

<b>OMB APPROVAL</b>	
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**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>SIMMONS HAROLD C</u>  (Last) (First) (Middle) <u>THREE LINCOLN CENTRE</u> <u>5430 LBJ FREEWAY STE 1700</u>  (Street) <u>DALLAS TX 75240-2697</u>  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>NL INDUSTRIES INC [ NL ]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) <u>Chairman of the Board &amp; CEO</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>01/31/2005</u>	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	01/31/2005		M		2,000	A	\$5.8125	26,800	D	
Common Stock								40,350,931	I	by Valhi <sup>(1)</sup>
Common Stock								222,100	I	by TFMC <sup>(2)</sup>
Common Stock								69,475	I	by Spouse <sup>(3)</sup>

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Non-Qualified Stock Option (right to buy)	\$5.8125	01/31/2005		M		2,000		02/01/2001	02/01/2005	Common Stock	2,000	(4)	0	D	

**Explanation of Responses:**

- Directly held by Valhi, Inc. See the Additional Information filed as Exhibit 99 to this statement for a description of the relationships among the persons joining in the filing.
- Directly held by TIMET Finance Management Company ("TFMC"). See the Additional Information filed as Exhibit 99 to this statement for a description of the relationships among the persons joining in the filing.
- The reporting person disclaims beneficial ownership of the the shares of the issuer's common stock that his spouse owns.
- Granted pursuant to the NL Industries, Inc. 1998 Long-Term Incentive Plan.

**Remarks:**

Exhibit Index Exhibit 99 - Additional Information

A. Andrew R. Louis, Attorney-in-fact, for Harold C. Simmons 01/31/2005

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

## Additional Information

Valhi, Inc. ("Valhi") and TIMET Finance Management Company ("TFMC") are the direct holders of approximately 83.3% and 0.5%, respectively, of the outstanding common stock of the issuer, NL Industries, Inc. ("NL").

Titanium Metals Corporation ("TIMET") is the direct holder of 100% of the outstanding shares of common stock of TFMC. Tremont LLC ("Tremont"), Harold C. Simmons' spouse, the Combined Mater Retirement Trust (the "CMRT"), and Valhi are the holders of approximately 39.6%, 14.4%, 12.1% and 1.3% of the outstanding shares of TIMET common stock. The ownership of Mr. Simmons' spouse is based on the 1,600,000 shares of TIMET's 6 3/4% Series A Convertible Preferred Stock, par value \$0.01 per share (the "Series A Preferred Stock"), that she directly owns, which are convertible into 2,666,666 shares of TIMET common stock. The ownership of Valhi includes 24,500 shares of TIMET common stock that Valhi has the right to acquire upon conversion of 14,700 shares of Series A Preferred Stock that Valhi directly holds. The percentage ownership of TIMET common stock held by each of Ms. Simmons and Valhi assumes the full conversion of only the shares of Series A Preferred Stock she or Valhi owns, respectively. Valhi is the sole member of Tremont.

Valhi Group, Inc. ("VGI"), National City Lines, Inc. ("National"), Contran Corporation ("Contran"), the Harold Simmons Foundation, Inc. (the "Foundation"), the Contran Deferred Compensation Trust No. 2 (the "CDCT No. 2") and the CMRT are the direct holders of 77.6%, 9.1%, 3.6%, 0.9%, 0.4% and 0.1%, respectively, of the common stock of Valhi. National, NOA, Inc. ("NOA") and Dixie Holding Company ("Dixie Holding") are the direct holders of approximately 73.3%, 11.4% and 15.3%, respectively, of the outstanding common stock of VGI. Contran and NOA are the direct holders of approximately 85.7% and 14.3%, respectively, of the outstanding common stock of National. Contran and Southwest Louisiana Land Company, Inc. ("Southwest") are the direct holders of approximately 49.9% and 50.1%, respectively, of the outstanding common stock of NOA. Dixie Rice Agricultural Corporation, Inc. ("Dixie Rice") is the direct holder of 100% of the outstanding common stock of Dixie Holding. Contran is the holder of 100% of the outstanding common stock of Dixie Rice. Contran is also the holder of approximately 88.9% of the outstanding common stock of Southwest.

