

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, 2004

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

Former Name if Applicable: Not Applicable

Address of Principal Executive Office:

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

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 Registrant is still in the process of completing its assessment of its internal control over financial reporting. The Registrant currently expects to be able to complete such assessment within the time provided by this Form 12b-25, at which time the Registrant would file its complete Annual Report on Form 10-K for the year ended December 31, 2004, including management's report on internal control over financial reporting.

PART IV - OTHER INFORMATION

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

Greg Swalwell, Vice President, Finance and Chief Financial Officer.  
972-233-1700.

(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.

As provided by the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, the Registrant cautions that statements in this Form 12b-25 relating to matters that are not historical facts including, but not limited to, statements found in Part III - "Narrative" and this Part IV - "Other Information," are forward-looking statements that represent management's belief and assumptions based on currently available information. Forward-looking statements can be identified by the use of words such as "believes," "intends," "may," "should," "could," "anticipates," "expected," or comparable terminology, or by discussions of strategies or trends. Although the Registrant believes 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 substantial risks and uncertainties that could significantly impact expected results, and actual future results could differ materially from those described in such forward-looking statements. While it is not possible to identify all factors, the Registrant continues to face many risks and uncertainties. Among the factors that could cause actual future results to differ materially are the risks and uncertainties discussed in this filing and those described from time to time in the Registrant's other filings with the Securities and Exchange Commission including, but not limited to:

- o Future supply and demand for the Company's products,
- o The extent of the dependence of certain of the Company's businesses on certain market sectors,
- o The cyclical nature of certain of the Company's businesses,
- o The impact of certain long-term contracts on certain of the Company's businesses,
- o Customer inventory levels,
- o Changes in raw material and other operating costs,
- o The possibility of labor disruptions,
- o General global economic and political conditions,
- o Competitive products and substitute products,
- o Customer and competitor strategies,
- o The impact of pricing and production decisions,
- o Competitive technology positions,
- o The introduction of trade barriers,
- o Fluctuations in currency exchange rates,
- o Operating interruptions,
- o The ability to implement headcount reductions in certain operations in a cost effective manner within the constraints of non-U.S. governmental regulations, and the timing and amount of any such cost savings realized,
- o The ability of the Company to renew or refinance credit facilities,

- o Uncertainties associated with new product development,
- o The ultimate outcome of income tax audits, tax settlement initiatives or other tax matters,
- o The ultimate ability to utilize income tax attributes, the benefit of which has been recognized under the "more-likely-than-not" recognition criteria,
- o The ultimate ability to timely complete the assessment of the Company's internal control over financial reporting,
- o Environmental matters,
- o Government laws and regulations and possible changes therein,
- o The ultimate resolution of pending litigation, and
- o Possible future litigation.

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. The Registrant disclaims any intention or obligation to update or revise any forward-looking statement whether as a result of changes in 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: March 16, 2005

NL INDUSTRIES, INC.

By: /s/ Greg Swalwell.  
Greg Swalwell  
Vice President, Finance and  
Chief Financial Officer