wholly-owned subsidiary of Valhi also held an additional approximate 42% of Kronos' outstanding common stock. Substantially all of Contran's outstanding voting stock is held by trusts established for the benefit of certain children and grandchildren of Harold C. Simmons, of which Mr. Simmons is sole trustee, or is held by Mr. Simmons or persons or other entities related to Mr. Simmons. Mr. Simmons, the Chairman of the Board of Valhi, Contran and the Company, may be deemed to control each of such companies.

Contributions. The majority of the Employer's U.S. employees are eligible to voluntarily participate in the Plan after six months of employment. Active participants may make "basic contributions" (as defined by the Plan) of between 0% and 8% of their eligible compensation. Basic contributions may consist of a combination of pre-tax and after-tax earnings. Generally, pre-tax contributions are excluded from the employee's taxable income until they are distributed. Eligible employees that have elected to make the maximum basic contribution of 8% may also make supplemental pre-tax or after-tax contributions of between 1% and up to 92% of their eligible compensation. Pursuant to the Internal Revenue Code (the "Code"), pre-tax contributions are limited to \$12,000 in 2003 and total participant contributions (pre-tax and after-tax) and employer contributions are limited to \$40,000 in 2003. Eligible employees age 50, by the end of the Plan year, or over may make an additional \$2,000 pre-tax catch-up contribution.

Highly compensated participants may be required to adjust the amount of their contributions in order to permit the Plan to satisfy certain nondiscrimination requirements of the Code.

Participants may direct the investment of their balances in various funds. Participants may reallocate investments among the available funds on a daily basis. Regarding investments in the NL common stock, only one transfer per month may affect a participant's account. No investment allocations, only sales are allowed in the Kronos, Valhi and Halliburton Company common stock. Prior to the investment in one of the available funds, contributions may be held as cash and temporarily invested in securities with maturities of less than one year, issued or guaranteed by the U.S. government or any agency or instrumentality thereof, or deposited in a bank savings account.

Employer contributions include (i) a match equal to a portion of participants' contributions, (ii) an annual contribution of 4% of employees' eligible earnings and (iii) with respect to certain participants, a contribution related to NL's decision to freeze its defined benefit plan in 1996. The

Company's level of matching contributions is determined annually and is based upon the attainment of certain operating income target levels approved by the Management Development and Compensation Committee of the Board of Directors of NL (the "MD&C Committee"). The Company match applies only to participants' basic contributions. The level of match approved by the MD&C Committee for 2003 was 50%. Employees who are eligible to participate in the Plan receive an annual contribution to their investment accounts of 4% of their eligible compensation, subject to Internal Revenue Service ("IRS") limitations on eligible compensation, which for 2003 was \$200,000. The Company makes this annual contribution for each eligible employee regardless of whether the employee elects to otherwise participate in the Plan.

Vesting and benefits. The vesting schedule for participants allows for 20% vesting of employer contributions following two years of service, 50% vesting following three years of service, 75% vesting following four years of service, and 100% vesting following five years of service. A participant with less than two years of service is 0% vested in employer contributions. Employer contributions are fully vested upon death, retirement or disability, as provided in the Plan.

Distributions to participants may occur upon termination or during active service under prescribed circumstances. Only lump sum distributions are allowed under the Plan.

Benefits are recorded when paid.

Investments. Investments are recorded at fair value based upon the quoted market price reported on the last trading day of the period for those securities listed on a national securities exchange. Listed securities for which no sale was reported on that date are valued at the mean between the last reported bid and ask prices. Short-term investments are stated at fair value.

Purchases and sales of investments are reflected on a trade-date basis. Gains or losses on sales of securities are based on average cost. The Plan presents in the statements of changes in net assets available for benefits the net appreciation (depreciation) in the fair value of its investments which consists of realized gains or losses and unrealized appreciation (depreciation) on investments.

Contributions. Contributions from eligible employees are recorded in the period the employer makes payroll deductions from Plan participants. Employer contributions, if any, are accrued by the end of each year and are received in the subsequent year.

Investment income. Income (loss) from investments is recorded on an accrual basis. Dividend income is recorded on the ex-dividend date.

