SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

	
	FORM 11-K
√	ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 (NO FEE REQUIRED)
	For the fiscal year ended December 31, 2009
	OR
0	TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 (NO FEE REQUIRED)
	For the transition period fromto

MARTIN MARIETTA MATERIALS, INC. PERFORMANCE SHARING PLAN

Commission file number: 1-12744

(Full title of the plan and the address of the plan, if different from that of the issuer named below)

MARTIN MARIETTA MATERIALS, INC.

2710 Wycliff Road Raleigh, North Carolina 27607

(Name of issuer of the securities held pursuant to the plan and the address of its principal executive office)

FINANCIAL STATEMENTS AND SUPPLEMENTAL SCHEDULE

Martin Marietta Materials, Inc. Performance Sharing Plan

December 31, 2009 and 2008 and Year Ended December 31, 2009

Page 2 of 18

Martin Marietta Materials, Inc. Performance Sharing Plan

Audited Financial Statements and Supplemental Schedule

December 31, 2009 and 2008 and Year Ended December 31, 2009

Contents

Report of Independent Registered Public Accounting Firm	4
Audited Financial Statements:	
Statements of Net Assets Available for Benefits Statement of Changes in Net Assets Available for Benefits Notes to Financial Statements	5 6 7
Supplemental Schedule:	
Schedule H, Line 4(i) — Schedule of Assets (Held at End of Year)	16
<u>Signatures</u>	17
Exhibit Index EX-23.01	18
Page 3 of 18	

Report of Independent Registered Public Accounting Firm

Martin Marietta Materials, Inc., as Plan Administrator Raleigh, NC

We have audited the accompanying statements of net assets available for benefits of the Martin Marietta Materials, Inc. Performance Sharing Plan (the "Plan") as of December 31, 2009 and 2008, and the related statement of changes in net assets available for benefits for the year ended December 31, 2009. These financial statements are the responsibility of Martin Marietta Materials, Inc., as Plan Administrator. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Plan's internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan at December 31, 2009 and 2008, and the changes in its net assets available for benefits for the year ended December 31, 2009 in conformity with accounting principles generally accepted in the United States of America.

Our audit was performed for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental Schedule of Assets (Held at End of Year) as of December 31, 2009 is presented for the purpose of additional analysis and is not a required part of the financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

Dixon Hughes PLLC

Raleigh, North Carolina June 18, 2010

Martin Marietta Materials, Inc. Performance Sharing Plan Statements of Net Assets Available for Benefits

	2009	2008 <u>2008</u>
Assets	(III IIII	asanasy
Investments at fair value		
Common and collective funds	\$ 64,092	\$ 64,034
Common stocks	23,678	25,623
Mutual funds	46,044	33,609
	133,814	123,266
Participant loans	3,243	3,297
Accrued income	9	56
Contributions receivable:		
Employees	266	_
Martin Marietta Materials, Inc.	95	_
Total assets	137,427	126,619
Accrual for pending investment trades	294	138
Net assets available for benefits See accompanying notes.	\$ 137,133	\$126,481
Page 5 of 18		

Martin Marietta Materials, Inc. Performance Sharing Plan Statement of Changes in Net Assets Available for Benefits Year Ended December 31, 2009

(in thousands)

	* * * * * * * * * * * * * * * * * * *
Net assets available for benefits at beginning of year	\$ 126,481
Additions to net assets attributed to:	
Net appreciation in fair value of investments	13,492
Interest and dividend income	1,337
Interest on participant loans	203
Contributions	
Employees	7,212
Martin Marietta Materials, Inc.	2,483
Rollovers	363
Total contributions	10,058
Total additions	25,090
Deductions from net assets attributed to:	
Distributions and withdrawals	14,272
Administrative expenses	282
Total deductions	14,554
Net increase in net assets available for benefits	10,536
Transfers in from Martin Marietta Materials, Inc. Savings and Investment Plan	116
Net assets available for benefits at end of year	<u>\$137,133</u>
See accompanying notes.	
Page 6 of 18	

Martin Marietta Materials, Inc. Performance Sharing Plan Notes to Financial Statements December 31, 2009 and 2008

1. Accounting Policies

Basis of Accounting

The financial statements of the Martin Marietta Materials, Inc. Performance Sharing Plan (the "Plan") are prepared on the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts, changes therein and related disclosures. Actual results could differ from those estimates.

