

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 12b-25
NOTIFICATION OF LATE FILING

NL Industries, Inc.

SEC FILE NUMBER: 1-640

Form 10-K Form 20-F Form 11-K Form 10-Q Form N-SAR

For Period Ended: December 31, 2003

Transition Report on Form 10-K Transition Report on Form 20-F
 Transition Report on Form 11-K Transition Report on Form 10-Q
 Transition Report on Form N-SAR
For the Transition Period Ended:

Nothing in this form shall be construed to imply that the Commission has
verified any information contained herein.

If the notification relates to a portion of the filing checked above, identify
the Item(s) to which the notification relates: Not applicable

PART I - REGISTRANT INFORMATION

Full Name of Registrant: NL Industries, Inc. ("NL")

Former Name if Applicable: Not Applicable

Address of Principal Executive Office:

5430 LBJ Freeway, Suite 1700
Three Lincoln Centre, Dallas, Texas 75240-2697

Full Name of Benefit Plan reporting on Form 11-K: NL Industries, Inc. Retirement
Savings Plan ("Plan")

PART II - RULES 12b-25(b) AND (c)

If the subject report could not be filed without unreasonable effort or expense
and the registrant seeks relief pursuant to Rule 12b-25(b), the following should
be completed.

- (a) The reasons described in reasonable detail in Part III of this form
could not be eliminated without unreasonable effort or expense;
- (b) The subject annual report, semi-annual report, transition report on
Form 10-K, Form 20-F, 11-K or Form N-SAR, or portion thereof, will be
filed on or before the fifteenth calendar day following the prescribed
due date; or the subject quarterly report or transition report on Form
10-Q, or portion thereof, will be filed on or before the fifth
calendar day following the prescribed due date; and

[] (c) The accountant's statement or other exhibit required by Rule 12b-25(c) has been attached, if applicable.

PART III - NARRATIVE

State below in reasonable detail the reasons why Forms 10-K, 20-F, 11-K, 10-Q, N-SAR, or the transition report or portion thereof, could not be filed within the prescribed period:

The Form 11-K for the fiscal year ended December 31, 2003 covering the Plan, to be filed under Form 10-K/A of NL's Annual Report on Form 10-K for the year ended December 31, 2003 as Exhibit No. 99.1, could not be filed within the prescribed period without unreasonable effort or expense.

PART IV - OTHER INFORMATION

(1) Name and telephone number of person to contact in regard to this notification:

Gregory M. Swalwell, Vice President, Finance and Chief Financial Officer. 972-450-4228.

(2) Have all other periodic reports required under Section 13 or 15(d) of the Securities Exchange Act of 1934 or Section 30 of the Investment Company Act of 1940 during the preceding 12 months or for such shorter period that the Registrant was required to file such report(s) been filed? If the answer is no, identify report(s).

Yes [] No

(3) Is it anticipated that any significant change in results of operations from the corresponding period for the last fiscal year will be reflected by the earnings statements to be included in the subject report or portion thereof?

Yes [] No

If so, attach an explanation of the anticipated change, both narratively and quantitatively, and, if appropriate, state the reasons why a reasonable estimate of the results cannot be made.

The Plan expects to report a net increase in net assets available for benefits of approximately \$2.9 million for 2003.

As provided by the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, NL cautions that statements in this Form 12b-25 relating to matters that are not historical facts including, but not limited to, statements found in this Part IV - "Other Information," are forward-looking statements that represent management's beliefs and assumptions based on currently available information. Forward-looking statements can be identified by the use of words such as "believes," "intends," "may," "will," "should," "could," "anticipates," "expects," or comparable terminology or by discussions of strategy or trends. Although NL believes that the expectations reflected in such forward-looking statements are reasonable, it cannot give any assurances that these expectations will prove to be correct. Such statements by their nature involve risks and uncertainties. Should one or more of these risks materialize (or the consequences of such a development worsen), or should the underlying assumptions prove incorrect, actual results could differ materially from those forecasted or expected. NL disclaims any intention or obligation to update publicly or revise such statements whether as a result of new information, future events or otherwise.

NL Industries, Inc. has caused this notification to be signed on its behalf by the undersigned thereunto duly authorized.

Date: June 28, 2004

NL INDUSTRIES, INC.

By: /s/ Gregory M. Swalwell

Gregory M. Swalwell
Vice President, Finance and Chief Financial Officer