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 (the "Trusts"), of which Mr. Simmons is the sole trustee, or is held by Mr. Simmons or persons or entities related to Mr. Simmons. As sole trustee of the Trusts, Mr. Simmons has the power to vote and direct the disposition of the shares of Contran stock held by the Trusts. Mr. Simmons, however, disclaims beneficial ownership of any shares of Contran stock that the Trusts hold.

The Foundation directly holds approximately 0.9% of the outstanding Valhi common stock. The Foundation is a tax-exempt foundation organized for charitable purposes. Harold C. Simmons is the chairman of the board and chief executive officer of the Foundation and may be deemed to control the Foundation.

The CDCT No. 2 directly holds approximately 0.4% of the outstanding Valhi common stock. U.S. Bank National Association serves as the trustee of the CDCT No. 2. Contran established the CDCT No. 2 as an irrevocable "rabbi trust" to assist Contran in meeting certain deferred compensation obligations that it owed to Harold C. Simmons. If the CDCT No. 2 assets are insufficient to satisfy such obligations, Contran is obligated to satisfy the balance of such obligations as they come due. Pursuant to the terms of the CDCT No. 2, Contran (i) retains the power to vote the shares of Valhi common stock held directly by the CDCT No. 2; (ii) retains dispositive power over such shares and (iii) may be deemed the indirect beneficial owner of such shares.

The CMRT directly holds approximately 12.1% of the outstanding shares of TIMET common stock and 0.1% of the outstanding shares of Valhi common stock. Valhi established the CMRT to permit the collective investment by master trusts that maintain the assets of certain employee benefit plans Valhi and related companies adopt. Harold C. Simmons is the sole trustee of the CMRT and a member of the trust investment committee for the CMRT. Valhi's board of directors selects the trustee and members of the trust investment committee for the CMRT. Mr. Simmons is a participant in one or more of the employee benefit plans that invest through the CMRT. He disclaims beneficial ownership of the shares held by the CMRT, except to the extent of his individual vested beneficial interest, if any, in the assets held by the CMRT.

NL and a subsidiary of NL directly own 3,522,967 shares and 1,186,200 shares, respectively, of Valhi common stock. Pursuant to Delaware law, Valhi treats the shares of Valhi common stock that NL and the subsidiary of NL own directly as treasury stock for voting purposes and for the purposes of this statement are not deemed outstanding.

Harold C. Simmons is the chairman of the board and chief executive officer

of the issuer, vice chairman of the board of TIMET, and the chairman of the board of each of Tremont, Valhi, VGI, National, NOA, Dixie Holding, Dixie Rice, Southwest and Contran.

By virtue of the holding of the offices, the stock ownership and his service as trustee, all as described above, (a) Mr. Simmons may be deemed to control the entities described above and (b) Mr. Simmons and certain of such entities may be deemed to possess indirect beneficial ownership of shares of NL common stock that Valhi and TFMC hold directly. However, Mr. Simmons disclaims beneficial ownership of the shares of NL common stock beneficially owned, directly or indirectly, by any of such entities.

Harold C. Simmons' spouse is the direct owner of 69,475 shares of NL common stock, 43,400 shares of Valhi common stock and 1,600,000 shares of Series A Preferred Stock, which are convertible into 2,666,666 shares of TIMET common stock. Mr. Simmons disclaims beneficial ownership of all securities that his spouse holds directly.

A trust of which Harold C. Simmons and his spouse are co-trustees and the beneficiaries of which are the grandchildren of his spouse is the direct holder of 40,000 shares of Valhi common stock. Mr. Simmons disclaims beneficial ownership of these shares.