Investment Valuation and Income Recognition

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note 4 for discussion of fair value measurements.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recognized on the accrual basis. Dividends are recorded on the exdividend date. Net appreciation/depreciation includes the Plan's gains and losses on investments bought and sold as well as held during the year.

Distributions

Distributions are recorded as paid. Therefore, no liability is recorded for distributions to participants who terminated during the year but have chosen to defer payments to the following year.

Administrative Expenses

Administrative expenses are paid by the Plan. Certain administrative functions are performed by employees of Martin Marietta Materials, Inc. (the "Corporation"), the Plan's sponsor and administrator. No such employee receives compensation from the Plan.

Page 7 of 18

1. Accounting Policies (continued)

Transfers

Along with the Plan, the Corporation also sponsors the Martin Marietta Materials, Inc. Savings and Investment Plan, a defined contribution plan for hourly employees. If participants change their employment status between salaried and hourly during the year, their account balances are transferred into the corresponding plan. For the year ended December 31, 2009, \$116,000 was transferred into the Plan from the hourly plan.

2. Description of the Plan

The following description of the Plan provides only general information. Participants should refer to the summary plan description for a more complete description of the Plan's provisions.

General

The Plan is a defined contribution plan providing eligible salaried employees of the Corporation an opportunity to participate in an individual savings and investment program providing tax deferred savings. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

Wells Fargo Bank, N.A. ("Wells Fargo") is the Plan's trustee and recordkeeper.

Contributions

Employees are eligible to enroll in the Plan as soon as administratively possible upon hire. Participants may elect to contribute basic contributions of 1% to 7% of base salary (as defined in the Plan and subject to applicable Internal Revenue Code (the "Code") limitations on allowable compensation). Certain participants may also elect to make additional supplemental contributions, which are not considered for purposes of computing the employer match. A participant's before-tax combined basic and supplemental contributions may not exceed 25% of that participant's base pay.

Unless an affirmative election not to participate in the Plan is made, employees hired on or after March 1, 2006 are automatically enrolled in the Plan and deemed to have elected to contribute 2% of base salary. The 2% contribution increases by 1% on each anniversary date of the participants' automatic enrollment until the before-tax contribution reaches 7% of base salary. Participants may make an affirmative election at any time to contribute a different amount.

2. Description of the Plan (continued)

Contributions (continued)

Contributions are automatically invested in a target date fund that is closest to the date the participant attains age 65, unless otherwise designated by the participant. The target date funds seek to provide investors with an appropriate level of risk and return by investing in a mix of stocks, bonds and cash. The allocation is adjusted to become more conservative (investing more in bonds and cash) as the target date approaches and the participant plans to retire and/or begin to use the funds on or around the target date.

Certain participants also have the option of making after-tax contributions up to 17% of base pay to the Plan, in addition to, or in lieu of, before-tax contributions. However, the combined amount of after-tax and before-tax contributions cannot exceed a total of 25% of base pay, subject to certain restrictions for highly compensated employees.

The Corporation matches the participants' annual basic contributions (the first 7% of base pay) starting the first of the month following six months of employment. The amount of the Corporation's match is equal to 50% of the basic contributions and is credited to participant accounts semi-monthly.

Participants may change the overall percentage of their contributions in 1% increments and may change investment elections for future before-tax, after-tax and matching contributions. In addition, participants may change the investment mix of the accumulated value of prior contributions among the investment options daily. The Plan also allows for spot transfers in which a specific dollar amount may be transferred from one investment option to another.