Participants' accounts. Participants may direct the Plan administrator to invest, in 1% increments, their account balance in publicly-traded registered investment companies or pooled funds administered by Merrill Lynch Trust Company ("Merrill Lynch") or NL's common stock. The Plan's assets are invested principally in investment funds managed by (i) Merrill Lynch, (ii) Massachusetts Financial Services, (iii) Oppenheimer Funds Distributor, Inc., (iv) Harris Associates Securities L.P., (v) Calvert Asset Management Company and (vi) State Street Research Funds. At December 31, 2003, 56% of the Plan's investments were managed by Merrill Lynch. The Plan's assets also include investments in the common stock of Kronos, Valhi and Halliburton Company. See Note 2.

In addition to the investment funds described above, a "Loan Fund" is maintained to account for loans to participants, as permitted by the Plan. A participant is able to borrow from his/her fund account an amount ranging from a minimum of \$1,000 up to a maximum that is generally equal to the lesser of \$50,000 or 50% of his/her vested account balance. A loan is collateralized by the balance in the participant's account and bears interest at rates commensurate with local prevailing rates. For outstanding loans at December 31, 2003 the rates ranged from 5.00% to 10.50%. Principal and interest are repaid ratably over a two- to five-year period through semimonthly payroll deductions.

Each participant's account is credited with the eligible employee's contribution and an allocation of the Employer's contribution and Plan earnings. Allocations are based on participant earnings, matching or account balances, as defined in the Plan.

Forfeitures. Forfeitures of employer contributions may occur if a participant terminates employment prior to the full vesting period or if a



participant or beneficiary, to whom a distribution is payable, cannot be located within five years of the date on which such distribution became payable. Amounts forfeited are used in the following order in accordance with Plan provisions: (i) to restore the accounts of reemployed participants, (ii) to restore the accounts of participants or beneficiaries who apply for forfeited benefits and (iii) to reduce employer contributions. Forfeitures were \$6,564 in 2003. The balance in the forfeiture account was \$10,128 at December 31, 2003. In 2003, \$44,013 of the forfeiture account was used to reduce employer contributions.

Plan termination. The Employer has the right under the Plan to discontinue its contributions at any time and to terminate the Plan in compliance with the provisions of ERISA. In the event the Plan is terminated, the accounts of all participants will become fully vested.

Management estimates. The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and changes therein, and disclosure of contingent assets and liabilities. Actual results may, in some instances, differ from previously estimated amounts.

Risks and uncertainties. The Plan provides for various investment options in a variety of stocks, bonds, fixed income securities, mutual funds and other 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 Plan's statement of net assets available for benefits.

Expenses of administering the Plan. The Plan provides that the Employer will generally reimburse the Plan for administrative expenses paid by the Plan. The Employer paid all of the Plan's 2003 administrative expenses.

Tax status. The Plan has been notified by the IRS, by letter dated December 12, 2002, that it is a qualified plan under Section 401(a) and Section 401(k) of the Code, and is therefore exempt from federal income taxes under provisions of Section 501(a) of the Code.

The Plan has been amended since it was notified of its exempt status by the IRS. Management believes the Plan currently is designed and operates in accordance with the applicable requirements of the Code and therefore remains exempt from federal income taxes under provisions of Section 501(a) of the Code.

Note 2 - Related-party transactions:

Certain Plan investments are shares of mutual funds or common collective trusts managed by Merrill Lynch. Merrill Lynch serves as trustee for the Plan. Therefore, transactions involving these investments qualify as party-in-interest transactions.

Three of the available fund options invest in the common stock of NL, Kronos and Valhi. The activity in these securities for the year ended December 31, 2003 was as follows:

	Purchases	Sales and distributions, at cost	Other distributions	Realized gain	Fair value
	-----	-----	-----	-----	-----
NL common stock	\$ 40,737	\$ 129,338	\$ (195,776)	\$ 41,540	\$ 487,468
Kronos common stock	-	-	195,776	-	454,747
Valhi common stock	1,104	468	11,945	1,459	67,951
Tremont Corporation common stock	-	-	(11,945)	-	-

In February 2003, Valhi completed a series of merger transactions pursuant to which, among other things, Tremont Corporation became a wholly-owned subsidiary of Valhi. Under these merger transactions, Valhi issued 3.4 shares of its common stock (plus cash in lieu of fractional shares) in exchange for each share of Tremont common stock held in the Plan's investments. The Plan received approximately 4,600 shares of Valhi common stock in the merger transaction with an aggregate value of \$11,945 as of the merger date.

