

MacDonald Robert D III
 Form 4
 October 30, 2006

FORM 4

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

OMB APPROVAL

OMB Number: 3235-0287
 Expires: January 31, 2005
 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 OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
 MacDonald Robert D III

2. Issuer Name and Ticker or Trading Symbol
 3M CO [MMM]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)
 3M CENTER
 (Street)

3. Date of Earliest Transaction (Month/Day/Year)
 10/27/2006

____ Director
 Officer (give title below)
 ____ 10% Owner
 ____ Other (specify below)
 VICE PRESIDENT MARKETING

ST. PAUL, MN 55144-1000

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 ____ Form filed by More than One Reporting Person

(City) (State) (Zip)

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) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|---|
| | | | | (A) or (D) | Price | | |
| Common Stock | 10/27/2006 | | M | 6,958 A | \$ 61.9 | 26,896 | D |
| Common Stock | 10/27/2006 | | F | 5,430 D | \$ 79.305 | 21,466 | D |
| Common Stock | 10/27/2006 | | F | 499 D | \$ 79.305 | 20,967 | D |
| Common Stock | 10/27/2006 | | M | 2,180 A | \$ 45.85 | 23,147 | D |
| Common Stock | 10/27/2006 | | F | 1,260 D | \$ 79.305 | 21,887 | D |

| | | | |
|--------------|-------|---|----------------------|
| Common Stock | 2,001 | I | by 401k/PAESOP Trust |
| Common Stock | 9,614 | I | by Spouse |

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

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SEC 1474
(9-02)

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 (A) or Disposed of (D) (Instr. 3, 4, and 5) | 6. Date Exercisable and Expiration Date (Month/Day/Year) | 7. Title and Amount of Underlying Security (Instr. 3 and 4) | 8. Amount or Number of Shares |
|--|--|--------------------------------------|--|--------------------------------|--|--|---|-------------------------------|
| Incentive Stock Option (right to buy) | \$ 45.85 | 10/27/2006 | | M | 2,180 | 05/13/1998 05/13/2007 | Common Stock | 2,180 |
| Non-Qualified Stock Option (right to buy) | \$ 61.9 | 10/27/2006 | | M | 6,958 | 04/16/2003 05/11/2007 | Common Stock | 6,958 |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|--------------------------|-------|
| | Director | 10% Owner | Officer | Other |
| MacDonald Robert D III 3M CENTER ST. PAUL, MN 55144-1000 | | | VICE PRESIDENT MARKETING | |

Signatures

By: GeorgeAnn Biros For: Robert D MacDonald
10/30/2006

__Signature of Reporting Person

Date

Explanation of Responses:

- * 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).
- (1) The indirectly-held common stock holding (401k/PAESOP) reported in Table I includes shares acquired during the fiscal year pursuant to the 3M Voluntary Investment Plan.
- (2) The directly-held common stock holding reported in Table I includes shares acquired during the fiscal year pursuant to 3M's General Employee Stock Purchase Plan.

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

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