Investment Options

The Plan offers the following investment options: BlackRock LifePath® Portfolios, Wells Fargo Short Term Investment Fund G, Wells Fargo Advantage Total Return Bond Fund, Wells Fargo S&P 500 Index Fund G, Vanguard International Growth Fund, Harbor Capital Appreciation Fund, Loomis Sayles Value Fund Y, Vanguard Explorer Fund and Martin Marietta Materials, Inc. Common Stock Fund.

Page 9 of 18

2. Description of the Plan (continued)

Participant Accounts

Each participant's account is credited with the participant's and employer's contributions and allocations of earnings. The participant account is charged with an allocation of administrative expense. Allocations are based on participant earnings or account balances, as defined.

Vesting

Participants are immediately 100% vested in the value of their accounts, including employer contributions.

Participant Loans

The Plan provides for certain participants to borrow from his or her own investment account. All loans must meet specific terms and conditions of the Plan and are subject to applicable regulations of the Code. The minimum loan amount is \$1,000. The maximum loan is the lesser of 50% of the total account balance or \$50,000 minus the highest outstanding loan balance from the past 12 months. Personal loans are available to participants in terms of up to 5 years, and primary residence loans are available for terms of up to 15 years. Such loans bear interest at a fixed rate, established upon loan request, which is equal to the Wells Fargo Bank, N.A. prime rate plus 1%. All loans are due in full immediately upon termination of employment. In addition, the Plan provides for inservice withdrawals to participants that meet specific conditions of financial hardship, as defined in the Plan and in accordance with current specific regulations under the Code. Participants who are still working at the age of 59½ may qualify for special withdrawal rights and privileges as defined in the Plan. At December 31, 2009, interest rates on participant loans outstanding ranged from 4.25% to 10.5%. Principal and interest is paid ratably through payroll deductions.

Payment of Benefits

Upon separation from the Corporation, participants may receive the full current value of their contributions and the matching employer contributions in a lump-sum payment at any time or defer any payment until the participant reaches the age of 70½. Participants who have attained age 55 may receive their distributions in the form of a lump-sum payment or in annual, semi-annual, quarterly or monthly installments over a period of up to 25 years. The accounts of participants who receive installment payments remain invested in the funds indicated by the participant.

Page 10 of 18

2. Description of the Plan (continued)

Plan Termination

Although the Corporation expects to continue the Plan indefinitely, the Board of Directors of the Corporation may terminate the Plan for any reason at any time. If the Plan is terminated, each participant or former participant shall receive a payment equal to the value of the participant's account.

3. Investments

The following table presents investments, at fair value, that represent more than 5% or more of the Plan's net assets:

		Decemb	er 31
		2009	2008
		(In Thou	sands)
*	Wells Fargo Short Term Investment Fund G	\$36,028	\$42,514
*	Martin Marietta Materials, Inc. Common Stock Fund	\$23,678	\$25,623
*	Wells Fargo S&P 500 Index Fund G	\$21,575	\$17,871
	Vanguard International Growth Fund, Admiral Shares	\$13,589	\$ 9,570
	Loomis Sayles Value Fund Y	\$ 9,437	\$ 8,389
	Harbor Capital Appreciation Fund	\$ 7,931	_
*	Wells Fargo Advantage Total Return Bond Fund, Class I	\$ 7,606	_
	Vanguard Explorer Fund, Admiral Shares	\$ 7,481	_

^{*} Indicates party-in-interest to the Plan.

For the year ended December 31, 2009, net appreciation (depreciation) in fair value of the Plan's investments (including investments bought, sold and held during the year) was as follows (in thousands):

Common and collective funds	\$ 5,644
Martin Marietta Materials, Inc. Common Stock Fund	(1,853)
Mutual funds	9,701
	\$ 13,492

Investment did not represent more than 5% of more of the Plan's net assets.

4. Fair Value Measurements

The fair values of the Plan's investments are based on a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy are described as follows:

Level 1

Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2

Inputs to the valuation methodology include

- · quoted prices for similar assets or liabilities in active markets;
- quoted prices for identical or similar assets or liabilities in inactive markets;
- inputs other than quoted prices that are observable for the assets or liabilities;
- inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.