In December 2003, NL completed the distribution of 48.8% of Kronos' common stock in the form of a pro-rata dividend. Pursuant to this distribution,

stockholders of NL received one share of Kronos common stock for every two shares of NL held. The Plan received 20,484 shares of Kronos common stock in this distribution with an aggregate value of \$195,776 as of the date of distribution.

Dividend income received from related parties for the year ended December 31, 2003 consisted of \$35,836 from NL and \$1,104 from Valhi.

Note 3 - Investments:

The Plan's investments are stated at fair value based on quoted market prices and net appreciation for the year is reflected in the Plan's statement of changes in net assets available for benefits. The net appreciation consists of realized gains and losses and unrealized appreciation and depreciation on investments. The following presents investments that represent 5% or more of the Plan's net assets.

	December 31,	
	----- 2002	2003 -----
Merrill Lynch Retirement Preservation Trust	\$10,872,331	\$10,391,091
Massachusetts Financial Services Value Fund	4,202,587	5,292,095
Merrill Lynch Equity Index Trust	1,913,433	2,411,220
Oakmark International Fund	1,266,657	1,695,135
Oppenheimer Capital Appreciation Fund	1,042,941	1,537,518

During 2003, the Plan's net appreciation in the fair value of investments (including gains and losses on investments bought and sold, as well as held during the year) was as follows:

Mutual funds	\$1,977,470
Common stocks	317,223
Common collective trusts	568,967
	-----
	\$2,863,660
	=====

NL INDUSTRIES, INC. RETIREMENT SAVINGS PLAN

SCHEDULE H, line 4i - SCHEDULE OF ASSETS (HELD AT END OF YEAR)

December 31, 2003

Employer Identification No. 13-5267260

Plan No. 003

	Fair value
* Merrill Lynch Retirement Preservation Trust	\$10,391,091
MFS Value Fund - Class A shares	5,292,095
* Merrill Lynch Equity Index Trust	2,411,220
Oakmark International Fund - Class II shares	1,695,135
Oppenheimer Capital Appreciation Fund	1,537,518
* Merrill Lynch U.S. Government Mortgage Fund - Class A shares	685,889
Calvert Income Fund	346,127
State Street Aurora Fund	282,217
MFS Mid-cap Growth Fund	87,326
Oakmark Select Fund - Class II shares	87,108
MFS New Discovery Fund - Class A shares	72,800
* NL Industries, Inc. common stock	487,468
* Kronos Worldwide, Inc. common stock	454,747
Halliburton Company common stock	166,427
* Valhi, Inc. common stock	67,951
* Loans to participants (with interest rates from 5.0% - 10.50%), maturing through 2008	78,308
* Cash, Merrill Lynch Trust Company, FSB	656
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\* Investment in a "Party-in-interest" entity, as defined by ERISA.

EXHIBIT A

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the:

- (i) Registration Statement on Form S-8 (No. 33-29287) and related Prospectus with respect to the 1989 Long Term Performance Incentive Plan of NL Industries, Inc.; and
- (ii) Registration Statement on Form S-8 (No. 33-25913) and related Prospectus with respect to the NL Industries, Inc. Retirement Savings Plan; and
- (iii) Registration Statement on Form S-8 (No. 333-65817) and related Prospectus with respect to the NL Industries, Inc. 1998 Long-Term Incentive Plan; and
- (iv) Registration Statement on Form S-8 (No. 33-48145) and related Prospectus with respect to the NL Industries, Inc. 1992 Non-Employee Directors Stock Option Plan

of our report dated June 24, 2004 relating to the financial statements and supplemental schedule of the NL Industries, Inc. Retirement Savings Plan, which appears in this Form 11-K.

PricewaterhouseCoopers LLP

Dallas, Texas  
June 29, 2004

CERTIFICATION

I, Harold C. Simmons the Chairman of the Board and Chief Executive Officer of NL Industries, Inc., certify that:

- 1) I have reviewed this annual report on Form 10-K/A (Amendment No. 1) of NL Industries, Inc.; and
- 2) Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report.

Date: June 29, 2004

/s/ Harold C. Simmons

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Chairman of the Board and  
Chief Executive Officer