As filed with the Securities and Exchange Commission on May 18, 2010 Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-8

Registration Statement Under The Securities Act of 1933

3M COMPANY

(Exact name of Registrant as specified in its charter)

Delaware (State of incorporation)

Accelerated

filer

41-0417775 (I.R.S. Employer I.D. No.)

Smaller reporting

company

3M Center St. Paul, Minnesota 55144 (651) 733-2204 (Address of principal executive offices)

3M 2008 Long-Term Incentive Plan (Full title of the plan)

Gregg M. Larson
Deputy General Counsel
3M Company
3M Center
St. Paul, Minnesota 55144
Telephone: (651) 733-2204

(Name, address, and telephone number of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Non-accelerated filer □

(Do not check if a smaller reporting

	company)				
	Calculation of Registration Fee				
Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price/Share (2)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee	
Common Stock, \$0.01 par value/share	29,000,000 shares	\$84.08	\$2,438,320,000	\$173,852.22	

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, this registration statement also registers such additional shares of Common Stock that become available under the foregoing plan in connection with changes in the number of outstanding Common Stock because of events such as stock split, stock dividend, combination or reclassification of shares, recapitalization, merger or other similar events.
- (2) Estimated solely for the purpose of calculating the registration fee. This registration fee has been calculated pursuant to Rule 457(h)(1) and Rule 457(c) of the Securities Act of 1933, as amended, based upon the average of the high and low prices of 3M Company's Common Stock, par value \$0.01 per share, on May 17, 2010, as reported by the New York Stock Exchange, which was \$84.08.

REGISTRATION OF ADDITIONAL SECURITIES

Large accelerated

filer ⊠

The purpose of this Registration Statement is to register 29,000,000 additional shares of 3M Company's common stock, par value \$0.01 per share (the "Common Stock") for issuance under the Company's 2008 Long-Term Incentive Plan (the "Plan"). The Common Stock registered hereunder is in addition to the 35,000,000 shares of Common Stock in connection with the Plan previously registered on the Company's Form S-8 filed on May 20, 2008 (Commission File No. 333-151039) (the "Prior Registration Statement").

This Registration Statement is submitted in accordance with General Instruction E to Form S-8 regarding Registration of Additional Securities. Pursuant to Instruction E, the contents of the Prior Registration Statement are incorporated by reference and made part of this Registration Statement, except as amended hereby.

PART II - INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Certain Documents by Reference.

The following documents, which have heretofore been filed by 3M Company ("3M") with the Securities and Exchange Commission (the "Commission") pursuant to the

Securities Act of 1933, as amended (the "Securities Act"), and pursuant to the Securities Exchange Act of 1934, as amended, are incorporated by reference herein and shall be deemed to be a part hereof:

- (a) 3M's Annual Report on Form 10-K for the fiscal year ended December 31, 2009, as updated by our Current Report on Form 8-K dated May 17, 2010;
- (b) 3M's Quarterly Report on Form 10-Q for the guarter ended March 31, 2010;
- (c) Our Current Reports on Form 8-K dated March 4, March 26 and May 12, 2010;
- (d) The description of the 3M's Common Stock contained in the Prospectus dated February 17, 2009, to the Registration Statement on Form S-3 (File No. 333-157374).

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All documents later filed by us under Sections 13(a), 13(c), 14 or 15(d) of the Securities Act, before we file a post-effective amendment to this Registration Statement that indicates all securities offered under the Registration Statement have been sold or which deregisters all such securities that have not been sold, shall be deemed to be incorporated by reference and be a part of this Registration Statement from the date that document was filed.

Any statement contained herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained in any subsequently filed Incorporated Document modifies or supersedes such statement. Any statement contained in an Incorporated Document shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed Incorporated Document modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement

Registrant's Exchange Act file number with the Commission is 1-3285.

Item 8. Exhibits.

See Exhibit Index

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Signatures

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of St. Paul, the State of Minnesota on this 18th day of May, 2010.

3M COMPANY

By /s/ Gregg M. Larson

Name: Gregg M. Larson, Esq.

Title: Deputy General Counsel and Secretary

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates as indicated.

Signature	Title
* George W. Buckley	Chairman of the Board, President, Chief Executive Officer (Principal Executive Officer and Director)
* Patrick D. Campbell	Senior Vice President, Chief Financial Officer (Principal Financial Officer)
* David W. Meline	Vice President, Corporate Controller and Chief Accounting Officer (Principal Accounting Officer)
* Linda G. Alvarado	Director
* Vance D. Coffman	Director
* Michael L. Eskew	Director
* W. James Farrell	Director
* Herbert L. Henkel	Director
* Edward M. Liddy	Director
* Robert S. Morrison	Director

-	*	Director
Aulana	L. Peters	
D 1 (1	*	Director
Robert J	I. Ulrich	
* By:	/s/ Gregg M. Larson Gregg M. Larson Attorney-in-fact Date: May 18, 2010	
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Index to Exhibits

Exhibit Number	Description
3.1	Certificate of incorporation, as amended as of May 11, 2007, is incorporated by reference from the Form 8-K dated May 14, 2007.
3.2	Bylaws, as amended as of February 10, 2009, are incorporated by reference from the Form 8-K dated February 12, 2009.
5	Opinion of Counsel (Consent of Counsel included therein).*
10	3M 2008 Long-Term Incentive Plan (as amended through February 2010) is incorporated by reference from the Form 8-K dated May 12, 2010
15	Awareness Letter of PricewaterhouseCoopers LLP (regarding interim financial information)*
23	Consent of PricewaterhouseCoopers LLP (Consent of Counsel included in Exhibit 5).*
24	Power of Attorney*

^{*}Filed herewith.