Level 3

Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurements. Valuation techniques must maximize the use of observable inputs and minimize the use of unobservable inputs.

Following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2009 and 2008.

Martin Marietta Materials, Inc. Performance Sharing Plan

Notes to Financial Statements (continued)

4. Fair Value Measurements (continued)

Common and Collective Funds

These investments are public investment vehicles valued using the Net Asset Value (NAV) provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. The NAV is classified within level 2 of the valuation hierarchy because the NAV's unit price is quoted on a private market that is not active; however, the unit price is based on underlying investments which are traded on an active market.

Common Stocks

These investments are valued at the closing price reported on the active market on which the individual securities are traded and classified within level 1 of the valuation hierarchy.

Mutual Funds

These investments are public investment vehicles valued using the NAV provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding and is classified within level 1 of the valuation hierarchy.

Participant Loans

Loans to participants are valued at amortized cost, which approximates fair value and are classified within level 3 of the valuation hierarchy.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of these assets could result in a different fair value measurement at the reporting date.

Page 13 of 18

Martin Marietta Materials, Inc. Performance Sharing Plan

Notes to Financial Statements (continued)

4. Fair Value Measurements (continued)

The following tables sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31:

		2	009	
	Level 1	Level 2	Level 3	Fair Value
		(In The	ousands)	
Common and collective funds	\$ —	\$ 64,092	\$ —	\$ 64,092
Martin Marietta Materials, Inc. Common Stock Fund	23,678	_	_	23,678
Mutual funds	46,044	_	_	46,044
Participant loans	<u>—</u>		3,243	3,243
Total assets	\$ 69,722	\$ 64,092	\$ 3,243	\$137,057
				
		2	008	
	Level 1	Level 2	Level 3	Fair Value
		(I., Th.	1 \	
		(10 100	ousands)	
Common and collective funds	\$ —	\$ 64,034	\$ —	\$ 64,034
Common and collective funds Martin Marietta Materials, Inc. Common Stock Fund	\$ — 25,623	,	\$ — —	\$ 64,034 25,623
	•	\$ 64,034	\$ —	
Martin Marietta Materials, Inc. Common Stock Fund	25,623	\$ 64,034	\$ —	25,623

The following table sets forth a summary of changes in the fair value of the Plan's level 3 assets for the year ended December 31, 2009 (in thousands):

Balance at January 1	\$ 3,297
Purchases, sales, issuances and settlements (net)	(54)
Balance at December 31	\$ 3,243

Page 14 of 18

Martin Marietta Materials, Inc. Performance Sharing Plan Notes to Financial Statements (continued)

5. Income Tax Status

The Internal Revenue Service has determined and informed the Corporation by letter dated April 29, 2010, that the Plan and related trust are designed in accordance with the applicable sections of the Code. The Plan Administrator believes the Plan is designed and is currently being operated in compliance with the applicable requirements of the Code.

6. Exempt Party-in-Interest Transactions

Certain Plan investments are shares of mutual funds managed by Wells Fargo. Wells Fargo is the trustee, as defined by the Plan, and, therefore, these transactions qualify as exempt party-in-interest transactions. Fees paid to the trustee by the Plan for administrative services were approximately \$282,000 for the year ended December 31, 2009.

7. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities, in general, are exposed to various risks such as interest rate, credit and overall market volatility. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

8. Subsequent Events

In March 2010, the Plan received a settlement of \$1,373,329 as part of a two lawsuits against State Street Bank and Trust Company.

