FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| OMB APPROVAL | | | | | | | | | | |
|--------------------------|-----------|--|--|--|--|--|--|--|--|--|
| OMB Number: | 3235-0287 | | | | | | | | | |
| Estimated average burden | | | | | | | | | | |
| hours per response: | 0.5 | | | | | | | | | |

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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 Add | 2. Issuer Name and Ticker or Trading Symbol 3M CO [MMM] | | | | | | | | | Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner | | | | | | | | |
|---|---|--|---|---|---|---|---|---------|--|---|---|--|-------------------------------------|--|---|--|--|--|
| (Last) 3M CENTER | (First) | (N | /liddle) | | 05/31 | 3. Date of Earliest Transaction (Month/Day/Year) 05/31/2012 | | | | | | | | Officer (give title X Other (specify below) VP; former COB, CEO & Pres. | | | | |
| (Street) ST. PAUL MN 55144-1000 | | | |) | 4. If A | 4. If Amendment, Date of Original Filed (Month/Day/Year) 5. Individual or Joint/Group I X Form filed by One Form filed by Month III | | | | | | | | | | e Reporti | ng Person | , |
| (City) | (State) | (Z | ľip) | | | | | | | | | | | | | | | |
| | | Ta | able I - N | | | _ | | | - | , Dis | | f, or Benef | | | | | | |
| Dat | | | | | 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 Owne Following Reporte | | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | | 7. Nature of ndirect Beneficial Ownership |
| | | | | | | | | | Code | v | Amount | (A) or (D) | Price | Transaction(s) (Instr. 3 and 4) | | | | Instr. 4) |
| Common Stock | /2012 | | | M | | 1,355 | A | \$84.41 | 191,524 | | Ι |) | | | | | | |
| Common Stock 05/ | | | | | /2012 | | | | F | | 579 | D | \$84.41 | 190,945(3) | | D | | |
| Common Stock | | | | | | | | | | | | | | 631(4) |) |] | [4 | By 401k/paesop Trust |
| Common Stock | | | | | | | | | | | | | 27,958.63 | 34 ⁽⁵⁾ |] | | By Corporation | |
| | | | Table II | | | | | | , | • | , | or Benefici le securitie | • | ned | | | | |
| 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) | | | | 6. Date Exerc Expiration Da (Month/Day/Y | | ite | 7. Title and Ar Securities Un Derivative Sec 3 and 4) | derlying | 8. Price of Derivative Security (Instr. 5) | 9. Num derivat Securit Benefic Owned Following | tive Owner ties Form cially Direct or Including (I) (Including ted | 10. Ownershi Form: Direct (D) or Indirect (I) (Instr. 4 | Beneficial Ownership (Instr. 4) |
| | | | | c | ode \ | , | (A) | (D) | Date Exercis | able | Expiration Date | Title | Amount or Number of Shares | | (Instr. 4 | ction(s) 4) | | |
| Restricted Stock Units | (1) | 05/31/2012 | | | М | | | 1,355 | (2) | | (2) | Common Stock | 1,355 | \$0 | | 0 | D | |

Explanation of Responses:

- 1. Each restricted stock unit represents a contingent right to receive one share of 3M common stock.
- 2. The terms of the initial award (5,420 restricted stock units) provided for vesting in four equal installments commencing 12/31/2009.
- 3. Includes shares acquired under 3M's General Employee Stock Purchase Plan.
- 4. Includes shares acquired during the fiscal year pursuant to the 3M Voluntary Investment Plan.
- 5. Includes dividend share equivalents, accrued quarterly, pursuant to 3M's Performance Awards Deferred Compensation Plan.

George Ann Biros, attorney-in-fact 06/01/2012 for George W. Buckley

** 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.