May 18, 2010

3M Company 3M Center St. Paul, MN 55144

RE: Registration Statement on Form S-8 with respect to 3M Company's 2008 Long-Term Incentive Plan

Ladies and Gentlemen:

I have examined the Registration Statement on Form S-8 (the "Registration Statement") that is being filed by 3M Company (the "Company") with the Securities and Exchange Commission (the "Commission") in connection with the registration under the Securities Act of 1933, as amended (the "Act"), of 29,000,000 additional shares of the Company's Common Stock, par value \$0.01 per share (the "Shares"), to be issued under the Company's 2008 Long-Term Incentive Pan (the "Plan").

As Deputy General Counsel of the Company, I am familiar with the Certificate of Incorporation and the By-Laws of the Company and with its affairs, including the actions taken by the Company in connection with the Plan. I also have examined such other documents and instruments and have made such further investigation as I have deemed necessary or appropriate in connection with this opinion. In my examination, I have assumed the genuineness of all signatures, the legal capacity and competency of all natural persons, the authenticity of all documents submitted to me as originals and the conformity to original documents of all documents submitted to me as copies.

Based upon the foregoing, I am of the opinion that the Shares, when issued pursuant to the terms and conditions set forth in the Plan, will be validly issued, duly authorized, fully paid and non-assessable.

I consent to the filing of this opinion as an exhibit to Registration Statement, and I further consent to the use of my name wherever appearing in the Registration Statement. In giving this consent, I do not admit that I am within the category of persons whose consent is required under Section 7 of the Act or the Rules and Regulations of the Commission.

Very truly yours,

/s/ Gregg M. Larson, Esq.
Gregg M. Larson
Deputy General Counsel

Securities and Exchange Commission 100 F Street, N.E. Washington, DC 20549

Commissioners:

We are aware that our report dated May 5, 2010 on our review of interim consolidated financial information of 3M Company for the three-month period ended March 31, 2010 and 2009, and included in the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, is incorporated by reference in the Company's Registration Statements on Form S-8 dated May 18, 2010.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP Minneapolis, Minnesota May 18, 2010

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our reportdated February 16, 2010, except with respect to our opinion on the consolidated financial statements insofar as it relates to the effects of the segment realignments discussed in Notes 3 and 17 as to which the date is May 17, 2010, relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in 3M Company's Current Report on Form 8-K dated May 17, 2010.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP Minneapolis, MN May 18, 2010

POWER OF ATTORNEY

Each of the undersigned Directors and the Principal Executive and Principal Financial and Accounting Officers of 3M COMPANY, a Delaware corporation, hereby constitute and appoint George W. Buckley, Patrick D. Campbell, Gregg M. Larson, Marschall I. Smith, and Janet L. Yeomans, and each of them, his or her true and lawful attorneys-in-fact and agents, with full and several power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign one or more Registration Statements under the Securities Act of 1933, as amended, on Form S-8, or such other form as such attorneys-in-fact or any of them may deem necessary or desirable, and to sign any and all amendments (including post-effective amendments and supplements to such registration statement) for the registration of securities under the 3M 2008 Long-Term Incentive Plan, as amended, and in connection with 3M's deferred compensation plans, in such forms as they or any one of them may approve, and to file the same with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing such said attorneys and agents may deem necessary or desirable to enable 3M COMPANY to comply with the Securities Act of 1933, as amended, and any rules, regulations, and requirements of the Securities and Exchange Commission in respect thereof, including specifically, but without limiting the generality of the foregoing, power and authority to sign the name of 3M COMPANY, and the names of the undersigned to one or more Registration Statements or amendments thereto and to any instruments and documents filed as part of or in connection therewith; as fully and to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that said attorneys-in-fact and agents, or any of them or their substitutes, may lawf

The undersigned have signed this Power of Attorney this 9th day of February 2010.

/s/ Patrick D. Campbell	
Patrick D. Campbell, Senior Vice President and	
Chief Financial Officer (Principal Financial Officer)	
/s/ David W. Meline	
David W. Meline, Vice President, Controller and	
Chief Accounting Officer (Principal Accounting Officer)	
/s/ Edward M. Liddy	
Edward M. Liddy, Director	
/s/ Robert S. Morrison	
Robert S. Morrison, Director	
/s/.Aulana L. Peters	
Aulana L. Peters, Director	
/s/ Robert J. Ulrich	
Robert J. Ulrich, Director	