Page 15 of 18

Martin Marietta Materials, Inc. Performance Sharing Plan

EIN: 56-1848578 Plan Number: 005

Schedule H, Line 4i — Schedule of Assets (Held at End of Year)

December 31, 2009

	(b)	(c) Description of Investment			
	Identity of Issue,	Including Maturity Date,	(1)		(e)
(a)	Borrower, Lessor, or Similar Party	Rate of Interest, Collateral, Par or Maturity Value	(d) Cost		Current Value
<u>(u)</u>	Similar Furty	Tur or maturity value	Cost	(in	thousands)
*	Wells Fargo Bank, N.A.	Wells Fargo Short Term Investment Fund G		\$	36,028
*	Martin Marietta Materials, Inc.	Common Stock Fund			23,678
*	Wells Fargo Bank, N.A.	Wells Fargo S&P 500 Index Fund G			21,575
	The Vanguard Group	Vanguard International Growth Fund, Admiral Shares			13,589
	Loomis Sayles	Loomis Sayles Value Fund Y			9,437
	Harbor Funds	Harbor Capital Appreciation Fund			7,931
	The Vanguard Group	Vanguard Explorer Fund, Admiral Shares			7,481
*	Wells Fargo Bank, N.A.	Wells Fargo Advantage Total Return Bond Fund, Class I			7,606
	BlackRock Institutional Trust Company, N.A.	BlackRock Lifepath Index Retirement M			1,014
	BlackRock Institutional Trust Company, N.A.	BlackRock Lifepath Index 2015 M			823
	BlackRock Institutional Trust Company, N.A.	BlackRock Lifepath Index 2020 M			997
	BlackRock Institutional Trust Company, N.A.	BlackRock Lifepath Index 2025 M			806
	BlackRock Institutional Trust Company, N.A.	BlackRock Lifepath Index 2030 M			617
	BlackRock Institutional Trust Company, N.A.	BlackRock Lifepath Index 2035 M			727
	BlackRock Institutional Trust Company, N.A.	BlackRock Lifepath Index 2040 M			438
	BlackRock Institutional Trust Company, N.A.	BlackRock Lifepath Index 2045 M			338
	BlackRock Institutional Trust Company, N.A.	BlackRock Lifepath Index 2050 M			729
*	Participant loans	Interest Rates ranging from 4.25% to 10.5%			3,243
				\$	137,057
				Ψ	107,007

Note: Cost information has not been included in column (d) because all investments are participant directed. directed.

Page 16 of 18

^{*} Indicates party-in-interest to the Plan.

SIGNATURES

THE PLAN. Pursuant to the requirements of the Securities Exchange Act of 1934, the plan administrator of the below named plan has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

MARTIN MARIETTA MATERIALS, INC. PERFORMANCE SHARING PLAN

By: Martin Marietta Materials, Inc. Plan Administrator

By: Benefit Plan Committee

By: /s/ Anne H. Lloyd
Anne H. Lloyd

Date: June 18, 2010

EXHIBIT INDEX

 $\frac{\text{Exhibit No.}}{23.01}$ Document

Consent of Dixon Hughes PLLC

Page 18 of 18

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-115918) pertaining to the Amended and Restated Martin Marietta Materials, Inc. Common Stock Purchase Plan for Directors, Martin Marietta Materials, Inc. Performance Sharing Plan and the Martin Marietta Materials, Inc. Savings and Investment Plan; in the Registration Statement (Form S-8 No. 333-85608) pertaining to the Martin Marietta Materials, Inc. Common Stock Purchase Plan for Directors; in the Registration Statement (Form S-8 No. 33-83516) pertaining to the Martin Marietta Materials, Inc. Omnibus Securities Award Plan, as amended; in the Registration Statement (Form S-8 No. 333-15429) pertaining to the Martin Marietta Materials, Inc. Common Stock Purchase Plan for Directors, Martin Marietta Materials, Inc. Performance Sharing Plan and the Martin Marietta Materials, Inc. Savings and Investment Plan; in the Registration Statement (Form S-8 No. 333-79039) pertaining to the Martin Marietta Materials, Inc. Stock-Based Award Plan, as amended; in the Registration Statement (Form S-3 No. 333-157731) pertaining to Debt Securities, Preferred Stock, Common Stock, and Warrants of Martin Marietta Materials, Inc. of our report dated June 18, 2010, with respect to the financial statements and schedule of the Martin Marietta Materials, Inc. Performance Sharing Plan included in the Annual Report (Form 11-K) for the year ended December 31, 2009.

Dixon Hughes PLLC

Raleigh, North Carolina June 18, 2010